Spending Better for Children through Social Policy



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Please cite this publication as:
OECD (2026), *Spending Better for Children through Social Policy*, OECD Publishing, Paris, https://doi.org/10.1787/1d6fb668-en.

ISBN 978-92-64-55183-1 (print)
ISBN 978-92-64-45023-3 (PDF)
ISBN 978-92-64-82705-9 (HTML)

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Foreword

Spending better for children is both a social imperative and a sound economic investment. Children who grow up in poverty or disadvantage are more likely to experience poorer health, educational and labour market outcomes throughout their lives, generating significant costs for individuals, societies and public finances. The challenge for policymakers is therefore not only how much to spend, but how to allocate and design social spending in ways that improve child well-being while supporting fiscal sustainability.

Drawing on a value-for-money framework, this report examines how the level, allocation and design of social spending influence child poverty, material deprivation, educational achievement and health, while considering their implications for long-term social expenditure. The findings highlight the importance of coherent policy packages rather than isolated interventions. Employment-oriented policies, including early childhood education and care (ECEC), work-family reconciliation measures and active labour market policies (ALMPs), can strengthen family incomes while supporting children's development. Adequate and predictable income support also plays a central role, particularly when complemented by accessible health, housing, education and childcare services that address multiple and interconnected sources of disadvantage. The report further underscores the importance of sustained investment throughout childhood, from early intervention in the first years of life to continued support during middle childhood and adolescence. Overall, achieving better value for money requires policy mixes that successfully combine effectiveness, equity and fiscal sustainability.

This report was prepared by the OECD Centre on Well Being, Inclusion, Sustainability and Equal Opportunity (WISE Centre). It was developed under the leadership of Romina Boarini (Director, OECD WISE Centre) and under the supervision of Olivier Thévenon (Head of the Child Well-being Unit, OECD WISE Centre). The report was authored by Nora Brüning and Olivier Thévenon, with valuable research assistance from Théophile Mulot during his internship in the Child Well-being Unit. Anne-Lise Faron (OECD WISE Centre) prepared the manuscript for publication, and Taylor Kelly and Martine Zaïda (OECD WISE Centre) provided valuable support and advice on communication and publication.

The report benefited from valuable comments on earlier drafts provided by delegates of the OECD Working Party on Social Policy. The authors are sincerely grateful for their insights and contributions and hope that the report will serve as a useful resource in supporting their work. The report also benefited from comments and feedback from Willem Adema and Herwig Immervoll (OECD Directorate for Employment, Labour and Social Affairs); guidance from Romina Boarini; and comments from Fabrice Murtin and Gabriel Chaves Bosch of the OECD WISE Centre. The authors also wish to thank Mathis Porchez and Olivier Bontout of the European Commission for their valuable feedback at all stages of the project.

This report was made possible through financial support and strong substantive engagement from *European Commission*, *Employment and Social Development Canada*, New Zealand's *Ministry of Social Development* and *Social Investment Agency*, and the *Bundenmisiterium Arbeit, Soziales, Gesundheit, Pflege und Konsumentenschutz* in Austria. The authors also wish to express their gratitude to OECD Secretary-General Mathias Cormann for supporting this project through the Secretary-General's Allocation Fund (SGAF).

Editorial

Investing in children is one of the best investments a government can make. What happens in childhood shapes a person's health, education, job prospects and well-being for the rest of their life. It matters for our economies too. When children grow up in poverty or miss out on opportunities, they are less likely to reach their full potential as adults. That holds back productivity and pushes up demands on public budgets later on. Giving every child a fair start is also how we build societies where success depends on talent and effort, not on the circumstances a child is born into.

Governments across the Organisation for Economic Co-operation and Development (OECD) face growing pressure on their finances. Populations are ageing. Economic growth has slowed. Public money needs to work harder. Fewer children are being born, too: the number of children under 18 in OECD countries is projected to fall from around 283 million in 2025 to about 250 million by 2050. That creates a real opportunity to invest more in each child – but only if children stay a priority in public budgets. That is why making social spending work better for children has never been more important.

Spending Better for Children through Social Policies looks beyond how much countries spend. It asks a more useful question: how can the way we spend deliver better results for children – and ease the pressure on public finances in the years ahead?

The starting point is clear. Public social spending across OECD countries has risen from around 20% of gross domestic product (GDP) in the early 2000s to 25% in the 2020s. But children have not been the main beneficiaries. Spending on families with children has stayed below 10% of total social spending. Most of the increase has gone to health and old-age support.

Meanwhile, too many children are being left behind. In 2023, one in eight children across the OECD lived in income poverty. In 2024, around one in seven children in OECD European countries experienced severe material and social deprivation – and most of them live in families above the poverty line. Learning outcomes are slipping: the share of 15-year-olds performing below baseline proficiency in the OECD Programme for International Student Assessment (PISA) rose from 31% in 2009 to 43% in 2025. More than one in five adolescents say their health is fair or poor.

So how do we make social spending work better for children?

The report's central finding is simple. Spending more can help. **Spending better helps far more.** If social spending keeps growing at its historical pace, child poverty could fall by around 1.5 percentage points (p.p.) over the next decade, and material deprivation by 4.2 p.p. Those are welcome gains. But much larger gains are within reach if new resources go to the policies that deliver the most for children. No single policy does the job on its own. The strongest results come from a coherent mix of three things: helping parents into work, adequate income support, and accessible, high-quality services.

First, early childhood education and care (ECEC). Putting extra resources into ECEC and making sure children take part – especially children from disadvantaged families – makes a big difference. If an additional p.p. of social spending went to ECEC, alongside higher enrolment, the poverty-reducing impact of social spending could rise by around 50% over the next decade. Learning improves as well: the share

of low performers in PISA could fall by around 4% from 2025 levels. Yet today, participation among children under three remains highly unequal across income groups, which limits what these systems can deliver. This is what spending better means in practice. It is not just about funding high-quality services. It is about making sure the children who would benefit most can actually use them.

Second, helping parents into work. Work is the most reliable route out of poverty and the surest path to independence for families. An additional p.p. of social spending devoted to active labour market programmes – the support that helps people find and keep jobs – could lift the impact of social spending on child poverty by 24%, and on severe material deprivation by 9%. It would also slow the growth of social spending by around 1% over the next decade. Combined with affordable childcare and income support that makes work pay, these policies help families stand on their own feet and give children a lasting way out of poverty.

Third, adequate income support. Directing a larger share of social spending to family cash benefits could raise the impact of social spending on relative child poverty by around 27%. Support works best when it is stable and predictable, and when it reaches the families that need it most. But cash alone is not enough. Relying on cash transfers on their own does less to reduce severe material deprivation and can add to long-term spending pressures. Poor housing, unmet healthcare needs and limited access to essential services can hold children back whatever the family income. Income support needs to be matched by accessible, high-quality services. Preventive healthcare stands out: shifting one p.p. of social spending to it is associated with a 24% rise in the share of adolescents reporting excellent health, without adding to long-term spending pressures.

One more lesson matters. Support for children cannot stop after the early years. The first years of life are critical for preventing disadvantage. But children also need sustained support through middle childhood and adolescence to do well at school, stay healthy and move up in life. That is what equality of opportunity requires. **Value for money is not about choosing one policy over another. It is about getting the mix right – and keeping support in place as children grow.**

The report also shows that improving children's lives and keeping public finances sustainable are not competing goals. Well-designed policies can achieve both. Supporting parents into work, investing in early childhood education and care, providing adequate income support and ensuring access to quality services all improve children's lives today. They also prevent more costly disadvantage tomorrow.

The OECD will build on this evidence as we support governments to strengthen policies for children across sectors and throughout childhood, including through the draft OECD Recommendation on Child Well-Being and Policy Action for Children. This report makes an important contribution to that agenda. It shows not only why investing in children matters, but how governments can make every investment count – so that every child has the best possible chance to lead a successful life.



Mathias Cormann,

OECD Secretary-General

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Executive summary

Investing in children is both a social imperative and a smart economic choice. Children who grow up in poverty or socio-economic disadvantage are more likely to experience poorer health, lower educational achievement and weaker labour market outcomes throughout life. These disadvantages generate long-term costs for society through reduced productivity, lower tax revenues and higher public spending. At the same time, OECD countries face increasing fiscal pressures from population ageing, rising healthcare costs and slower economic growth. The challenge is therefore not only how much governments spend, but how resources can be allocated to improve child well-being while containing future expenditure pressures.

Over the past two decades, public social expenditure across the OECD has increased from around 20% to 25% of GDP, largely due to rising health and old-age spending, while spending on families with children remains below 10% of the total. Yet many children continue to face disadvantage. In 2023, 12.5% lived in income poverty, and around one in seven children in OECD European countries experienced severe material and social deprivation in 2024, often despite living above poverty thresholds. Educational and health outcomes are also concerning. The share of 15-year-olds performing below baseline proficiency in the PISA assessment increased from 31% in 2009 to 43% in 2025, while more than one in five adolescents report fair or poor health.

This report applies a value-for-money framework to examine how the level, allocation and design of social spending influence child poverty, material deprivation, educational achievement and health, while also considering implications for long-term public expenditure. The analysis shows that no single policy instrument is sufficient. And while spending more can make a difference, the gains can be substantially greater when additional resources are directed towards a coherent mix of policies. The strongest outcomes are achieved through balanced policy packages combining employment-oriented policies, adequate income support and accessible, high-quality public services.

Early childhood education and care (ECEC) is one of the most effective areas of investment. Higher spending and enrolment among children aged 3 to 5 is associated with lower child poverty, better educational outcomes and improved health later in life. These benefits arise because high-quality ECEC, adapted to families' work-care responsibilities, supports parental employment while also promoting children's development. However, participation among children under age three remains highly unequal across socio-economic groups, limiting the potential benefits of ECEC systems in many countries.

Reducing these participation gaps is central to improving value for money. An additional p.p. of social expenditure allocated to ECEC, combined with higher enrolment, is estimated to increase the impact of social spending on reducing relative income child poverty by around 50% over the next decade. Greater investment and participation are also associated with stronger educational outcomes, including an estimated 4% reduction in the share of low PISA performers and a 3% increase in the share of high performers relative to 2025 levels.

Active labour market policies (ALMPs) can also deliver substantial benefits by improving parents' employment prospects and earnings, particularly when programmes are compatible with caregiving responsibilities. Allocating an additional p.p. of social expenditure to ALMPs is estimated to increase the

effectiveness of social spending in reducing child poverty by 24% and severe child material deprivation by 9%, while reducing expenditure growth by 1% over the next decade.

Cash transfers remain a cornerstone of child policy. They provide immediate protection against income loss and improve living standards, especially for families that cannot rely on employment alone. Their effectiveness depends not only on spending levels but also on how support is targeted and delivered. Income support is most effective when it reaches families with the greatest needs, including low-income households, single-parent families and large families, while recognising that many materially deprived children live above conventional poverty thresholds.

Increasing the share of social expenditure devoted to direct income support for families could raise the impact of social spending on reducing relative child poverty by an estimated 27% over the next decade and contribute to improved educational and health outcomes. However, greater reliance on cash transfers alone is associated with weaker performance in reducing severe material deprivation and may increase long-term spending pressures. This underlines the importance of combining adequate income support with accessible services that address broader drivers of disadvantage, including poor housing, unmet healthcare needs and limited access to essential resources. Investments in healthcare, housing and other in-kind services can therefore provide particularly strong value for money. Preventive healthcare is especially promising, improving child health while helping moderate future expenditure pressures.

Finally, the findings highlight the importance of sustained investment throughout childhood. Early childhood is a critical period for preventing disadvantage, but continued support during middle and late childhood remains essential for strengthening educational achievement, promoting good health and supporting upward social mobility.

Key policy considerations

- **How resources are allocated matters as much as how much is spent**. Well-designed policy mixes can improve children's living conditions while helping contain long-term pressures on public finances.
- **Policies that support parental employment offer high value for children**. Investments in ECEC, work-family reconciliation measures and ALMPs reduce child poverty, improve educational and health outcomes, and can strengthen the long-term sustainability of social spending.
- **Income support remains essential but is most effective when combined with accessible and affordable services**. Cash benefits protect living standards, while services in health, housing, childcare and education address broader drivers of disadvantage.
- **Enhancing child well-being and reducing disadvantage requires sustained investment throughout childhood**. Early intervention is crucial for preventing poor outcomes, but continued support during middle childhood and adolescence is equally important for promoting higher educational achievement and better self-reported health.
- **The adequacy, timing and predictability of support matter.** Stable and reliable support helps families meet immediate needs and invest in their children's future.
- **The greatest gains come from coherent and mutually reinforcing policy packages**. Combining employment-oriented measures, adequate income support and quality public services delivers stronger outcomes while supporting both equity and fiscal sustainability.

1. Spending better for children: Why it matters and which policies make a difference

This chapter synthesises the main findings of the report. It first outlines how countries have responded to rising social expenditures, notably through a shift towards a forward-looking social investment approach that places greater emphasis on prevention, investment in children and the strengthening of opportunities across the life course. It then reviews multiple channels through which policies affect children, both directly and indirectly through parental well-being, employment and living conditions, and highlights major policy trends across OECD countries. It brings together evidence on the effectiveness of social policies in reducing income poverty and material deprivation of households with children, and in improving educational and self-reported health outcomes of children. The chapter also discusses complementarities and trade-offs across policy areas, highlighting the importance of tailoring the scope and intensity of support to the needs of disadvantaged children. Finally, it emphasises that preventing disadvantage from accumulating early in life, while sustaining support throughout childhood and adolescence, is essential both to improve educational and health outcomes and to strengthen opportunities for social mobility.

Investing in children is essential to improve their well-being today – by protecting them from poverty, supporting their physical, emotional and social development – while also strengthening their learning capacities, socialisation, and access to formative experiences that provide them with a strong start in life. Such investments are particularly important for children facing income poverty and other forms of socio-economic disadvantage, who tend to experience poorer outcomes in childhood as well as weaker health and labour market prospects in adulthood (Box 1.1). Over time, investments in children are expected to translate into higher educational attainment, stronger social connections, better health, and greater productivity, generating both individual benefits (e.g. improved career prospects) and broader societal gains through a better-prepared workforce, stronger economic growth, and enhanced social inclusion.

At the same time, social policies face a growing tension between rising demands – driven notably by population ageing and emerging social risks, including those associated with climate change – and tightening budget constraints that limit the scope for expanding public spending. In a context of declining fertility, the number of children under age 18 in OECD countries is projected to fall from around 283 million in 2025 to below 260 million by the early 2030s and to about 250 million by 2050 (United Nations, 2024[1]). This demographic shift may ease some pressures on social expenditure associated with supporting children and families in the short term, thus creating an opportunity to increase investment per child, particularly in policy areas that remain underfunded or where evidence suggests the largest gains in child well-being can be achieved. However, declining child populations also carry the risk that children and families become less of a priority in public budgets and that future social expenditures will be directed towards programmes that do not benefit children.

Irrespective of the total level of investment, demographic change offers an opportunity to reallocate and better target resources to enhance their impact on children and families. Ultimately, spending better for children can strengthen confidence in the future, an important determinant of individual fertility decisions with broader economic and demographic benefits. Reliable, available public services and social supports – including affordable childcare, quality education, healthcare, housing support, and adequate income protection – reduce economic and social uncertainties and can strengthen parents' confidence in their ability to have and raise children. By improving children's development while enabling parents to participate more fully in the labour market, well-designed family policies can help address the challenges associated with persistently low fertility, population ageing and economic growth. In addition, investment in children is often the best way to prevent risks of poor outcomes in adulthood (Box 1.1), support human capital accumulation and address fiscal pressures.

These multiple returns reinforce the importance of shifting the policy debate from how much is spent to how effectively resources are allocated, placing greater emphasis on achieving value for money in social policy.

This chapter provides an overview of the main findings presented in detail throughout the report on the "value for money" of social policies, assessed from the perspective of their impact on child outcomes over the past two decades. In this context, "value for money" refers to the extent to which different types of social policies – and their design features – improve child outcomes while either containing or adding pressure on social spending. The chapter aims to inform investment decisions for children by strengthening the evidence on the effectiveness of social spending across key policy domains, including policies supporting parents' labour market participation and economic self-sufficiency, income support for families, early childhood education and care, health, and other in-kind benefits. It examines how these policies contribute to reducing child poverty and improving educational and health outcomes, while also considering how policy design influences the evolution of social spending as countries develop economically.

The chapter begins by examining trends in social expenditure, including a shift towards a social investment approach in which investment in children plays a central role. It then unpacks the different dimensions of social policies that affect children, both directly and indirectly through their impact on parental outcomes and family living conditions and presents key trends in these policies (discussed in more detail in

Chapter 2). The remainder of the chapter synthesises the main findings on the value for money of social policies in reducing child income poverty and material deprivation (Chapter 3), and in improving educational and health outcomes (Chapter 4). It places particular emphasis on identifying complementarities and trade-offs across policy areas and outcomes, while also summarising key results for individual outcomes. Overall, the chapter reviews how the allocation of spending across policy domains, as well as specific design features, contributes to – or limits – the effectiveness of policies in improving child well-being while managing pressures on social spending.

Box 1.1. Cost of inaction on childhood socio-economic disadvantage

Childhood is a critical period for the development of human and social capital, yet too many children experience poverty during these formative years, limiting their chances from the outset. Growing up in disadvantaged circumstances affects multiple dimensions of well-being – health, cognitive development, and socio-emotional functioning – with long-lasting consequences for life trajectories (OECD, 2025[2]; 2021[3]; National Academies of Sciences, Engineering, and Medicine, 2019[4]; De Schutter et al., 2023[5]). These effects extend beyond individuals to society as a whole, through lower productivity, reduced tax revenues, and higher public spending over the life course. A key reason to address socio-economic disadvantage early is its persistence through interconnected developmental pathways: early deficits can trigger "developmental cascades", whereby disadvantages accumulate and reinforce one another across domains, widening gaps in health, education, and well-being over time (Masten and Cicchetti, 2010[6]; OECD, 2021[3]). As a result, the cost of inaction extends well beyond the immediate consequences of child income poverty. It encompasses not only insufficient action to address inadequate household incomes, high housing costs and broader cost-of-living pressures, but also failure to prevent the associated deterioration in children's health, learning and socio-emotional development. These accumulated disadvantages generate substantial long-term economic and social costs that are considerably more difficult – and more expensive – to reverse later in life.

Empirical evidence shows that children from low socio-economic backgrounds face higher risks of adverse birth outcomes, chronic illness, obesity and mental health problems, reflecting material deprivation, exposure to stress, and limited access to preventive care. They are also more likely to experience delays in cognitive and language development, leading to lower educational attainment and weaker academic performance, alongside higher rates of behavioural difficulties, anxiety, and lower life satisfaction. These cumulative disadvantages are reflected in adolescence, where socio-economically disadvantaged young people are consistently less likely to perform well in school, pursue tertiary education, enjoy good health, or report high well-being (Clarke and Thévenon, 2022[7]).

These early inequalities often persist into adulthood. Individuals who grew up in disadvantaged households tend to achieve lower levels of education, face weaker labour market outcomes, earn less, and experience poorer health. Estimates from European OECD countries and Canada suggest they are 3 to 6 p.p. less likely to be employed, earn around 20% less, and experience worse health – equivalent to losing about two weeks of full health per year (Clarke et al., 2022[8]). These individual disadvantages translate into substantial economic costs: in European OECD countries, they amount to around 3.4% of GDP annually when combining labour market and health effects, while estimates for the United States reach about 5.4% of GDP. Conversely, reducing child poverty could generate sizeable economic gains through higher employment, earnings and tax revenues.

More broadly, family background remains a key driver of inequality of opportunity and intergenerational mobility. Evidence from the OECD Survey of Adult Skills (PIAAC) shows that individuals with highly educated parents earn nearly 30% more, on average, than those whose parents have low levels of

education (Causa, Nguyen and Tanaka, 2026[9]). Across OECD countries, inherited circumstances – including parental socio-economic status – account for a substantial share of income inequality and shape life chances to a large extent, contributing to over 60% of inequality of opportunity in many countries. These findings underscore the importance of early and sustained policy efforts to mitigate disadvantage and promote more equal opportunities from childhood onward (OECD, 2025[2]).

1.1. Responding to rising demand for social spending through smart investment

Social policies face rising demands alongside tighter budget constraints, shifting the focus from how much to spend to how to spend more effectively and achieve better value for money. In response, many countries are increasingly prioritising policies aimed at strengthening individuals' capacity for economic self-sufficiency. These include measures to support skills development, employment, adaptability and resilience, prevent disadvantage, and build human and social capital throughout the life course, both at the individual and collective levels. This so-called "social investment" approach aims to improve long-term outcomes by boosting employment, productivity, and creating conditions for lower future reliance on social assistance.

Investing in children as a cornerstone of social investment strategies

Investing in children and tackling child poverty are central components of this approach, as they help prevent early-life inequalities from translating into persistent, life-course disadvantages (Esping-Andersen, 2002[10]). Early childhood interventions, in particular, tend to yield especially high returns: they support cognitive and socio-emotional development, help break the intergenerational transmission of poverty, and enable parents – especially mothers – to remain in employment. Continued support throughout later childhood and adolescence is also essential, as well-designed programmes at these stages improve well-being, educational attainment, and future labour market outcomes.

Beyond child-focussed policies, policies for older age groups are also needed to address the root causes of poverty and sustain the welfare state. This includes active labour market policies, work-care reconciliation measures, lifelong learning, and active ageing initiatives, all of which support employment and contribute to a virtuous cycle of social and economic gains. Within this framework, income protection and minimum-income schemes remain essential to ensure that households – including families with children – can meet basic needs and avoid falling into poverty. Health policies also play a critical role, supporting both children's development and adults' capacity to participate fully in society and the labour market.

Many reforms in social policies draw inspiration from the social investment approach even when this reference is not made explicit. At the same time, it is not always clear which forms of social support should be considered part of social investment and which should not. While reform strategies vary widely, several common trends can be observed – in particular, stronger support for parents, expanded provision in the early years, and reforms to active labour market policies aimed at creating, mobilising, and preserving human skills and capabilities (Garritzmann, Häusermann and Palier, 2022[11]).

Across countries, however, policy mixes, financing models, time horizons and distributive profiles differ substantially. While in some OECD countries and regions the shift towards a social investment approach is explicit and used as a guiding framework for policy design, in others it is more implicit. Even where the approach is clearly articulated, priorities across policy levers, the range of targeted outcomes, and the time horizons used to assess returns can vary significantly.

In **Europe**, the European Union has played a leading role in promoting policies that prioritise early intervention, lifelong skills development, and enabling forms of social protection. EU frameworks

emphasise supporting children and families, expanding access to early childhood education and care, strengthening continuous learning and active labour market policies, and designing income support and services to facilitate labour market participation rather than merely cushion risks (European Commission, 2013[12]; 2021[13]). However, countries have adopted the social investment agenda to varying degrees, clustering into "balanced" strategies with broad investment across domains, "basic" strategies focussed mainly on traditional education, and "bent" strategies placing relatively greater emphasis on early-life supports (Baiocco et al., 2022[14]).

Child poverty reduction has also been closely aligned with these social investment principles. EU initiatives promote parental employment, work-family reconciliation and expanded access to early childhood education and care as key tools to prevent the intergenerational transmission of disadvantage. Since the late 1990s, frameworks such as the European Employment Strategy have encouraged paid leave provisions, childcare targets and other supports that enable parents – particularly mothers – to participate in the labour market (Thévenon, 2004[15]; Bouget et al., 2015[16]). Together with more recent EU initiatives explicitly focussed on investing in children and combating child poverty,[1] these efforts reflect a growing alignment between child poverty strategies and preventive, investment-oriented social policies (Esping-Andersen, 2002[10]; Vandenbroucke, Hemerijck and Palier, 2011[17]; Bouget et al., 2015[16]; European Commission, 2024[18]).

A major milestone in this agenda was the adoption the **European Child Guarantee** (ECG) in 2021, which seeks to ensure that children at risk of poverty or social exclusion have access to the most basic of rights, like healthcare and education (European Commission, 2021[19]). The ECG calls on Member States to guarantee children in need effective and free access to early childhood education and care, education and school-based activities, at least one healthy meal every school day, and healthcare. It also recommends ensuring effective access to healthy nutrition and adequate housing. Each member state must develop a national action plan to implement the European Child Guarantee (ECG) through to 2030. In line with the Recommendation, these plans should establish an integrated policy framework to effectively tackle child social exclusion. They should also address the geographic dimensions of child poverty and inequality by focussing on the specific needs of children in disadvantaged urban, rural, remote, and segregated areas through a multidisciplinary, co-ordinated approach.

Building on this trajectory, in May 2026, the European Commission introduced a major social policy package including the EU's first Anti-Poverty Strategy (European Commission, 2026[20]), a proposal for a Council Recommendation on fighting housing exclusion, a reinforcement of the European Child Guarantee, (European Commission, 2026[21]) and an updated disability rights strategy up to 2030. The package aims to accelerate the reduction of the number of people at risk of poverty or social exclusion by at least 15 million by 2030 (including at least 5 million children), with a strong focus on quality employment, access to services and income support, homelessness prevention, and breaking the cycle of intergenerational disadvantage.

New Zealand has adopted a particularly explicit and operational form of the social investment approach. At its core, this approach seeks to better enable people, whānau, families, and communities to achieve positive outcomes and thrive, by taking a long-term perspective across multiple dimensions of their lives (Social Investment Agency, 2026[22]). It emphasises early intervention and prevention rather than crisis response, targets investment towards those with the greatest and most complex needs, and promotes holistic, family-centred support. In practice, social investment is implemented as a data- and evidence-driven framework for designing, funding, and delivering social services with a strong focus on long-term outcomes (Government of New Zealand, 2013[23]; 2025[24]). More broadly, the approach emphasises allocating public resources where they can generate the greatest impact and value – not only by improving service design, delivery, and cross-agency co-ordination, but also by informing higher-level spending decisions across the system (Social Investment Agency, 2026[22]). A central feature is the use of outcomes-based contracting, whereby funding is linked to the achievement of measurable results rather

than prescribed activities. This enables service providers to innovate and tailor support to the needs of individuals and families, while maintaining a strong focus on improving long-term outcomes.

Reducing child poverty is one component of this approach in New Zealand, supported by formal targets, reporting requirements, and policy planning grounded in outcome-focussed evidence (Government of New Zealand, 2025[24]). The Child Poverty Reduction Act of 2018 introduced mandatory three- and ten-year targets across multiple indicators, including income poverty (before and after housing costs) and material hardship. Building on this framework, the Child and Youth Strategy 2024-2027 (Government of New Zealand, 2024[25]) sets out three priorities for children and families: i) supporting children and their families and whānau in the first 2 000 days; ii) reducing child material hardship by increasing household incomes, supporting access to stable housing, lowering essential living costs and addressing long-term disadvantage, with a focus on increasing household incomes; and iii) preventing harm against children.

Canada provides an example of a sustained commitment to reducing child poverty, illustrating the importance of a comprehensive policy strategy that brings together multiple elements consistent with a social investment approach, even if not explicitly framed as such. Successive governments have progressively expanded support for low- and modest-income families and strengthened co-ordination across federal, provincial and territorial levels, notably through the 2018 Opportunity for All – Canada's First Poverty Reduction Strategy (ESDC, 2018[26]). Through its Poverty Reduction Strategy, which aligns with the United Nations Sustainable Development Goal of eradicating poverty (SDG 1), Canada has implemented a range of policy measures aimed at reducing poverty and enhancing the social safety net. Notably, these measures include increased targeted income support for families, strengthened income security in retirement, and enhanced earning supplements for low-income workers to support their labour market participation and upward mobility. In addition to immediate income supports, the Government of Canada has made strategic, longer-term investments in areas such as housing, clean water, health, transportation, early learning and childcare, and employment, intended to help address the multiple dimensions of poverty. In recent years, Canada has also established the National School Food Program and launched a Dental Care Plan, aimed at improving affordability and access to nutritious food and essential healthcare.

A cornerstone of Canada's child poverty efforts is the Canada Child Benefit, which was designed to simplify the delivery of income support by providing a single monthly payment that is exempt from taxation. This benefit enhances progressivity by directing more substantial financial assistance to low- and middle-income families, thereby effectively helping reducing child poverty (Thévenon, Clarke and Simard-Duplain, 2024[27]).

Trends in social spending and policies affecting children

Beyond the explicit investment strategies for children discussed above, Chapter 2 of this report shows that many developments in social policy over the past two decades have increasingly aligned with the principles of social investment, reshaping how policies influence outcomes for children and families. Chapter 2 situates these changes within the broader context of demographic shifts and the successive pressures faced by welfare systems. It then reviews key policy trends across OECD countries in detail, including the expansion of in-kind spending, stronger support for families with children, increased efforts to support working parents, and a weakening redistributive impact of income support.

The analysis shows that social spending in OECD countries has risen substantially over the past two decades, increasing from about 20% to 25% of GDP and by nearly two-thirds in per capita terms. This growth has been driven mainly by population ageing and rising healthcare costs. Per capita public spending on health increased by around 70%, while spending on older people rose by approximately 60%. Together, these two categories accounted for nearly two-thirds of total public social expenditure in 2021. Spending on active labour market programmes and unemployment benefits also increased markedly (by 68% and 85%) – particularly in the aftermath of the COVID-19 pandemic – but together, they still

represented less than 8% of total public social spending in 2021. By contrast, expenditure on families with children remained comparatively modest, accounting for 9% of total public social expenditure throughout. As the number of children declined over the same period, this nevertheless resulted in an increase in public spending per child.

The chapter also shows the changes in the underlying structure of policies and public and (voluntary and mandatory) private social expenditures[2] affecting children:

- First, there has been a shift towards activation and support for working parents, with expanded provision of paid parental leave entitlements and of early childhood education and care services. For instance, the inflation-adjusted increase in spending on ECEC services as a share of the total population was 100% over the past two decades, nearly twice the relative increase observed for per capita social expenditure overall. However, access remains unequal: in Europe, around 49% of children under three in the highest income group were enrolled in formal childcare in 2024, compared with 33% in the lowest income group.
- Second, there is greater reliance on in-kind services, which accounted for about 64% of total social spending in 2021, up from 58% in the early 2000s. Health services absorb nearly three-quarters of this spending, with family-related services forming the second largest category.
- Third, investment in families and early childhood has increased, driven by both higher cash transfers and – more markedly – the expansion of in-kind services. Per capita spending on in-kind family support has more than doubled in real terms since 2001, with early childhood education and care accounting for around two-thirds of this total. However, when combined with overall education spending for school-aged children, per-child expenditure in early childhood often remains lower than at later ages, as a result of the higher levels of spending devoted to formal schooling.
- Fourth, cash benefits continue to play a central role in supporting families, typically combining universal and targeted elements, although their design and size vary widely across countries. As of 2024, all OECD countries provide at least one family benefit, most offer several, and around half apply means testing. Many systems include supplements for single-parent families, while some countries – including Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, the Slovak Republic, Sweden and Switzerland – operate alimony-advance schemes. Several countries also provide school-related allowances to help cover the costs of supplies, clothing, and materials, or to reduce or eliminate ancillary school fees for low-income students. In addition, some countries – such as France, Italy and Norway – offer means-tested benefits specifically targeted at families with young children. Finally, a number of OECD countries link parts of family support to parents' labour market status, for example through in-work tax credits or childcare allowances, as seen in Belgium, Czechia, Finland, Korea and Norway.

  Income support generally increases with family size: on average, low-income families with two children receive about 1.9 times the net support of otherwise similar one-child families and those with three children over three times as much, although cross-country variation is large. In some countries families (notably in Hungary and Slovenia), support for two-child families is significantly more than double that for one-child, and in in Estonia, Latvia, Hungary, Slovenia and Spain, the ratio for three-child families exceeds four.
- Fifth, despite some improvements, significant challenges remain regarding redistribution and the adequacy of income support. While minimum wages now provide better protection against poverty than two decades ago – rising on average from just over 42% of median income in the early 2000s to around 55% in 2023 – this progress has not been universal. Combined with lower work intensity among families with children than in childless households, this means that labour income alone is frequently insufficient to protect families from in-work poverty.
- Tax and benefit systems reduce child poverty by about one-third on average across the OECD – equivalent to roughly 7 p.p. – but their impact varies widely across countries.

- Despite the important role of income transfers in reducing poverty, the redistributive impact of tax-benefit systems towards low-income households has weakened in many OECD countries over the past two decades. While some countries maintain strongly targeted systems in which more than half of social benefits accrue to households in the bottom 30% of the income distribution, the contribution of net transfers to disposable income and the redistributive design of tax-benefit policies for low- and middle-income families with children has generally declined since the early 2000s, with only a limited number of countries strengthening support for low-income families.
- Horizontal redistribution towards families with children has also weakened in many OECD countries over time. Although larger families continue to receive substantially higher net transfers than smaller ones, support for families with children of all sizes substantially declined in many countries, despite some notable increases in support for families with children in a small group of countries (including Estonia, Greece, Korea, Latvia, Lithuania, Japan and Poland).

1.2. Unpacking the child-focussed dimension of value for money in social policies

Investing in children requires governments to make strategic decisions about how future public resources should be allocated to boost improvements in child well-being. This involves deciding not only how much to spend, but also how to distribute social budgets across policy areas, forms of support and target groups in ways that most effectively reduce child poverty and strengthen children's health, education and long-term opportunities. This question differs from identifying where expenditure should be reduced or reallocated within a fixed budget. Instead, it concerns how additional resources generated through sustained economic development can be invested most effectively to achieve greatest returns for children.

In many OECD countries, continued economic development may create scope to expand social spending. At the same time, however, population ageing and other emerging social risks are increasing demands on public budgets, making public expenditures increasingly constrained. In this context, policy decisions need to consider not only the effectiveness of social spending in improving child outcomes, but also its implications for the future trajectory and sustainability of public expenditure.

Assessing the "value for money" of social policies therefore requires understanding how social expenditure across cash and in-kind forms of support, and the way that support is distributed across households and families, influence both child outcomes and trajectories of social spending over time. It also requires recognising that many areas of social policy – not only those explicitly targeted at children and families – can have important consequences for children's well-being.

Six social policy areas shaping child outcomes

This work identifies six broad categories of social policy that can substantially contribute to improving children's outcomes[3] (Figure 1.1 and Box 1.1), therefore contributing to prevent the transmission of disadvantage from one generation to the next and to reduce its long-term social and economic costs (De Schutter et al., 2023[5]; Clarke et al., 2024[28]):

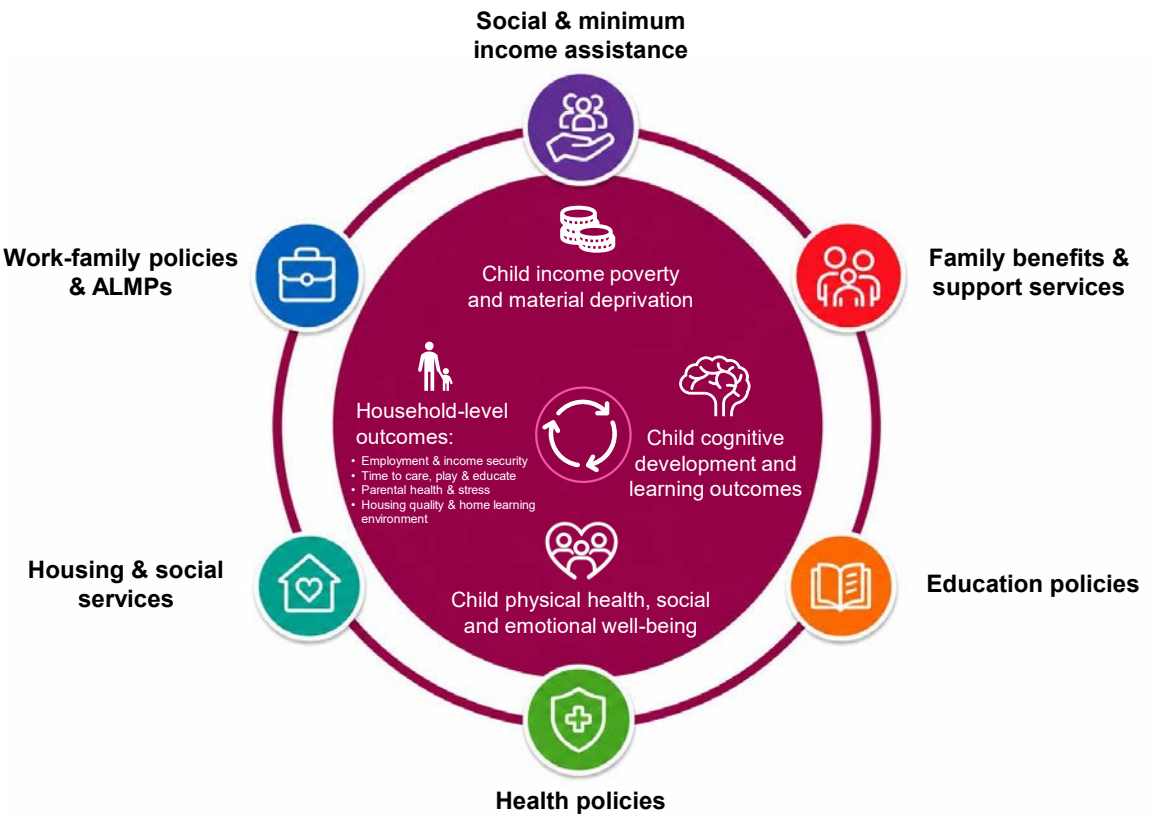
- **Work-family reconciliation and Active labour market policies** (ALMPs) support parents' access to employment, increase work intensity, and improve household living conditions – all key factors in reducing family poverty and strengthening financial security. Work-family reconciliation measures include paid parental leave entitlements, flexible working arrangements, and access to affordable early childhood education and care, all of which help reconcile employment and caregiving responsibilities. ALMPs include all social expenditure (other than education) which is aimed at the improvement of the beneficiaries' prospect of finding gainful employment or to otherwise increase their earnings capacity. They encompass job-search assistance, training, and

targeted support to overcome barriers to employment. While not exclusively targeted at parents, these policies address many of their specific needs and are also important for prospective parents seeking to establish stable employment. They influence child outcomes through multiple channels – by promoting parental employment, strengthening income stability, and improving working conditions – thereby fostering environments more conducive to parental well-being, quality parenting, and investment in children, although these effects are largely indirect and may take time to materialise.

- **Income support and minimum-income policies** increase the resources available to low-income families – whether in or out of work – and help secure an adequate standard of living. Unlike ALMPs, whose effects depend on improvements in employment and may take time to emerge, income support can translate more immediately into improved living conditions. These policies include a wide range of cash transfers targeted by income, household composition, employment status, or specific circumstances.
- **Family benefits and support services** combine financial and in-kind support to address the costs and risks associated with raising children. These include cash benefits and tax reductions to help cover child-related expenses, care needs, or family-related risks such as separation. They also encompass earmarked or "near-cash" instruments (e.g. vouchers for food or essential services) that directly reduce children's exposure to material deprivation, as well as family support services that provide tailored assistance to households facing complex or multiple disadvantages. Their effectiveness varies by design: sustained and predictable transfers tend to have a stronger impact than one-off payments, as they can be incorporated into household budgeting and longer-term decisions. Some transfers are conditional on the use of education, childcare, or health services, and support can also be delivered through the tax system, for example via tax credits or allowances for families with children.
- **Housing and social services** play a crucial role in reducing material deprivation and improving living conditions. By lowering housing costs and ensuring stable accommodation, they can provide a physical home environment that is safe and healthy, free up resources for children's needs and support parents' access to employment. Social services also help address social issues (e.g. social isolation, administrative barriers, substance use or exposure to violence) that may hinder stable work and family well-being.
- **Health policies** affect child outcomes through multiple channels. These include preventive and curative services targeted directly at children (e.g. health checks, paediatric care), as well as services that support parents' physical and mental health. By improving parental well-being, health policies enhance caregiving capacity, strengthen parent-child relationships, and support labour market participation. It is important to note, however, that data limitations make it difficult to isolate spending specifically devoted to children's healthcare services from broader health expenditure benefiting the population as a whole.
- **Education policies** are central to improving children's learning outcomes, particularly for those from disadvantaged backgrounds. Beyond academic achievement, they shape school environments and climates – key components of children's well-being – and play an important role in identifying and addressing difficulties children may face in their lives.

Figure 1.1. Policy pathways to child well-being: A simplified framework

Broad categories of policies with potential impacts on child outcomes



Note: The figure suggests that each policy area primarily affects outcomes that are most directly related to it, but can also generate indirect effects on more distant outcomes. These broader effects may arise because policies that influence poverty and material living conditions can have spillover effects across a wide range of child outcomes (as illustrated by the circled arrow), and because different dimensions of child well-being interact with one another. For example, social assistance and minimum income schemes, as well as family benefits, primarily affect households' material living conditions and poverty risks, but they can also influence children's learning and health outcomes both through reductions in poverty and through the use of additional household resources to meet children's developmental needs.

The extent to which countries allocate public resources across these policy areas reflects national policy priorities, but there are clear common patterns showing that both the level and composition of social spending are closely linked to economic development (see Annex 1.A). Countries with higher GDP per capita devote substantially more resources to social policies and tend to allocate relatively larger shares of spending to families with children notably through greater spending on cash benefits, and active labour market programmes. By contrast, the share of social spending devoted to healthcare generally declines as countries become wealthier, while the share allocated to early childhood education and care remains comparatively stable across different levels of development. Higher levels of economic development are also associated with higher maternal employment, lower joblessness, wider participation in early childhood education and care, and substantially lower rates of child poverty and severe material deprivation. Taken together, these findings underscore the importance of economic development and sustained social investment in improving children's living conditions, while highlighting the need to understand not only how much countries spend, but also how the design and allocation of social spending influence the outcomes achieved with increases in social expenditures.

What does "value for money" mean and how is it assessed?

The analysis conducted in this report examines how spending on social policies can deliver greater value for money for children, understood as their ability to improve child outcomes while, where possible, containing long-term pressures on public social expenditure. The approach adopts a forward-looking perspective, focussing on how social spending can be structured, allocated and designed to maximise its impact on children's well-being while supporting the long-term sustainability of social budgets. It builds on earlier OECD work assessing efficiency in health and education systems (Lorenzoni et al., 2018[29]; Égert, Botev and Turner, 2020[30]), adapting these approaches to social policies targeting child outcomes.

Assessing the value for money of social policies for children of policies requires considering two closely related dimensions:

- **Policy effectiveness** measures the extent to which particular policy features enhance or weaken the impact of social spending on children's outcomes, relative to a counterfactual in which social expenditure increases but the policy mix remains unchanged. The analysis examines whether differences in the allocation of social spending across policy areas, the balance between cash transfers and in-kind services, and the design and targeting of income support are associated with stronger improvements in child outcomes for a given level of expenditure increase. Outcomes considered include child poverty and material deprivation, educational achievement, health and emotional well-being. These outcomes are modelled as a function of overall social spending, policy features and relevant structural characteristics affecting children's living conditions, such as household composition, the prevalence of single-parent families, adolescent fertility and pre-transfer poverty. Chapters 3 and 4 describe the empirical methodology in detail.
- **Spending implications** assess whether alternative policy designs amplify or moderate the long-term growth of social expenditure. Specifically, the analysis examines whether differences in expenditure allocation, the balance between cash and services, or the targeting of support are associated with higher or lower levels of social spending over time than would be expected given a country's underlying economic and demographic conditions. Social expenditure is first modelled as a function of GDP per capita – which captures a country's fiscal capacity to spend – and key demographic factors, including life expectancy and the dependency ratio, which shape countries spending needs. Policy design features are then introduced to explain why countries with similar levels of economic development and demographic pressures may nevertheless experience different spending trajectories. The estimated effects are expressed as the percentage change in social expenditure associated with an incremental change in a given policy feature, relative to a counterfactual in which the policy mix remains unchanged. Depending on the policy, these effects may indicate either moderation[4] or amplification of long-term spending pressures.

Combining these two dimensions provides an assessment of the value for money of different policy configurations. Policies are considered to deliver greater value for money when they achieve stronger improvements in children's outcomes without adding pressures on long-term social expenditure. Value for money is therefore greatest for policy configurations that strengthen outcomes across multiple dimensions – such as reducing child poverty and improving educational achievement, health and socio-emotional well-being – while moderating the long-term relationship between economic development, demographic change and social expenditure.

The proposed framework adopts a long-run perspective in which social expenditure evolves with countries' economic development and demographic change. As such, it is designed to assess how alternative policy configurations influence the effectiveness and sustainability of social spending over time, rather than to evaluate budget-neutral short-run reallocations in which increases in spending in one policy area are exactly offset by reductions elsewhere. Nevertheless, the findings also provide insights into the potential effects of sustained reductions in social expenditure. By identifying the policy configurations that generate

weaker changes in child outcomes for a given change in social spending, the analysis highlights policy options that are likely to preserve children's well-being most effectively in the event of a permanent tightening of public social budgets.

Key policy features

The analysis considers several key dimensions of social policy design that shape the way governments support families and children:

- **The composition of social expenditure across policy areas**, including spending on early childhood education and care (ECEC), family cash benefits, healthcare, active labour market programmes and other in-kind services. The distribution of resources across these policy areas reflects the overall orientation of the social protection system and, as discussed in the previous section, can influence the extent to which policies reduce childhood socio-economic disadvantage and improve children's outcomes.
- **Employment-oriented measures** such as expenditure on active labour market programmes and the strength of financial work incentives, which aim to promote labour market participation and strengthen families' earning capacity.
- **The provision of in-kind services**, including early childhood education and care, healthcare, housing and other social services, which directly support children's development and family well-being while complementing household income.
- **The design of income support systems**, including both the size and targeting of cash transfers. This encompasses the extent to which transfers are directed towards lower-income households, as well as how support varies according to family characteristics, such as the number of children, family structure and household income.

Together, these policy dimensions capture the main levers through which governments shape social policy systems. They reflect decisions about how resources are allocated across policy areas, the balance between cash transfers and service provision, the emphasis placed on employment promotion versus income support, and the degree to which benefits are targeted towards different groups of households. These design choices influence children's living conditions through multiple channels – including household income, access to essential services, parental employment, housing conditions and family well-being – and are therefore expected to affect a broad range of child outcomes, including material well-being, educational achievement and health.

The indicators used to measure these policy dimensions are mainly constructed from the *OECD Social Expenditure Database (SOCX)* (OECD[31]), the *OECD Family Database* (OECD[32]), the *OECD Income Distribution Database* (OECD[33]), the *OECD Tax & benefit simulation model* (OECD[34]) and *OECD Child Well-being Data Portal* (OECD[35]).

Against this background, the analysis of Chapters 3 and 4 pursues three main objectives. First, it examines how different social policy levers influence multiple dimensions of children's outcomes, and the extent to which these outcomes can be improved individually or jointly. Second, it assesses the value for money for children of these policies – that is, their capacity to enhance child outcomes while containing pressures on social spending over time. By combining these two dimensions, the report evaluates the effectiveness of social policies from a child-centred perspective, considering their contribution to reducing child income poverty and material deprivation, improving adolescent educational performance, and enhancing self-reported health. It also investigates how overarching policy design features shape both the effectiveness of social spending in achieving these outcomes and its impact on the evolution of social expenditure. Third, the analysis explores how policies interact with one another, including whether specific combinations of interventions yield stronger results than standalone measures, and how these effects vary across countries depending on their level of economic development and the maturity of their welfare systems.

1.3. Value for money in reducing child poverty

Chapter 3 assesses the "value for money" of social policies in reducing child poverty and material deprivation by examining how spending choices and policy design features affect both effectiveness and future spending pressures. Child poverty outcomes are captured using three complementary indicators:

- Relative child income poverty, which measures the share of children living in households with equivalised disposable income that is below 50% of the national median. It rises with annual increases in the median income.
- Deep child (income) poverty, which captures the share of children who live below the inflation-adjusted poverty threshold "anchored" in 2005. As living standards have increased over time in most OECD countries, the anchored poverty rate allows to focus on children living in deeper levels of poverty compared to all those falling under the relative poverty line.
- Severe material deprivation among children refers to the EU indicator capturing the share of children living in households that experience an enforced inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life, including the ability to keep the home adequately warm, afford nutritionally adequate meals, cope with unexpected expenses, and afford a one-week annual holiday away from home.

The use of complementary measures of income poverty and material deprivation is motivated by the fact that these indicators capture different dimensions of children's economic disadvantage. Income poverty measures are valuable for cross-country comparisons and provide an assessment of children's risk of poverty, but they offer only limited insight into their actual living conditions. Parents may partially shield children from the consequences of low household income, and children may benefit from publicly provided in-kind services that are not reflected in conventional income-based measures. For this reason, income poverty indicators are increasingly complemented by measures of material deprivation, which provide a more direct assessment of children's exposure to hardship. Material deprivation measures also have limitations, however, as they rely on predefined lists of essential goods and activities and may not capture all aspects of disadvantage. Conversely, income measures remain indispensable because they reflect the financial constraints that limit families' capacity to invest in their children's development, even when material deprivation is not immediately observed. Taken together, the two approaches provide a more comprehensive assessment of child poverty than either measure alone.

Child poverty trends

An overview of child poverty across OECD countries reveals persistently high risks among children living in jobless, single-parent and large families, as well as substantial levels of in-work poverty and material deprivation extending beyond conventional income poverty measures. The analysis highlights five main findings:

- **Around one in eight children are income poor**. In 2023, 12.5% of children across the OECD lived in households with incomes below the relative poverty threshold, often at higher rates than the population as a whole. Child poverty is particularly high in countries such as Chile, Costa Rica, Israel, Mexico, Spain, Türkiye, the United Kingdom and the United States, while it is lowest in Denmark, Finland, Hungary and Slovenia, where children are less likely than adults to live in income-poor households.
- **Employment substantially reduces, but does not eliminate, poverty risks**. On average, around 10% of working families with children remain income poor, with much higher rates among single-parent families. Across the OECD, around one in five employed single-parent families lives in poverty, rising to more than one in three in countries such as Costa Rica, Spain and the United States.

- **Income poverty is associated with multiple forms of disadvantage**. Children living in income-poor households are more likely to experience inadequate housing, unmet healthcare needs and limited access to leisure and recreational activities. However, these disadvantages are not confined to income-poor households, as many children living above the poverty threshold also experience similar forms of hardship.
- **Material deprivation extends well beyond income poverty**. In 2024, around one in ten children in Europe experienced child-specific material deprivation. Although children living in income-poor households are nearly five times more likely to be materially deprived than other children, most materially deprived children are not income poor. Approximately two-thirds live in households with incomes above the relative poverty threshold, while around one-third live in households with incomes above the third decile of the income distribution across OECD European countries.
- **Family structure remains a major determinant of child poverty**. Children living in single-parent and large families face substantially higher risks of both income poverty and material deprivation than those living in smaller two-parent households. In particular, children in large families are more than twice as likely to experience poverty or deprivation as children living in one-child families, reflecting the greater financial pressures associated with raising larger families relative to household income.

Enhancing the "value for money" of social policies in reducing child poverty

Applying the value-for-money framework to child poverty shows that policy configurations emphasising employment promotion and in-kind services – particularly health, education and childcare – are generally more effective at reducing poverty and material deprivation while containing long-term growth in social expenditure. Income support remains essential for protecting families against economic shocks and providing immediate relief when household resources fall. However, while cash transfers are effective in reducing relative income poverty, they appear less successful in addressing deeper forms of hardship and tend to increase long-term spending pressures.

Overall, the analysis suggests that reducing child poverty while ensuring the sustainability of social spending requires balanced policy packages rather than reliance on any single policy instrument. The analysis highlights seven main policy implications:

No single policy instrument is sufficient

Over the past two decades, OECD countries have substantially increased social spending, contributing to an estimated reduction in child relative poverty of almost 3 p.p. – around one-quarter of its average level in 2023. However, the analysis shows that how resources are allocated is as important as how much is spent.

The most effective strategies combine employment-oriented policies, well-designed income support and investment in in-kind services. Stable employment provides the most sustainable route out of poverty; income transfers provide immediate protection against financial hardship; and services such as childcare, health and housing help strengthen children's long-term opportunities. Child poverty reduction is therefore most effective when these policy instruments operate in combination rather than in isolation.

Expanding access to early childhood education and care (ECEC) services is one of the most effective long-term investments to reduce child income poverty

Three main findings emerge:

- **First, increasing participation matters more than increasing spending alone.** Higher ECEC spending is not, by itself, associated with lower child poverty. Poverty reduction occurs when

additional investment translates into higher participation, particularly among children from low-income families. A one-standard-deviation increase in enrolment among children aged 3-5 (around 18 p.p.) alongside an increase in social spending is associated with an additional 1.5 p.p. reduction in child relative poverty – roughly doubling the poverty-reducing impact of the increase in social spending alone. An equivalent 18-p.p. increase in participation among children aged 0-2 is associated with a 1.8-p.p. reduction in anchored child poverty, increasing the effectiveness of social spending by around 50%.

However, in countries with relatively low levels of social spending, expanding ECEC participation alone appears less effective at reducing deep (anchored) child poverty. One likely explanation is that the initial beneficiaries of service expansion tend to be more advantaged families, while those experiencing the greatest deprivation remain harder to reach. Maximising the poverty-reducing impact of ECEC therefore requires strong affordability measures, accessible provision and targeted outreach to disadvantaged families.

- **Second, fiscal returns increase as systems mature.** Expanding ECEC coverage requires upfront investment and may initially increase pressures on social expenditures. As economies grow and ECEC enrolment rises, however, these costs are increasingly offset by higher parental employment and stronger labour market attachment (see Annex 1.A). In countries with more developed ECEC systems (and higher maternal employment rates), further expansion is no longer associated with additional long-term spending pressures and may even help moderate future growth in social expenditure. For example, the simulations reported in Chapter 3 suggest that, in countries with average levels of GDP per capita, allocating an additional one p.p. of total social expenditure to ECEC – sufficient to increase enrolment rates by around 14 p.p. – is associated with a 1.9% reduction in projected social spending relative to a scenario in which GDP increases without any change in the allocation of spending. This corresponds to a reduction in additional social spending of around one-fifth after 11 years compared with the baseline projection.
- **Third, ECEC alone is unlikely to eliminate severe material deprivation.** Although expanding participation can reduce deprivation in countries where coverage remains limited, the effects are generally modest. In more mature systems, additional investment in ECEC delivers smaller gains than spending on healthcare, housing and other services that more directly address the multiple dimensions of hardship faced by materially deprived families.

Active labour market policies (ALMPs) reduce child poverty across all measures

A larger share of social expenditure allocated to ALMPs is associated with stronger poverty reduction. Increasing the share of social expenditure allocated to ALMPs by one p.p. raises the poverty-reducing effectiveness of additional social spending by around 25% for child relative poverty, around 20% for anchored poverty, and roughly 10% for severe material deprivation after a decade.

However, marginal returns decline as overall social spending rises, suggesting that additional investment yields smaller gains for child poverty reduction in more mature welfare systems. Nevertheless, while higher ALMP expenditure may initially increase social spending pressures, these pressures diminish – and may eventually reverse – as countries become wealthier, reflecting stronger labour market attachment and potentially reduced dependence on income support.

The findings suggest that ALMPs help parents overcome barriers to employment and secure more stable earnings, although further research is needed to identify which programme designs are most effective for families with children, particularly single-parent families.

Making work pay is equally important. Chapter 3 shows that larger financial gains from moving into full-time employment – whether from non-employment or part-time work – can be associated with lower rates of severe material deprivation. Employment support is therefore most effective when combined with tax-benefit systems that ensure work results in a meaningful improvement in living standards.

Investment in health and other in-kind services delivers substantial value for money

The share of social expenditure devoted to health has increased substantially across the OECD over the past two decades. The analysis suggests that a one-standard-deviation increase in health spending (equivalent to around 9 p.p. of total social expenditure) is associated with a further 4.1 p.p. reduction in anchored child poverty – more than doubling the poverty-reducing effectiveness of the additional social spending relative to a scenario in which the spending mix remains unchanged – and a 3.2 p.p. reduction in severe child material deprivation, increasing spending effectiveness by around 76%. At the same time, a greater allocation of social spending to health as GDP increases is associated with an estimated 11% moderation in long-term social spending pressures after 11 years, meaning that social expenditure is projected to grow more slowly than would be expected from economic growth alone. These findings suggest that investment in health can simultaneously improve child outcomes and support the long-term sustainability of public finances.

A similar pattern emerges for housing, incapacity-related benefits and other social services. Greater investment in these areas is associated with lower child income poverty and material deprivation, although it comes with higher long-term spending pressures. A one-standard-deviation increase in their share of social expenditure (around 3.5 p.p. of social expenditure) is linked to a 20% improvement in the effectiveness of additional social spending in reducing child relative poverty after around a decade, a 40% enhancement for anchored child poverty, and over 50% for severe child material deprivation. However, this reallocation is also associated with a 5.6% increase in long-term social spending pressures, suggesting that these services generally complement rather than replace other forms of support. These results highlight the important role that housing and other in-kind services can play in reducing hardship among disadvantaged children, while underlining the need for effective targeting to maximise impact and minimise fiscal costs.

Cash transfers remain essential, but their design can be strengthened

Cash transfers remain a core component of child poverty reduction. They provide immediate protection against income loss, support families whose earnings are insufficient to ensure an adequate standard of living, and complement employment-oriented policies whose benefits emerge more gradually.

On average across the OECD, a one-standard-deviation increase in the average size of all cash benefits taken together (around 6 p.p. of disposable income) is associated with a 1.2 p.p. reduction in child relative poverty, increasing the poverty-reducing effectiveness of additional social spending by around 80%.

Targeting also matters. Directing a larger share of benefits towards lower-income households strengthens poverty reduction while helping contain spending pressures. For every standard-deviation increase in the average size of cash benefits, a one-standard-deviation increase in the share of benefits received by the bottom 30% of the income distribution amplifies the poverty-reducing effect by an additional 1.1 p.p. for child relative poverty. Greater targeting towards the bottom 30% is further linked to a 3-p.p. reduction in anchored child poverty (increasing the effectiveness of social spending in reducing deep child poverty by around 80%).

However, stronger income targeting does not appear to improve the effectiveness of transfers in reducing severe material deprivation. This likely reflects three factors. First, increased targeting of benefits towards lower-income households has not always been accompanied by higher benefit levels for those families. Second, a substantial proportion of materially deprived children live in households above conventional income-poverty thresholds and are therefore not reached by highly targeted transfers. Third, material deprivation often reflects not only insufficient income but also limited access to affordable housing, childcare, healthcare, transport and other essential services. As a result, reducing material deprivation requires both adequately designed income support and complementary investment in accessible in-kind services.

Strengthening income support for families with children helps reduce child income poverty, but appears less effective in tackling deeper forms of poverty, suggesting there may be scope to improve benefit adequacy and coverage. Greater income support for families with children, relative to otherwise similar childless households, is associated with reductions in child relative poverty of around 1.4 to 1.8 p.p. – equivalent to increasing the poverty-reducing impact of the simulated increase in social spending by approximately 95-120%. This relationship is particularly pronounced in countries with higher levels of social expenditure, where child-related benefits tend to be more generous. By contrast, no statistically significant association is observed with anchored child poverty. This may indicate that benefit levels remain insufficient to lift families out of persistent poverty, or that take-up among the lowest income families is limited.

These findings point to the value of combining a universal foundation with targeted support. A proportionate universal approach could provide all children with a basic level of income security while directing additional support towards families facing greater needs because of low income, family composition or other vulnerabilities.

Effective policy implementation design matters as much as spending

Across all policy areas, effectiveness depends on whether support reaches families in a way that is aligned with their needs, accessible, adequate and predictable.

Three design principles stand out:

- **Align support with family needs**. Benefit levels and services should reflect family size, household composition and children's ages. This is particularly important for single-parent and large families, which face elevated cost of children and poverty risks (Rapp and Thévenon, 2025[36]).
- **Improve take-up and maintain adequacy**. Administrative complexity often prevents eligible families from receiving support. Simplifying procedures, strengthening outreach and maintaining benefit values through regular indexation can substantially enhance effectiveness.
- **Provide timely and predictable support**. Social protection systems need to respond quickly to changing family circumstances while avoiding unnecessary instability in household resources. The challenge is to balance accurate targeting with income security, administrative simplicity and ease of access. While frequent reassessments may improve targeting, they can also generate income volatility, increase administrative burdens and lead to overpayments that leave families facing repayment obligations and financial stress. Striking the right balance is therefore essential. Equally important is ensuring continuity of support throughout childhood. Predictable and sustained support helps families plan ahead, make longer-term spending and investment decisions, and provides greater stability during key stages of children's development.

Reducing material deprivation requires a broader service-based approach

Overall, the findings underscore that income support alone is insufficient to tackle severe material deprivation. Lasting reductions in deprivation require cash transfers to be complemented by stronger investment in healthcare, housing and other services that address the wider determinants of disadvantage.

This also highlights the importance of place-based policies that reduce inequalities in access to essential services (OECD, 2025[37]; 2025[38]). Ensuring that childcare, healthcare, housing, transport, leisure facilities and green spaces are available, affordable and accessible in disadvantaged communities can substantially strengthen the effectiveness of anti-poverty efforts and improve children's well-being, as also highlighted in recommendations to strengthen the implementation of the European Child Guarantee (European Commission, 2026[39]).

Where does additional social spending deliver the greatest value for money?

A final question addressed in Chapter 3 compares the effectiveness of allocating the same additional social spending across broad policy domains in reducing child poverty and material deprivation while influencing long-term spending pressures. The findings show that:

- Expanding participation in early childhood education and care (ECEC) offers the greatest returns for reducing child relative income poverty, largely through its effects on parental employment and earnings: an additional one p.p. of total social expenditure allocated to ECEC to expand enrolment increases the poverty-reducing effectiveness of social spending by an additional 0.74 p.p. (around 50% more than increasing in social spending alone). However, its effectiveness in addressing deeper forms of disadvantage depends on the maturity of the welfare state. In lower-spending countries, shifting resources towards ECEC to increase enrolment may reduce the effectiveness of efforts to combat deep poverty, whereas in more developed welfare states – with more extensive childcare systems and higher parental employment – it can substantially strengthen reductions in anchored poverty.
- For severe material deprivation, ECEC investment is most effective where childcare provision remains underdeveloped, but its marginal impact declines as coverage becomes widespread. By contrast, investment in active labour market programmes (ALMPs), health services, housing and other in-kind support strengthens the effectiveness of social spending in reducing both anchored child poverty and severe material deprivation. On average, a one-p.p. increase in the share of social spending allocated to ALMPs, health and other in-kind services raises the effectiveness of social spending in reducing severe material deprivation by around 9%, 8% and 14%, respectively.
- Greater investment in ECEC, health services and ALMPs can help moderate long-term spending pressures, particularly in wealthier countries. For example, directing an additional p.p. of social expenditure to expanding ECEC coverage is associated with 1.9% lower long-term social expenditure after a little more than a decade – around 20% less than the projected increase in spending associated with economic growth without changes in policy. These gains arise because higher parental employment and stronger labour market attachment increasingly offset the costs of service provision. By contrast, greater reliance on cash transfers and some other in-kind benefits in the policy mix tends to increase long-term spending pressures.

Overall, the findings indicate that investing in ECEC expansion provides the highest value for money in reducing relative income poverty, while health, housing, other in-kind services and ALMPs are more effective in tackling deeper and more persistent forms of disadvantage.

1.4. Value for money in enhancing adolescents' education and health outcomes

Chapter 4 assesses the value for money of social policies in improving adolescents' academic performance and health. It begins by examining trends in educational achievement at age 15, drawing on data from the *Programme for International Student Assessment* (PISA) between 2009 and 2025, rates of 15- to 29-year-olds neither in employment nor education or training (NEET) and trends in adolescents' self-reported health using data from the *Health Behaviour in School-aged Children* (HBSC) study. The chapter also examines the extent to which these outcomes vary according to adolescents' socio-economic background. It then applies the value-for-money framework, adapted to adolescent outcomes, to estimate how the social policy levers identified earlier contribute to improving educational achievement and health while influencing long-term social spending.

Raising students' academic performance and health while ensuring fairness is a challenge

Education is a key driver of social mobility and equality of opportunity, but its equalising potential is constrained by socio-economic inequalities that emerge early in childhood and persist throughout adolescence. Children from disadvantaged backgrounds are more likely to enter school with weaker cognitive and socio-emotional skills and to experience poorer academic outcomes, while more advantaged families are better able to compensate for educational setbacks through greater economic, social and cultural resources. At the same time, numerous OECD countries have experienced declining educational performance since the early 2010s, reflecting rising shares of low-performing students and, in many cases, fewer high achievers. These trends raise concerns for both social inclusion and long-term economic growth, particularly in increasingly knowledge- and technology-intensive economies (Hanushek and Woessmann, 2008[40]; 2015[41]; European Commission, 2020[42]). A central policy challenge is therefore to improve overall educational performance while narrowing socio-economic disparities, by reducing low achievement and creating greater opportunities for disadvantaged students to reach high levels of academic performance.

Data from PISA assessments between 2009 and 2025 point to a deterioration in academic performance across both the lower and upper ends of the achievement distribution, with the decline being particularly pronounced among low-performing students:

- Across the OECD, 43% of children performed below baseline proficiency levels in the 2025 PISA assessments, up from 31% in 2009. The increase in low performance has been especially marked in Finland, Greece, Iceland, the Netherlands and Norway. Low performers are not confined to disadvantaged groups: nearly half came from middle socio-economic backgrounds[5] in 2025.
- The share of high-performing 15-year-olds also declined across most OECD countries, falling on average from 15.1% in 2009 to 11.9% in 2025, although levels continue to vary widely across countries. The largest declines were observed in several European countries, while only a small group of countries – including Türkiye, the United States and the United Kingdom – recorded increases. High achievement is not confined to the most advantaged groups: across the OECD, students from middle socio-economic backgrounds account for 47% of top performers students and students with lower socio-economic status for 9%.
- Across the OECD, 13% of young people aged 15-29 are neither in employment, education nor training (NEET). Encouragingly, NEET rates have declined over time in most countries, falling from an OECD average of 16% in 2010.

In parallel to trends in educational outcomes, similar concerns have emerged regarding child health, both in terms of deteriorating outcomes over time and the persistent influence of social determinants on health inequalities:

- Across the OECD, 28% of 15-year-olds report being in "excellent" health, although this share varies widely across countries, from 46% in Israel to fewer than one in six adolescents in Latvia and Poland. Since 2013-2014, the proportion reporting excellent health has declined by more than 3 p.p. on average, with particularly large decreases in Greece and Spain.
- At the same time, 22% of adolescents report their health as "fair" or "poor", ranging from less than 15% in Finland, France and Sweden to 35% or more in Hungary, Latvia and Poland. The share reporting poor health increased by around 5 p.p. on average between 2013-2014 and 2021-2022, with especially strong increases in Canada, Hungary, Ireland and Poland.
- In 2021-2022, more than half (53%) of 15-year-olds reported experiencing at least two health complaints more than once a week during the previous six months. Multiple subjective health complaints increased markedly over time in all OECD countries, particularly after 2017-2018.

- Strong socio-economic gradients are evident in adolescents' self-reported health. Adolescents from more affluent families are more likely to report excellent health and less likely to report fair or poor health than their peers from less affluent backgrounds.

Enhancing the "value for money" of social policies in enhancing adolescent academic performance and health

Improving adolescent educational achievement and health requires both reducing the share of young people experiencing poor outcomes and increasing the share who attain high levels of performance and well-being. These objectives are complementary: reducing disadvantage promotes equality of opportunity, while expanding excellence strengthens countries' capacity to meet future economic and social challenges, including growing demand for highly skilled and healthy populations. Achieving both goals, however, may require different combinations of policies and investments. This is particularly important for adolescents from low- and middle-socio-economic status (SES) backgrounds, who remain substantially less likely than their more advantaged peers to achieve strong educational outcomes or report excellent health.

A major challenge remains in expanding opportunities for low-SES students to achieve high levels of academic performance. Across the OECD, only around 5% of 15-year-olds from the bottom quarter of the socio-economic distribution are high performers, compared with 12% among students from middle socio-economic backgrounds and 23% among those from the top quarter. These findings point to the importance of providing support across a broad range of low- and middle-SES children, while ensuring that the intensity of support remains proportionate to levels of need and therefore stronger for the most disadvantaged children.

Against this backdrop, the value-for-money framework is used to assess how the level, allocation and design of social spending influence the distribution of educational and health outcomes among 15-year-olds. Rather than focussing solely on average performance, the analysis examines which policy configurations are most effective in reducing the share of adolescents with poor outcomes while increasing the share who achieve high levels of academic performance and well-being. The framework is also applied to assess the contribution of social policies to reducing the proportion of young people who are not in employment, education or training (NEET).

A key methodological feature is that policy variables are aligned with the stage of childhood at which cohorts were exposed to them. For example, spending on early childhood education and care (ECEC) is measured 10-15 years before outcomes are observed for 15-year-olds so that it reflects the policy environment experienced during early childhood. The analysis also considers spending on primary and secondary education, although it does not examine how institutional characteristics of education systems affect spending effectiveness, an issue addressed by Egert et al. (2020[30]).

Overall, the findings highlight the importance of sustained investment throughout childhood. Early-life investments appear particularly effective in preventing poor educational and health outcomes, whereas spending during middle childhood and adolescence plays a larger role in promoting high achievement and excellent health. The results also underline the importance of matching both the type and intensity of support to children's needs, especially among those from low- and middle-SES backgrounds.

The analysis points to six main policy implications.

Early childhood education and care is a key investment for improving long-term educational and health outcomes

ECEC emerges as one of the most effective entry points for improving children's developmental trajectories. Allocating greater shares of social expenditure to ECEC services is linked to higher rates of PISA high performers as well as improved health outcomes across all measures (the share of adolescents

reporting excellent health, low health and multiple subjective health complaints). These associations reflect ECEC spending overall, without distinguishing between investments aimed at expanding coverage and those aimed at improving service quality.

Importantly, spending and participation appear mutually reinforcing. The benefits of investment in ECEC are substantially greater when accompanied by an expansion in enrolment, suggesting that the quality of provision is as important as its coverage. Simulations indicate that jointly, both policies generate a stronger positive association with the share of high-performing students in PISA than either policy alone and, for a sufficiently large increase in enrolment, they are also associated with a reduction in the share of low-performing students when spending alone is insignificant individually.

Reaching disadvantaged children, ensuring high-quality provision, supporting transitions into compulsory schooling and maintaining continuity with later educational stages are therefore critical to maximising long-term returns. More broadly, ECEC appears most effective when embedded within a wider system of sustained support throughout childhood.

Sustained investment during the school years remains essential

The analysis suggests that different stages of educational spending contribute to different outcomes. Across countries, higher investment in primary education is associated with fewer low-performing students, while spending in primary and, more strongly, secondary education is linked to a larger share of high performers.

However, changes in education spending within countries over time are not consistently associated with measurable improvements in outcomes, indicating that spending levels alone may not be sufficient. The effectiveness of education investment is also likely to depend on broader institutional factors such as teacher quality, governance arrangements and system design. Improving the value for money of education spending therefore requires attention to both the amount invested and the way resources are used (Égert, Botev and Turner, 2020[30]).

The timing of income support to families with children matters

The effects of family cash benefits vary across childhood. Support during early and middle childhood appears particularly important for preventing poor educational and health outcomes, while sustained support throughout childhood is more strongly associated with higher shares of students with high academic achievement and excellent self-reported health at age 15. These findings mirror patterns observed for education spending, where investment in primary education is linked to fewer low performers and spending in secondary education more strongly tied to a greater share of high performers.

These findings suggest that income support can contribute to children's development not only during the earliest years but throughout childhood, helping families meet evolving needs as children grow older and maintain home environments conducive to learning and well-being. Beyond expenditure levels, policy design also matters. Eligibility conditions and links to school attendance, preventive health checks or other forms of engagement may strengthen the effectiveness of cash transfers in improving children's educational and health outcomes.

ECEC and family benefits help reduce socio-economic inequalities in educational outcomes

Both preschool participation and family cash benefits play an important role in narrowing socio-economic gaps in educational achievement. They reduce the risk of low performance among disadvantaged students while increasing opportunities for higher achievement and upward mobility.

Income support during early and middle childhood appears particularly beneficial for reducing the share of low achievers among low-SES children, suggesting that the returns to additional support may be high among the most disadvantaged groups. These findings reinforce the importance of ensuring that policies are designed to reach children facing the greatest barriers while maintaining support across a broader population.

Balancing targeting and broad-based support is key

The design of income support matters as much as the size of benefits. Higher average benefits amounts are associated with a higher likelihood that low- and middle-SES students achieve high educational outcomes. By contrast, more narrowly targeted support concentrated on the poorest households does not necessarily improve educational outcomes and may, in some cases, be associated with a smaller share of high performers.

This may reflect the limitations of narrowly targeted approaches when support for middle-income families is insufficient to address the financial constraints that can affect children's development. Overall, the findings suggest that while targeting can help contain spending pressures, broader forms of support that also reach middle-income households may be more effective in reducing material deprivation – as highlighted in the former section and discussed in more details in Chapter 3 – thereby strengthening home learning environments and supporting stronger educational outcomes.

Public expenditures on health and ALMPs seem to generate important indirect benefits

Public expenditure on preventive healthcare appears particularly important for increasing the share of adolescents reporting excellent health. While no direct association is found with educational performance, dedicating higher shares of social expenditure to health services is linked to lower rates of youth disengagement from employment, education or training (NEET), suggesting indirect benefits through improved well-being and stronger labour market attachment. Investment in preventive care may also help contain long-term social spending by preventing the need for more costly interventions later in life, although preventive services often require substantial upfront investment before savings materialise. A key limitation of the analysis, however, is the lack of detailed child-specific health expenditure data, which constrains the ability to identify which forms of health spending are most effective for improving children's outcomes (Morgan and Mueller, 2023[43]).

Preliminary evidence also suggests that allocating a larger share of social expenditure to ALMPs is associated with fewer adolescents reporting poor health and multiple subjective health complaints and more reporting excellent health. Although children are not the direct beneficiaries of these programmes, the effects may operate through improvements in parental employment, income stability and job quality. By strengthening household living conditions, reducing financial stress and enhancing parents' capacity to provide care and support, ALMPs may help create family environments that are more conducive to children's health and well-being. Further research is nevertheless needed to better understand the mechanisms underlying these relationships and to identify which programme designs are most effective in generating benefits for children.

Overall, the findings suggest that raising the *value for money of social policies requires moving beyond aggregate spending levels to focus on policy design, targeting, and complementarities across sectors*. The main challenges lie in scaling up high-quality interventions, ensuring that disadvantaged groups are effectively reached, maintaining continuity of support across the life course, and balancing trade-offs between efficiency, equity, and fiscal sustainability.

Where does additional social spending deliver the greatest value for money?

A final exercise in Chapter 4 assesses the impact of allocating additional social spending across policy areas on adolescent educational and health outcomes. The simulations suggest that:

- **Investment in ECEC services offers particularly high returns**. Increasing the share of social expenditure devoted to ECEC, together with expanding enrolment towards universal coverage, is associated with the largest improvements in educational performance. An additional 1 p.p. of total social expenditure allocated to ECEC and a corresponding expansion in enrolment is associated with 1.7 p.p. fewer low-performing students and 0.4 p.p. more high-performing students in PISA assessments. This corresponds to improvements by 4% and 3% relative to the OECD averages in 2025, respectively. These gains are achieved while lowering the long-term social expenditure growth that is expected from demographic change and economic development.
- **The timing of family cash benefits matters**. Greater support during early and middle childhood is associated with stronger educational and health outcomes, with investment directed towards children in middle childhood (ages 6-11) appearing to have the largest impacts: an additional 1 p.p. of total social expenditure to programmes targeting this age group is associated with 1.5 p.p. fewer low-performing students and 0.8 p.p. more high-performing students in PISA assessments, as well as with 1.6 p.p. more adolescents reporting excellent health.
- **Preventive health and other in-kind services improve adolescent health**. Greater investment in a combination of preventive healthcare, active labour market programmes (ALMPs) and other in-kind services is associated with better adolescent health outcomes. The optimal service mix depends on the size of the welfare state. However, preventive health spending stands out in all contexts as it substantially increases the share of adolescents reporting excellent health without adding long-term pressure on social expenditure, suggesting particularly strong value for money. Increasing the share of total social expenditure allocated to preventive health by one p.p. is associated with an almost 7 p.p. increase in the share of adolescents reporting excellent health on average (equivalent to an increase by 24% from 2021-2022 levels).

1.5. Conclusions

The analysis shows that social policies can improve children's well-being through multiple and complementary channels. When well designed, they can reduce child poverty through income support and services provided to children and their families. They can also be directed to strengthening parental employment, income stability, families' health and well-being, thereby improving the home environments in which children grow and develop. Although economic growth may create opportunities to increase social spending, the value of well-designed social policies is evident even in times of tight financial constraints, helping policymakers identify interventions that deliver the greatest benefits for children relative to their cost.

Overall, the results suggest that the highest value for money is achieved through balanced policy packages that combine employment support, income protection and quality services to families. Table 1.1 brings the findings together and highlights three broad conclusions.

First, **no single policy performs best across every child outcome**. The pattern of results differs depending on whether the objective is to reduce income poverty, tackle severe deprivation, improve educational performance or promote adolescent health. The findings point to the value of coherent policy packages in which different interventions address different sources and dimensions of disadvantage.

Second, **improving child outcomes and containing long-term spending pressures do not always go hand in hand**. ECEC, healthcare and ALMPs are associated with both stronger outcomes and more

moderate growth in social expenditure over time, showing therefore a particularly favourable value-for-money profile. By contrast, family cash transfers and certain social services reduce child poverty and improve educational outcomes, but may mean greater spending pressure in the long-term. This does not imply that such policies have little value. On the contrary, some policies are essential despite being associated with greater spending pressures. Family cash transfers, for example, provide timely protection against material hardship and remain indispensable for families in which parents are unable to participate in the labour market.

Finally, **combining income support, measures that promote parental employment and access to high-quality services is critical**. Measures that support parental employment – particularly ECEC and ALMPs – stand out for their potential to reduce child poverty, improve children's outcomes and contain long-term spending pressures. Family cash transfers are important for reducing relative income poverty and can also support educational outcomes, although the effects on more severe forms of material hardship appear more limited. Health, housing and other in-kind services complement income support by helping families meet essential needs, with particularly important effects on severe deprivation and health outcomes. Within health expenditure, greater emphasis on preventive care appears especially effective in promoting excellent health and moderating long-term growth of social expenditure. Importantly, combining policies with different spending implications can strengthen the overall value for money of the policy package. Policies that help moderate long-term spending pressures can create fiscal space for other essential interventions that may increase expenditure but address outcomes not sufficiently improved by the most cost-effective measures alone. This reinforces the case for assessing value for money across the policy package as a whole, rather than considering each intervention in isolation.

Table 1.1. Summary of estimated policy associations

Direction of the estimated long-run association with child outcomes and social spending growth

Policy intervention	Child material outcomes			Educational outcomes		Children self-reported health			Long-run social spending
	Relative poverty ↓	Deep poverty ↓	Severe deprivation ↓	Low performers ↓	High achievers ↑	Poor health ↓	Excellent health ↑	Multiple health constraints ↓	Growth
ECEC investment and enrolment	↓↓	↓	↑	↓↓	↑	–	–	↓↓	↓↓ Moderates
Family cash transfers	↓	–	↑	↓↓*	↑	–	–	–	↑ Increases
Healthcare	–	↓	↓	–	–	–	↑↑**	–	↓ Moderates
Housing, incapacity benefits and other social services	–	↓	↓	–	–	–	–	↓↓	↑ Increases
Active labour-market programmes	↓	↓	↓	–	–	↓	↑	↓	↓ Moderates

Note: How to read the table: Arrows show the direction of the estimated change of a given child outcome or total spending growth associated with changes in spending allocation accompanying historical increases in social expenditure (see Chapter 3, Figure 3.10 and Chapter 4, Figure 4.7). Green indicates an improvement in outcomes or moderation in spending growth; orange indicates an adverse outcome association or faster spending growth; "–" indicates no robust association identified. This table summarises the estimated associations for countries with average levels of social expenditure and GDP per capita. As discussed in the following chapters, the strength and, in some cases, direction of these associations may vary with countries' levels of economic development and the size of their welfare systems.
* The reduction in low performance is stronger when family support is directed towards middle childhood.
** The association with excellent health relates specifically to preventive health spending.

Four broad policy recommendations emerge:

Strengthen parental employment and ensure that work provides a sustainable route out of poverty

The evidence consistently points to parental employment as one of the most powerful mechanisms through which social policies improve child outcomes. Stable employment not only raises family income and reduces the risk of poverty and material deprivation; it can also improve parental well-being, reduce financial stress and create an environment for more supportive parenting practices and better conditions for children's development (OECD, 2018[44]; 2021[3]). Policies that help parents enter, remain in and progress within the labour market therefore generate benefits that extend well beyond employment itself.

Delivering these outcomes requires a comprehensive "pro-employment" policy package:

- Investment in high-quality early childhood education and care (ECEC) stands out because it delivers a dual dividend: it supports parental employment while simultaneously improving children's cognitive development, educational achievement and health. An additional p.p. of social expenditure allocated to ECEC, combined with higher enrolment, is estimated to increase the impact of social spending on reducing relative income child poverty by around 50% over the next decade. Greater investment and participation are also associated with stronger educational outcomes, including an estimated 4% reduction in the share of low PISA performers and a 3% increase in the share of high performers relative to 2025 levels.
- Active labour market programmes (ALMPs) also appear to offer particularly strong value for money by helping parents overcome barriers to employment while moderating long-term spending pressures. Nevertheless, further evidence is needed to better understand the mechanisms through which ALMPs affect family outcomes and to identify the programme designs that generate the greatest benefits. Allocating an additional p.p. of social expenditure to ALMPs is estimated to increase the effectiveness of social spending in reducing child poverty by 24% and severe child material deprivation by 9%, while reducing expenditure growth by 1% over the next decade.
- In addition to providing employment opportunities, helping parents reconcile work and family responsibilities through affordable childcare, parental leave, flexible work arrangements and out-of-school care remains essential (OECD, 2011[45]; 2007[46]).
- Finally, ensuring that work pays is critical. Employment alone does not guarantee adequate living standards, particularly for single-parent families and low-wage workers. Across the OECD, nearly 10% of working families with children and 20% of single-parent families remain income poor. Therefore, ensuring that employment provides adequate living standards remains a central policy challenge (Balestra, Hirsch and Vaughan-Whitehead, 2023[47]). Tax-benefit systems, in-work supports and opportunities for skills development need to complement employment policies to ensure that work provides a genuine pathway out of poverty.

Provide adequate, equitable and predictable income support for families with children

Despite the importance of employment, labour market income alone is often insufficient to meet the costs of raising children or to protect families from economic shocks. Income support remains a cornerstone of child poverty reduction. They provide immediate financial support to families, help protect children from income shocks, and improve living conditions, particularly where parents are unable to work or where earnings alone are insufficient to secure an adequate standard of living. However, their effectiveness depends not only on the overall level of spending but also on how support is designed and distributed. The analysis shows that cash transfers are most effective when they reach the families with the greatest needs, including low-income households, single-parent and large families.

The findings also suggest that increasing the share of social expenditure allocated to family cash benefits by one standard deviation (4.5 p.p., equivalent to around half of its average share) more than doubles the poverty-reducing effect of an increase in social spending compared to an equivalent increase in overall social expenditure without changing its allocation. Beyond reducing child poverty, providing cash benefits throughout childhood – rather than focussing predominantly on the early years – is associated with a lower risk of poor academic performance and a greater likelihood of high educational achievement. At the same time, the finding that material deprivation affects a relatively broad range of families across the income distribution supports a proportionate universalist approach, combining a universal foundation of child income protection with additional, progressively targeted support for families facing greater needs (Francis-Oliviero et al., 2020[48]). Such a system should also ensure that benefits are adequate, accessible, responsive to changing family circumstances, and delivered in a timely and predictable manner.

Complement income support with accessible, affordable and high-quality services

Cash transfers alone are not sufficient to address the wider determinants of child disadvantage. Tackling poor housing conditions, unmet healthcare needs and severe material deprivation requires complementary investment in housing, healthcare and other family and social services. These forms of in-kind support appear to offer good value for money: they contribute to reducing severe material deprivation, while investment in preventive healthcare is also associated with better health outcomes. More broadly, allocating a greater share of social spending to health and other preventive services appears to help contain long-term pressures on social expenditure, suggesting that these investments can improve both child well-being and the sustainability of social protection systems.

Health spending is especially notable because it appears to generate benefits across multiple dimensions. It is associated with lower severe material deprivation, better adolescent self-reported health and lower rates of disengagement from education, employment or training, while also helping to contain long-term spending pressures through prevention. Housing and other in-kind social services similarly play an important role in addressing material hardship by improving children's immediate living conditions. These findings suggest that the most effective strategies are those that combine income support with direct investments in the services and environments that shape children's daily lives. Ensuring that such services are accessible in disadvantaged communities and effectively reach vulnerable families is therefore central to improving both equity and value for money.

Combine early intervention with sustained support throughout childhood and adolescence

One of the clearest messages from the analysis is that the timing of investment matters. Early childhood is a particularly sensitive period during which interventions can generate large and lasting returns. Investments in ECEC, income support during the early years and access to key services appear especially important for preventing disadvantage from emerging and becoming entrenched.

At the same time, the evidence shows that early intervention alone is not sufficient. Different stages of childhood require different forms of support, and many of the gains associated with early investment can weaken if support is not sustained. The results suggest that investments during middle childhood and adolescence play a particularly important role in promoting higher educational achievement and self-reported health. In educational outcomes, for example, greater cash support during early and middle childhood appears especially important in reducing the risk of poor performance, whereas continued support during middle and late childhood is more strongly associated with achieving high levels of performance. Similar patterns emerge in education spending, where investment in primary education helps reduce low academic performance and later spending, in secondary education, is more strongly associated with higher achievement. This highlights the importance of viewing child well-being through a life-course lens: policy should not only provide children with a strong start, but also accompany them through

successive stages of development, responding to evolving needs and strengthening capabilities over time (OECD, 2021[3]; Hendren and Sprung-Keyser, 2020[49]; Page, 2024[50]).

Taken together, these four priorities point to a common conclusion: the greatest returns are achieved not through any single intervention, but through coherent and mutually reinforcing policy packages. Combining employment-oriented policies, adequate income protection, accessible services and sustained investment throughout childhood provides the strongest foundation for reducing poverty, promoting educational success and health, and improving children's opportunities while maintaining the long-term sustainability of public social expenditure. In other words, value for money is not about choosing between policies, but about getting the mix right and sustaining support as children grow.

References

Baiocco, S. et al. (2022), "Changing Social Investment Strategies in the EU", *JRC Working Papers Series on Labour, education and Technology*, No. 1, European Commission - Joint Research Center, https://publications.jrc.ec.europa.eu/repository/handle/JRC127769. [14]

Balestra, C., D. Hirsch and D. Vaughan-Whitehead (2023), "Living wages in context: A comparative analysis for OECD countries", *OECD Papers on Well-being and Inequalities*, No. 13, OECD Publishing, Paris, https://doi.org/10.1787/2e622174-en. [47]

Bouget, D. et al. (2015), *Social investment in Europe – A study of national policies 2015*, European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Liser, European Social Observatory, Applica, Publications Office, https://data.europa.eu/doi/10.2767/084978. [16]

Causa, O., M. Nguyen and T. Tanaka (2026), "Intergenerational social mobility across OECD countries: Does the apple fall far from the tree?", *OECD Economics Department Working Papers*, No. 1858, OECD Publishing, Paris, https://doi.org/10.1787/6d76ec2a-en. [9]

Clarke, C. et al. (2024), "What are the economic costs of childhood socio-economic disadvantage? Evidence from a pathway analysis for 27 European countries", *Journal of Economic Inequality*, Vol. 22/2, pp. 473-494, https://doi.org/10.1007/s10888-023-09603-8. [28]

Clarke, C. et al. (2022), "The economic costs of childhood socio-economic disadvantage in European OECD countries", *OECD Papers on Well-being and Inequalities*, No. 9, OECD Publishing, Paris, https://doi.org/10.1787/8c0c66b9-en. [8]

Clarke, C. and O. Thévenon (2022), "Starting unequal: How's life for disadvantaged children?", *OECD Papers on Well-being and Inequalities*, No. 6, OECD Publishing, Paris, https://doi.org/10.1787/a0ec330c-en. [7]

De Schutter, O. et al. (2023), *The Escape from Poverty: Breaking the Vicious Cycles Perpetuating Disadvantage*, Policy Press, Bristol, https://doi.org/10.51952/9781447370611. [5]

Égert, B., J. Botev and D. Turner (2020), "The contribution of human capital and its policies to per capita income in Europe and the OECD", *European Economic Review*, Vol. 129, p. 103560, https://doi.org/10.1016/J.EUROECOREV.2020.103560. [30]

ESDC (2018), "Opportunity for All - Canada's First Poverty Reduction Strategy", https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/reports/strategy.html (accessed on 24 March 2026). [26]

Esping-Andersen, G. (2005), “Education and Equal Life-Chances: Investing in Children”, *Social Policy and Economic Development in the Nordic Countries*, pp. 147-163, https://doi.org/10.1057/9780230523500_6. [52]

Esping-Andersen, G. (ed.) (2002), *Why We Need a New Welfare State*, Oxford Academic, https://doi.org/10.1093/0199256438.001.0001. [10]

European Commission (2026), *Breaking the cycle of child poverty: strengthening the European Child Guarantee*, DG Employment, Social Affairs and Inclusion - Staff working document. [39]

European Commission (2026), “EU Anti-Poverty Strategy”, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/eu-anti-poverty-strategy_en. [20]

European Commission (2026), “European Child Guarantee”, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/investing-children/european-child-guarantee_en. [21]

European Commission (2024), *Employment and social developments in Europe 2024*, Directorate-General for Employment, Social Affairs and Inclusion. Publications Office of the European Union, https://data.europa.eu/doi/10.2767/91555 (accessed on 12 September 2025). [18]

European Commission (2021), “European Pillar of Social Rights Action Plan”, https://employment-social-affairs.ec.europa.eu/policies-and-activities/european-pillar-social-rights-building-fairer-and-more-inclusive-european-union/european-pillar-social-rights-action-plan_en (accessed on 1 December 2025). [13]

European Commission (2021), *Proposal for a Council Recommendation establishing a European Child Guarantee*, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021SC0062&qid=1642497870316 (accessed on 6 July 2026). [19]

European Commission (2020), *European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience*, European Commission, https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/european-skills-agenda_en (accessed on 21 May 2026). [42]

European Commission (2013), *Towards Social Investment for Growth and Cohesion – including implementing the European Social Fund 2014-2020*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0083 (accessed on 7 September 2026). [12]

Francis-Oliviero, F. et al. (2020), “Theoretical and practical challenges of proportionate universalism: a review”, *Revista Panamericana de Salud Pública*, Vol. 44, p. e110, https://doi.org/10.26633/RPSP.2020.110. [48]

Garritzmann, J., S. Häusermann and B. Palier (eds.) (2022), *The World Politics of Social Investment : Volume I Knowledge Economy*, Oxford University Press, London, https://global.oup.com/academic/product/the-world-politics-of-social-investment-volume-i-9780197585245 (accessed on 1 December 2025). [11]

Government of New Zealand (2025), *Putting the Strategy into action - Taking a social investment approach*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/child-wellbeing-and-poverty-reduction/child-youth-strategy/putting-the-strategy-into-action.html (accessed on 12 September 2025). [24]

Government of New Zealand (2024), *The Child and Youth Strategy 2024-2027*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/child-wellbeing-and-poverty-reduction/child-youth-strategy/index.html (accessed on 1 September 2026). [25]

Government of New Zealand (2013), *The Investment Approach - 2013 Benefit System Performance Report*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/evaluation/investment-approach/2013-index.html (accessed on 1 December 2025). [23]

Hanushek, E. and L. Woessmann (2015), *The Knowledge Capital of Nations: Education and the Economics of Growth*, MIT Press, Cambridge. [41]

Hanushek, E. and L. Woessmann (2008), "The Role of Cognitive Skills in Economic Development", *Journal of Economic Literature*, Vol. 46/3, pp. 607-68, https://doi.org/10.1257/JEL.46.3.607. [40]

Hendren, N. and B. Sprung-Keyser (2020), *A Unified Welfare Analysis of Government Policies*, Oxford University Press, https://doi.org/10.1093/qje/qjaa006. [49]

Lorenzoni, L. et al. (2018), "Which policies increase value for money in health care?", *OECD Health Working Papers*, No. 104, OECD Publishing, Paris, https://doi.org/10.1787/a46c5b1f-en. [29]

Masten, A. and D. Cicchetti (2010), "Developmental cascades", *Development and psychopathology*, Vol. 22/3, pp. 491-495, https://doi.org/10.1017/S0954579410000222. [6]

Morgan, D. and M. Mueller (2023), "Understanding international measures of health spending: Age-adjusting expenditure on health", *OECD Health Working Papers*, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/043ed664-en. [43]

National Academies of Sciences, Engineering, and Medicine (2019), *A Roadmap to Reducing Child Poverty*, The National Academies Press, Washington, DC, https://doi.org/10.17226/25246. [4]

OECD (2025), "Building child-friendly neighbourhoods: Empowering communities with data-driven action", *OECD Papers on Well-being and Inequalities*, No. 33, OECD Publishing, Paris, https://doi.org/10.1787/4f46a260-en. [37]

OECD (2025), "The importance of monitoring neighbourhood conditions for children's well-being and development", *OECD Papers on Well-being and Inequalities*, No. 34, OECD Publishing, Paris, https://doi.org/10.1787/143ae959-en. [38]

OECD (2025), *To Have and Have Not – How to Bridge the Gap in Opportunities*, OECD Publishing, Paris, https://doi.org/10.1787/dec143ad-en. [2]

OECD (2021), *Measuring What Matters for Child Well-being and Policies*, OECD Publishing, Paris, https://doi.org/10.1787/e82fded1-en. [3]

OECD (2019), *The OECD SOCX Manual - 2019 Edition: A guide to the OECD Social Expenditure Database*, OECD, Paris, https://www.oecd.org/social/soc/SOCX_Manuel_2019.pdf (accessed on 8 July 2026). [53]

OECD (2018), *Poor children in rich countries: why we need policy action*, OECD, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/child-and-family-well-being/poor-children-in-rich-countries-policy-brief-2018.pdf (accessed on 3 September 2026). [44]

OECD (2011), *Doing Better for Families*, OECD Publishing, Paris, https://doi.org/10.1787/9789264098732-en. [45]

OECD (2007), *Babies and Bosses - Reconciling Work and Family Life: A Synthesis of Findings for OECD Countries*, OECD Publishing, Paris, https://doi.org/10.1787/9789264032477-en. [46]

OECD (n.d.), "OECD calculator of taxes and benefits", https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html (accessed on 3 September 2026). [34]

OECD (n.d.), *OECD Child Well-being Data Portal*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html (accessed on 3 September 2026). [35]

OECD (n.d.), *OECD Employment Database*, https://www.oecd.org/en/data/datasets/oecd-employment-database.html (accessed on 3 September 2026). [51]

OECD (n.d.), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 3 September 2026). [32]

OECD (n.d.), *OECD Income and Wealth Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html (accessed on 3 September 2026). [33]

OECD (n.d.), *OECD Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html (accessed on 3 September 2026). [31]

Page, M. (2024), "New Advances on an Old Question: Does Money Matter for Children's Outcomes?", *Journal of Economic Literature*, Vol. 62/3, pp. 891-947, https://doi.org/10.1257/JEL.20231553. [50]

Rapp, S. and O. Thévenon (2025), "Parenting on a budget: The cost of raising children in changing family configurations and its policy implications", *OECD Papers on Well-being and Inequalities*, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/bd0b594e-en. [36]

Social Investment Agency (2026), "What is social investment?", https://www.sia.govt.nz/social-investment/what-is-social-investment (accessed on 5 May 2026). [22]

Thévenon, O. (2004), "Les enjeux pour l'emploi féminin de la Stratégie européenne pour l'emploi", *Revue de l'OFCE*, Vol. 90/3, pp. 379-417, https://doi.org/10.3917/reof.090.0379. [15]

Thévenon, O., C. Clarke and G. Simard-Duplain (2024), "The economic cost of childhood socio-economic disadvantage in Canada", *OECD Papers on Well-being and Inequalities*, No. 25, OECD Publishing, Paris, https://doi.org/10.1787/7abf1837-en. [27]

United Nations (2024), *World Population Prospects*, Department of Economic and Social Affairs Population Division, https://population.un.org/wpp/downloads?folder=Standard%20Projections&group=Population (accessed on 29 April 2026). [1]

Vandenbroucke, F., A. Hemerijck and B. Palier (2011), "The EU Needs a Social Investment Pact", *European Social Observatory (OSE) opinion paper*, No. 5, https://ssrn.com/abstract=2991018. [17]

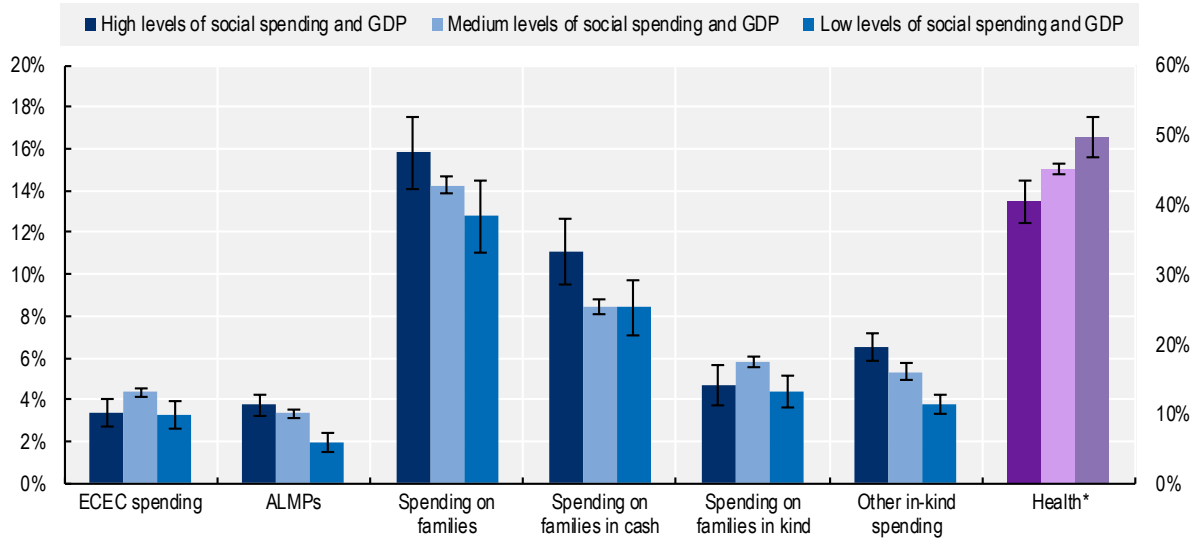
Annex 1.A. Economic development, social policy design and child poverty

The assessment of the value for money of social policies rests on the premise that economic development is a key determinant of the overall level of spending, and that increases in total social expenditure may be accompanied by shifts in how resources are allocated across policy areas and in the design features that shape their effectiveness in reducing child poverty. In practice, countries with higher GDP per capita tend to spend substantially more on social policies – on average six times more per capita than in lower-income contexts.

Differences in economic development and higher social spending are also reflected in distinct allocation patterns across policy domains (Annex Figure 1.A.1). Health is the only area where higher GDP and spending per capita are associated with a smaller share of social expenditure, which represents higher expenditure levels in other social policy areas in these countries rather than lower absolute spending amounts on health services. By contrast, higher levels of GDP and social expenditure are associated with larger shares of spending allocated to families with children (notably cash spending), active labour market policies, and other in-kind benefits (grouping incapacity-related, housing and other social policy areas). Notably, however, the share of social spending devoted to early childhood education and care (ECEC) shows little variation across countries, regardless of their level of GDP or overall social spending.

Annex Figure 1.A.1. Higher GDP and social spending are associated with a larger share of spending on families, in-kind support and active labour market policies, and a smaller share on health

Share of public and private social expenditure allocated across policy categories, by level of per capita total social spending and GDP per capita



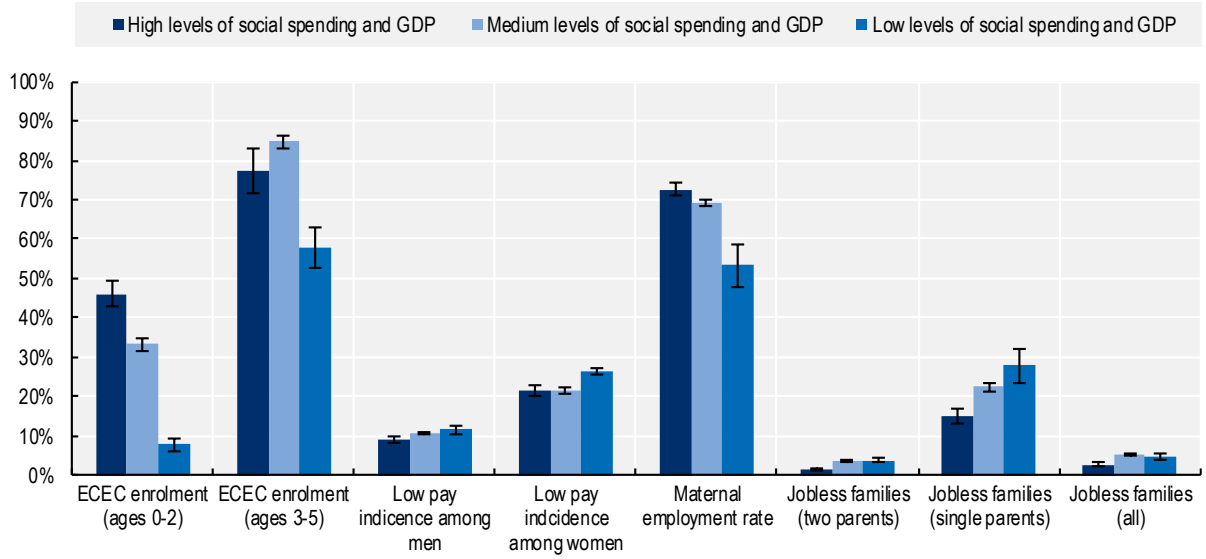
Note: The figure shows average spending shares allocated to a given policy area by logged per capita levels of GDP and social expenditure across the sample of 32 OECD countries from 2002 to 2021. Spending shares are averaged across country-year pairs that are greater than one standard deviation above the sample average, between one standard deviation above and below the sample average, and smaller than one standard deviation below the sample average of each, the log of per capita social expenditure and logged GDP per capita. Confidence intervals are indicated at the 95% level.
* Health spending is displayed on the secondary (right-hand) axis, while all other spending categories are expressed as percentages on the primary (left-hand) axis. "Other in-kind spending" refers to in-kind spending on incapacity-related, housing and other social policy areas.
Source: OECD Secretariat calculations based on (OECD[31]), *Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html.

Economic development also reshapes the context in which families live. In particular, higher levels of parental employment alter the conditions under which children grow up and change the nature and extent of the social support they require. As shown in Annex Figure 1.A.2, higher GDP and social spending per capita are associated with higher rates of maternal labour force participation and lower levels of joblessness, especially among single-parent households. It is also linked to a lower incidence of low-paid employment although these differences remain relatively modest.

In addition, higher levels of GDP and social expenditure are typically associated with greater coverage of early childhood education and care (ECEC) services for children below school age, which plays an important role in enabling parental employment. Notably, the increase in coverage is more pronounced between low- and middle- levels of GDP per capita than between middle- and high-GDP per capita levels, suggesting that the expansion of these services tends to slow once a certain level of economic development is reached.

Annex Figure 1.A.2. Higher per capita GDP and social spending are associated with greater coverage of formal childcare and early education, higher maternal employment, and lower joblessness

Average levels of policy indicators, by level of per capita total social spending and GDP per capita

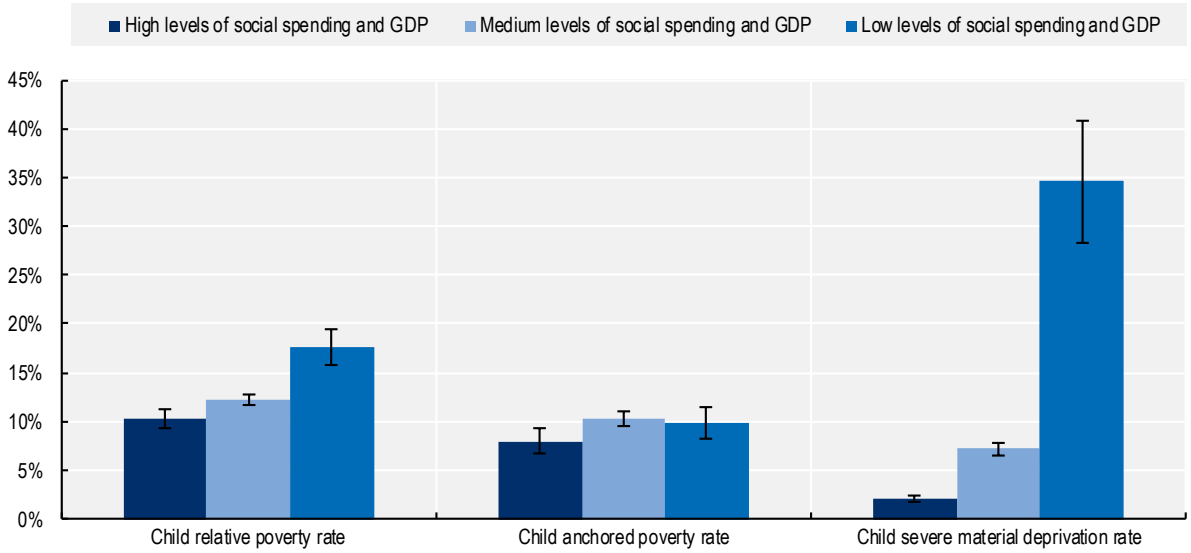


Note: The figure shows average values of policy indicators by logged per capita levels of GDP and public and private social expenditure across the sample of 32 OECD countries from 2002 to 2021. Policy indicators are averaged across country-year pairs that are greater than one standard deviation above the sample average, between one standard deviation above and below the sample average, and smaller than one standard deviation below the sample average of each, the log of per capita social expenditure and logged GDP per capita. Confidence intervals are indicated at the 95% level.
Source: OECD Secretariat calculations based on (OECD[51]), *Employment Database*, https://www.oecd.org/en/data/datasets/oecd-employment-database.html, (OECD[32]) *Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html and (OECD[31]), *Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html.

Higher GDP and social expenditures per capita are also associated with lower levels of child poverty. Relative income poverty tends to be higher in countries with lower GDP and social spending, while variations in deeper forms of poverty – captured by anchored poverty rates – remain relatively limited (see Annex Figure 1.A.3). What stands out most, however, is the stark contrast in children's exposure to severe material deprivation: around 35% of children under 18 experience severe material deprivation when GDP and social spending are comparatively low, against only 2% when GDP and social spending per capita reach higher levels. This highlights the strong potential of economic development combined with social spending to reduce child poverty and material deprivation. To harness this potential, the analysis presented in this report aims to contribute to a better understanding of which types of social policies are most effective in achieving such reductions.

Annex Figure 1.A.3. Higher social spending is associated with lower levels of child poverty

Average levels of child poverty by level of per capita total social spending and GDP per capita



Note: The figure shows average values of child poverty outcomes by logged per capita levels of GDP and public and private social expenditure. Outcomes are averaged across country-year pairs that are greater than one standard deviation above the sample average of per capita social spending and GDP per capita, between one standard deviation above and below the sample average, and smaller than one standard deviation below the sample average of each, the log of per capita social expenditure and logged GDP per capita. Confidence intervals are indicated at the 95% level.

Relative child income poverty rates measure the share of children living in households with equivalised disposable income that is below 50% of the national median; anchored child poverty rates capture the share of children who live below the inflation-adjusted poverty threshold "anchored" in ~~2005~~. Severe material deprivation rates among children capture the share of children living in households that experience an enforced inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life, including the ability to keep the home adequately warm, afford nutritionally adequate meals, cope with unexpected expenses, and afford a one-week annual holiday away from home (as defined by Eurostat, see Annex 3.B for a full definition).

Source: OECD Secretariat calculations based on (OECD[33]), *Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html and (OECD[31]), *Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html.

Notes

[1] Important steps at the European level to promote investment in children and foster integrated action to improve the well-being of disadvantaged children include the 2013 European Commission Recommendation Investing in Children: Breaking the Cycle of Disadvantage, which promotes an integrated social investment approach to child well-being based on three pillars: ensuring access to adequate resources, providing affordable and high-quality services such as ECEC, education and healthcare, and supporting children's participation in social and cultural life. Another major initiative was the establishment in 2021 of the European Child Guarantee, aimed at preventing and combating child poverty and social exclusion by ensuring that children in need have effective access to key services, including early childhood education and care, education, healthcare, healthy nutrition and adequate housing.

[2] The OECD Social Expenditure Database groups social benefits by the nature of provision into public, mandatory private and voluntary private social expenditure across nine different social policy areas (OECD, 2019[53]). The distinction between public and private social protection is made on the basis of whoever controls the relevant financial flows; public institutions or private bodies. Public social expenditure: social spending with financial flows controlled by General Government (different levels of government and social security funds), as social insurance and social assistance payments. For example, sickness benefits financed by compulsory employer and employee contributions (receipts) to social insurance funds are by convention considered public. Within the group of private social benefits, two broad categories can be distinguished: (i) Mandatory private social expenditure: social support stipulated by legislation but operated through the private sector, e.g. direct sickness payments by employers to their absent employees as legislated by public authorities, or benefits accruing from mandatory contributions to private insurance funds; (ii) Voluntary private social expenditure: benefits accruing from privately operated programmes that involve the redistribution of resources across households and include benefits provided by NGOs, and benefit accruing from tax advantaged individual plans and collective (often employment-related) support arrangements, such as for example, pensions, childcare support, and, in the United States, employment-related health plans. Spending on pensions and old age are not included in the present analysis.

[3] It should be noted that social expenditure data do not allow for a precise identification of spending in several policy areas that are important for child well-being and central to the policy orientations of some countries, such as school meal provision, nutrition programmes, or extracurricular and leisure activities for children. These expenditures are often either not reported separately or only partially integrated into broader categories of social support, making it difficult to isolate and compare them reliably across countries.

[4] Moderating long-term spending pressures does not necessarily mean reducing expenditure today. It means designing policies so that social spending grows more slowly over time than it otherwise would as incomes rise and populations change. By considering spending moderation alongside spending effectiveness, our analysis can identify policy configurations that generate a double dividend: better outcomes for children and less upward pressure on future social expenditure. For example, accessible childcare combined strong incentives to work and effective active labour-market policies for parents can help them enter employment or increase their earnings. This can reduce child poverty directly, lower families' longer-term reliance on income support, and expand the tax base.

[5] These are students with scores on the PISA index of economic, social and cultural status between the 25th and 75th percentiles.

2. The evolving landscape of social policies supporting children

This chapter examines recent developments in social policies that are particularly relevant for children and families' outcomes. It begins by situating the evolution of social policies within the broader context of demographic change and the successive economic recessions that welfare systems have had to address over the past two decades. The chapter also introduces the social investment perspective that has increasingly informed policy reforms in many OECD economies, highlighting the key policy dimensions that are especially important for children and their families. It then describes the expansion of in-kind social expenditures, the strengthening of support directed towards families with children, the increased policy efforts to support working parents, and the declining redistributive impact of income support.

Social policies today face a growing dilemma. On the one hand, they must respond to rising demands generated by population ageing and the diversification and expansion of social risks across the life course. Ageing populations increase the need for pensions, healthcare and long-term care, while changes in labour markets and family structures create new forms of economic insecurity and inequalities that call for policy responses. On the other hand, demographic change and fiscal constraints make it increasingly difficult to expand social spending. Slower labour force growth, pressures on public finances and competing budgetary priorities limit governments' capacity to finance further increases in social expenditure. This tension places social policy at a crossroads, where the key challenge is not only how much to spend but how to spend better. Ensuring that social policies deliver **"value for money"**– that is, achieving their intended economic and social outcomes while remaining financially sustainable – has therefore become a central objective for policymakers.

To respond to these challenges, many countries are reconsidering how social spending is prioritised. One perspective that has gained prominence in this context is to place greater emphasis on programmes that strengthen individuals' capacity to become economically self-sufficient along their lifetimes while providing fair opportunities to reach positive outcomes even when coming from disadvantaged backgrounds. This includes measures that promote early childhood development, support parents' participation in the labour market, enhance educational attainment, and foster the accumulation of human and social capital. By improving people's prospects for employment and economic participation, these policies seek to reduce long-term dependence on social assistance while strengthening productivity, social inclusion and social cohesion.

This approach, commonly referred to as **social investment**, emphasises preventive and enabling policies that help individuals build resilience and participate fully in society, alongside more traditional forms of income protection that buffer the consequences of economic shocks and adverse life events. The underlying premise is that well-targeted investments in people's capabilities generate long-term returns through higher employment, stronger productivity, better well-being and lower future demands on public expenditure.

Whether families with children – and children themselves – benefit from these evolving policy priorities remains an open question. On the one hand, stronger emphasis on employment-oriented policies may benefit families if parents are able to secure stable jobs and reliable incomes, particularly when they are supported by measures that help reconcile work and family responsibilities. Children may also benefit directly from policies specifically targeted at families, such as early childhood education and care (ECEC), family benefits and parenting support. More broadly, investments in health, housing, education and other public services, although not exclusively designed for families with children, can substantially improve children's living conditions, development opportunities and long-term life chances. On the other hand, these shifts in policy priorities may not benefit all children equally. Employment-oriented policies alone may be insufficient where parents face persistent barriers to work, labour markets fail to provide stable and adequately paid jobs, or employment is not accompanied by accessible childcare and other family supports. Likewise, inadequate access to affordable, high-quality services may prevent improvements in income from translating into better living conditions and reduced material deprivation. Fiscal pressures may also lead governments to concentrate resources on specific population groups or policy areas, potentially reducing support for others. Similarly, tighter targeting of benefits, often introduced to contain public spending, may exclude families experiencing financial hardship who do not meet strict eligibility thresholds. As a result, the net impact of these policy trends on child poverty and children's well-being may be uncertain.

This chapter provides insights into recent developments in social policies that are particularly relevant for understanding how they may affect outcomes for children and families. The first section places the broad evolution of social policies in the context of demographic change and the series of crises to which welfare systems have had to respond over the past two decades. It also highlights the need to demonstrate value

for money, as illustrated by the social investment perspective that underpins many of these policy developments and highlights the key dimensions of social policy that are especially important for children and their families. The following sections then describe how these interventions have evolved across OECD countries, focussing in particular on the expansion of in-kind social expenditures, the strengthening of support targeted at families with children, increased support for working parents, and the declining redistributive impact of income support.

2.1. Social spending under pressure: demographic change, crises and the need to demonstrate value for money

Social policies pursue multiple, interconnected objectives. Their primary function is to protect individuals and families from social risks and economic hardship over the life course, including poverty, unemployment, sickness, disability and old age. Beyond this protective role, social expenditures also serve a redistributive function, helping to reduce inequalities in income and living standards, both vertically and horizontally (for example, between households with and without children).

Some social policies also play a promotional role by strengthening labour market attachment among working-age adults, particularly for disadvantaged groups. They also support families with children by helping to offset the costs of raising children and by facilitating the reconciliation of work and family life. Investments in childcare, education and active labour market programmes support employment and social mobility, while other in-kind benefits – such as healthcare, housing and family or social services – improve living conditions, promote good health and help reconnect vulnerable populations with work.

In addition, social policies contribute to macroeconomic stabilisation by sustaining demand during economic downturns and by supporting human capital development over the longer term. Taken together, social policies combine protection, investment in skills and capabilities, and measures that empower individuals to participate fully in economic and social life. In doing so, social policies aim to enhance the well-being of both children and adults, strengthen equality of opportunity, and promote greater social cohesion.

These multiple objectives are reflected in the way social expenditures are organised into distinct policy or risk areas, although their structure also varies across countries depending on historical and institutional factors, specific needs and the relative weight given to each objective. In the *OECD Social Expenditure Database (SOCX)* (OECD[1]), which is used as the main source of comparative information in this report, social expenditures include *health spending*, which covers medical care and public health services; *incapacity-related benefits*, which provide income support in cases of sickness, disability, or work injury; and *family benefits*, which support households with children through cash transfers, parental leave, and childcare services. Other key areas include a*ctive labour market programmes* aimed at improving employment prospects through training, job placement, and wage subsidies; *unemployment benefits* that protect income during joblessness; *housing support* that helps reduce accommodation costs; and *social assistance and other income support programmes* targeting groups at high risk of poverty. *Old-age and survivors' benefits* form a final category, providing income security in retirement or following the death of a breadwinner, and represent one of the largest components of overall social spending.

Families with children benefit directly from expenditures explicitly targeted at them, but they may also gain – often indirectly – from other areas of social spending. For example, unemployment benefits and active labour market programmes help stabilise the incomes of jobless parents and support their return to work. Health expenditures play a crucial role in improving children's health outcomes, safeguarding the health of prospective parents and pregnant women, as well as in supporting parental health and employability. Survivor pensions are likewise important for protecting families that become single-parent households

following the death of a partner from poverty. By contrast, families with children benefit far less from old-age pensions – except in countries where multigenerational households are common – and they can instead shift social expenditures towards childless households.

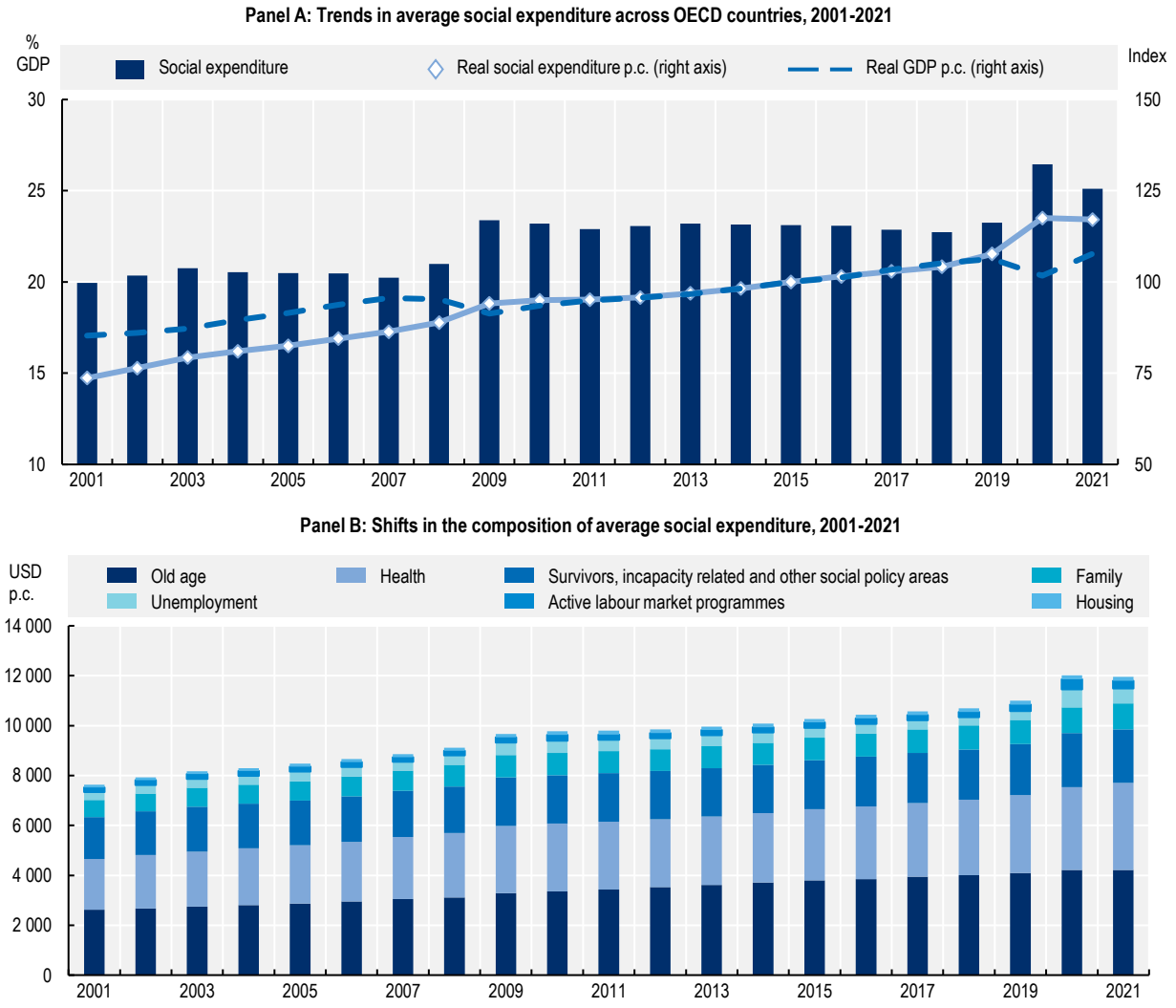
Growth in social expenditures in the context of economic and demographic changes

The share of national income that OECD countries devote to social expenditures has risen over the two past decades, increasing from an average of 20% of GDP in 2001 to around 25% in 2021 (Figure 2.1, Panel A). The two major crises over this period – the 2008 financial crisis and the COVID-19 pandemic – both produced permanent upward shifts in the level of social spending, in gross and real terms. The share of social expenditures in GDP rose sharply between 2008 and 2010, reflecting combined effect of falling GDP per capita and the expansion of social programmes introduced in response to the financial crisis. Spending remained at these higher levels in the years that followed.

Social expenditures increased again during the COVID-19 pandemic, peaking at 26% of GDP on average in 2020, driven by higher outlays on health, unemployment and active labour market programmes, as well as expanded income-tested cash supports (OECD, 2023[2]) (Box 2.1). In per-capita real terms, social spending “stepped up” in 2020 due to rising expenditures and declining GDP per capita, and remained elevated in 2021 even as GDP per capita began to recover.

Important shifts in the composition of social expenditures have taken place together with increases in total levels. Total social expenditure per capita, measured in constant dollars, increased by over 50% between 2001 and 2021, from around USD 7 500 to nearly USD 12 000 (Figure 2.1, Panel B). This growth was driven primarily by rising expenditure on older people, alongside strong increases in per-capita health spending. Over this period, per-capita health expenditure grew by 72%, while expenditure on the elderly rose by 61%. Together, these two categories make up nearly two-thirds of all social expenditure in 2021. Owing largely to the COVID-19 pandemic, spending on active labour market policies and unemployment benefits also increased strongly since 2001 (+79%) but at less than 8% in 2021, they cover a much smaller share of per-capita expenditure. Similarly, per-capita spending on families with children remains relatively low – accounting for less than 10% of total social expenditure in 2021 on average. It grew in line with total social expenditure (+53% over 20 years), which represents a significant increase in spending per child given that the share of children in the population has declined over the same time period (-16% for individuals under age 20).

Figure 2.1. Growth of social expenditure across OECD countries



Note: Social expenditure refers to in-cash and in-kind spending in public, mandatory private and voluntary private programmes in the policy areas old age, survivors, incapacity-related benefits, health, family, active labour market programmes, unemployment, housing and other social policy areas. Panel A: The right scale is indexed for 2015 = 100, based on data series measured in USD per person, PPP converted and at constant prices. Panel B: Data refer to USD per person, PPP converted at constant prices (base year = 2015).
Source: OECD (n.d.[3]), *OECD Social Expenditure database*, https://data-explorer.oecd.org/s/46u and OECD (n.d.[4]), *OECD National Accounts at a Glance*, https://data-explorer.oecd.org/s/46v.

StatLink https://stat.link/iqhcx3

Box 2.1. Policy support for families during the COVID-19 Pandemic

The COVID-19 pandemic severely disrupted labour markets across the OECD, prompting governments to rapidly expand social protection through sickness benefits, job retention schemes (JRS), unemployment benefits (UB), and support for self-employed workers (Dely, Hyee and Prinz, 2025[5]). Overall, these emergency measures were largely effective: they cushioned income losses, supported a swift labour-market recovery despite the initial economic shock, and helped prevent a lasting rise in labour-market inactivity. Structural impacts remained limited in the medium term, with no widespread increases in disability benefit claims and long-term unemployment largely returning to pre-pandemic levels in most countries.

Countries differed in how they absorbed the shock. Most OECD countries introduced or expanded JRS, with European countries relying mainly on subsidised reductions in working hours, while countries such as the United States leaned more heavily on extended unemployment benefits, leading to greater job losses but rapid re-employment during the recovery. Both approaches proved broadly successful: JRS were effective in preserving jobs, particularly where schemes already existed, while temporary UB extensions had limited adverse effects on job search given the exceptional circumstances. The pandemic also exposed gaps in protection for self-employed workers, prompting several countries to extend their social insurance coverage after the crisis. Despite temporary increases in long-term unemployment and sickness absence, there is little evidence so far of lasting spillovers into disability or permanent labour-market exit.

The pandemic also disrupted the usual balance between the state, market and family, bringing the relationship between families and public policy into sharper focus (Daly and Ryu, 2025[6]). Lockdowns and service closures led to a partial withdrawal of early childhood education and care and primary schooling, effectively “returning” children to the family sphere. Policy responses largely prioritised resourcing parental and family-based care rather than maintaining child-centred services, with access to education and care often conditioned on parental employment status. While some countries softened closures through limited access or distance learning, children’s needs were mainly interpreted through the lens of parental caregiving and labour-market participation. Overall, traditional family- or parent-centred approaches prevailed, with little progress in advancing children’s rights, autonomy, or participation, and with children often less visible than adults in crisis responses.

Cross-country variation in Europe was substantial but patterned (Daly and Ryu, 2025[6]). Countries with well-developed pre-pandemic systems of income support and services for children and families – particularly the Nordic countries, as well as Austria, France and Luxembourg – were better able to protect children and sustain support during the crisis. Targeted welfare systems, such as those in Ireland and the United Kingdom, also performed relatively well in prioritising vulnerable children. In contrast, countries with weaker pre-existing provision struggled to respond effectively. While these patterns reflect strong policy path dependency, the pandemic also disrupted prior child-centred policy trends, including service guarantees, early-years investment, and child poverty targets. This reversal highlights a tension between parent-centred and child-centred policy logics: although supporting parents is crucial, evidence from child rights and well-being frameworks suggests that a focus on families alone may be insufficient to safeguard children’s development and rights during times of crisis.

During the COVID-19 crisis, the United States temporarily expanded the federal Child Tax Credit (CTC) as part of the American Rescue Plan Act of 2021, raising the maximum credit from USD 2 000 to as much as USD 3 600 per child under age 6 and USD 3 000 for older children, extending eligibility to 17-year-olds, making the credit fully refundable, and providing half of the benefit in monthly advance payments – changes that together helped reduce child poverty significantly in 2021. However, these enhancements were only in effect for tax year 2021 and expired at the end of the year, after which the

CTC reverted to its earlier, less generous design, resulting in reduced support for low-income families and contributing to increases in child poverty once the expanded payments ended.

In Canada, the expansion of the Canada Child Benefit (CCB) and the introduction of the Canada Emergency Response Benefit (CERB) played a key role in cushioning the impact of the COVID-19 pandemic on families with children. Child poverty fell markedly between 2019 and 2020, driven largely by the temporary emergency income support provided through CERB. However, following the expiry of the programme, child relative poverty increased by more than two percentage points (p.p.) in 2021, while the anchored child poverty rate rose even more sharply. This reversal highlights the extent to which the earlier reductions in child poverty were sustained by temporary income support and raises concerns about the vulnerability of low-income families once emergency measures were withdrawn (Thévenon, Clarke and Simard-Duplain, 2024[7]).

The drivers of rising social spending are multiple, and fully disentangling their respective contributions lies beyond the scope of this chapter. Nonetheless, the literature points to a range of economic, demographic, and political-institutional factors that systematically shape spending dynamics, exerting both upward and downward pressures on expenditure levels (Haelg, Potrafke and Sturm, 2022[8]).

Population ageing is a key driver of increasing social protection needs. Rising life expectancy and the growing share of older people are pushing up spending on pensions and healthcare, which rise sharply with age (Koutsogeorgopoulou and Morgavi, 2025[9]; Crowe et al., 2022[10]; OECD, 2017[11]). Declining fertility rates further accelerate ageing dynamics. While lower fertility can ease short-term pressures on family-related spending – including early childhood education and care (ECEC) and family benefits – potentially allowing for higher resources per child, it intensifies long-term fiscal pressures by shrinking the working-age population and eroding the tax base (Guillemette and Turner, 2021[12]; OECD, 2023[13]). This shift may increasingly constrain governments' capacity to sustain investment in younger generations.

Other factors also contribute to upward pressures on spending. Economic downturns, rising unemployment, and financial crises typically trigger counter-cyclical expansions in welfare provision. In addition, higher public debt can reinforce political pressures to maintain or expand support, as crisis-related measures often prove difficult to reverse.

By contrast, several forces tend to restrain social expenditure. Trade globalisation exposes governments to greater international competition, strengthening incentives to contain public costs. Political fragmentation can further limit expansion by complicating coalition-building and decision making, while concerns about fiscal sustainability often prompt consolidation efforts. Consistent with this, Haelg et al. (2022[8]) found that, across OECD countries between 1980 and 2016, trade globalisation, political fragmentation, and fiscal balances are associated with lower social spending, whereas unemployment, population ageing, banking crises, public debt, and social globalisation are linked to higher expenditure levels.

The rising labour market participation of parents – particularly mothers – is another key trend increasing the demand for policies aimed at reconciling work and family life, including more generous parental leave provisions, greater investment in childcare services, and adjustments to tax – benefit systems to better reflect the growing prevalence of part-time and non-standard forms of employment (Adema, Clarke and Thévenon, 2020[14]). At the same time, fertility patterns and parenting behaviours have evolved, and family structures have become more diverse. These developments have required adaptations in social protection, income support, and family policies to better cover non-traditional family forms (Miho and Thévenon, 2020[15]; Rapp and Thévenon, 2025[16]). They have also prompted changes in the design and delivery of family and social services to respond more effectively to increasingly complex and varied needs (Riding et al., 2021[17]).

Taken together, these trends are driving significant adjustments in social policy strategies. They affect not only the overall level of spending, but also how resources are allocated across policy domains and the ways in which families with children are supported – whether through targeted transfers or more indirectly through broader policies that promote employment, protect incomes, and improve health and living conditions via in-kind services. While these shifts are rooted in structural demographic and economic changes, they also reflect growing expectations that social policies demonstrate their effectiveness and deliver measurable "returns". This has contributed to the increasing prominence of a social investment perspective in the design and orientation of social policy.

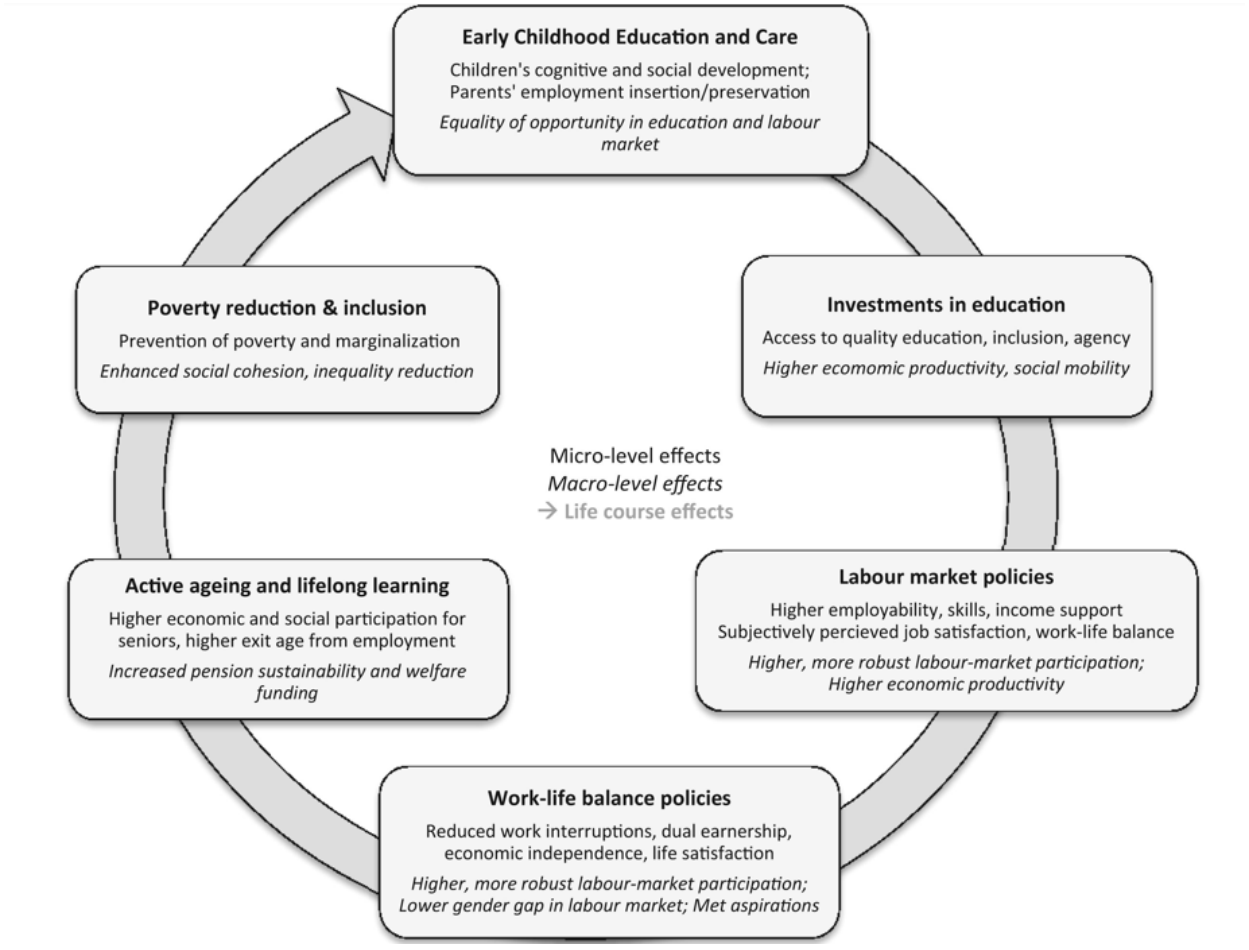
Towards a social investment approach

Rising pressures on social expenditure have led many countries to reassess its impact and, in the context of fiscal constraints, to consider how best to prioritise spending. To inform these decisions – and to emphasise that social policies can generate broader benefits – many OECD countries have increasingly framed social policy as (social) *investment* as opposed to a mere *cost*, particularly when resources are directed towards interventions expected to yield high long-term returns (Bouget et al., 2015[18]). This approach seeks to move welfare states beyond a predominantly compensatory logic and toward a more preventive, forward-looking model. Rather than focussing mainly on income replacement once social risks materialise, social investment prioritises strengthening people's capabilities over the life course through early intervention, education, and employment support (Hemerijck, Ronchi and Plavgo, 2023[19]; Garritzmann, Häusermann and Palier, 2022[20]; Esping-Andersen, 2002[21]). The overarching idea is that well-designed social policies are not merely redistributive transfers but productive investments that strengthen human capital, boost labour-market participation, reduce poverty and create more resilient and inclusive economies (OECD, 2018[22]).

As illustrated in Figure 2.2, the social investment approach rests on the idea of a virtuous cycle whereby well-designed policies reinforce one another across the life course. It emphasises both the cumulative effects of interventions whose benefits build over time and the complementarities between policies that address interconnected disadvantages across different domains of life. In practice, this approach prioritises spending that strengthens human and social capital, reduces inequalities from an early age, and enables children to realise their full potential. It therefore places strong emphasis on investment in early childhood education and care, schooling, and education systems more broadly. It also highlights policies that enhance households' self-sufficiency, including active labour market programmes, lifelong learning, and measures that support the reconciliation of work and family life – which are also key to expanding the tax base and sustaining investment in poverty reduction and social inclusion, thereby completing the social investment cycle. At the same time, poverty prevention and reduction remain central, as they help create the conditions for equal opportunities and reinforce social cohesion.

More broadly, the social investment perspective underscores the importance of early intervention combined with sustained support over time. However, it has also been criticised for prioritising policies that promise the highest long-term economic returns, potentially at the expense of adequate income protection for those with immediate needs. Critics further argue that some social investment policies may disproportionately benefit better-off households (e.g. see later discussion on the expansion of early childhood care and education services). In doing so, it may underplay the needs of those facing severe and persistent disadvantages, who are often the hardest to support through activation-oriented measures or to reintegrate into the labour market (Box 2.2).

Figure 2.2. The social investment life-course multiplier



Source: Hemerijck, Ronchi and Plavgo (2023[19]), "Social investment as a conceptual framework for analysing well-being returns and reforms in 21st century welfare states", *Socio-Economic Review*, https://doi.org/10.1093/ser/mwac035.

Box 2.2. Limits of the social investment approach

While the social investment approach has reshaped welfare thinking by emphasising early intervention, human capital formation, and long-term outcomes, several limitations have been identified in the literature.

First, the distinction between policies that mitigate social risks and those that prevent them is analytically helpful, but it can be difficult to make such distinction in practice, because social risks evolve over time and many policies serve multiple purposes. In reality, welfare systems rely on layered and interacting instruments that blur this boundary. Moreover, many policies simultaneously perform compensatory and preventive functions. For example, unemployment benefits mainly compensate for income loss after job loss, but they can also prevent longer-term harm by stabilising consumption, preserving skills, and enabling better job matching. Similarly, disability benefits mitigate income loss while helping prevent social exclusion and persistent poverty.

Whether a policy is preventive or compensatory also often depends on timing. Early childhood education and care (ECEC) can prevent the accumulation of disadvantage when provided early and

universally, but when offered only after developmental problems emerge, it functions more as remedial support. Policy design and context also matter: while cash transfers are often seen as compensatory, reliable income support can prevent housing instability, poor health, or setbacks in child development; conversely, ostensibly preventive measures such as education or activation policies may have limited impact if access or quality is uneven.

Social risks are also interdependent and cumulative over the life course, further weakening a binary distinction. For instance, childcare services both mitigate work-family constraints in the short term and prevent long-term income penalties for mothers. Finally, political and institutional constraints mean that governments often combine preventive elements with existing compensatory schemes, creating hybrid policies. Overall, mitigation and prevention are best understood as points on a continuum, with effective social policies typically combining both logics (Hemerijck, 2017[23]).

Another concern is the risk of underemphasising income protection and adequacy, especially for individuals who cannot easily benefit from activation-oriented or skill-enhancement measures. Critics argue that a policy model centred predominantly on labour-market participation may leave those facing structural barriers – such as people with disabilities, long-term unemployed adults, or carers – insufficiently protected (Cantillon, 2011[24]; Morel, Palier and Palme, 2012[25]). This may result in a "Matthew effect", where better-off groups benefit more from social investment policies than lower-income or precarious populations because they are linked to employment, tied to income or delivered as services. Working-income supplements, for instance, benefit those who work and do little for workless households. Likewise, persons with higher incomes tend to better avail themselves of public services on offer. Formal childcare services, for instance, are everywhere more attended by the children of double-income households, and less so by those with a low-educated, low-income mother (Bonoli, Cantillon and Lancker, 2017[26]; Gingrich and Ansell, 2015[27]). Knise et al. (2021[28]), for instance, found that young adults with the lowest education and employment experience participate less often in the most advantageous measures; particularly in firm-based upskilling and employment assistance, and more often in measures that proved to be not as beneficial, such as workfare programmes. Regional contextual traits, which can present a variety of configurations, play a significant role in moderating the effects of ALMPs. Divergent outcomes per type and level of education also highlight the complexity of the landscape for ALMPs' design and implementation (Cefalo and Scandurra, 2023[29]).

Social investment strategies can exhibit implementation and timing challenges. Because many of their returns – particularly those from early childhood investment – materialise only in the medium to long term, governments may find it difficult to sustain political and fiscal support. Short electoral cycles tend to favour visible, immediate spending rather than multi-decade commitments (Hemerijck, 2017[30]). Moreover, a strong social investment agenda requires well-co-ordinated, high-quality services across sectors such as education, childcare, health and employment; in practice, fragmentation, limited administrative capacity, and siloed governance often weaken the intended "multiplier" effect (Vandenbroucke and Vleminckx, 2011[31]).

A social investment approach risks overstating the role of activation and human capital in securing social inclusion, particularly during periods of weak labour demand or structural economic change. It encourages governments to spend more on measures that support employment, and less on passive benefits (Cantillon, 2011[24]). Moreover, even well-designed social investment policies cannot fully compensate for precarious employment, declining job quality, or widening labour-market inequalities (Taylor-Gooby, Gumy and Otto, 2015[32]). Without complementary regulation and robust minimum-income protection, social investment can fall short of reducing poverty or cushioning new social risks (Cantillon and Vandenbroucke, 2014[33]).

Finally, concerns have been raised about the narrow economistic framing sometimes associated with social investment. When policies are primarily justified in terms of future fiscal returns or productivity

gains, broader welfare objectives – such as social rights, equality, dignity, mental health, and overall well-being – may receive insufficient attention (Jenson, 2010[34]; Deeming and Smyth, 2015[35]). In response, increasing efforts are being made to broaden the assessment of social investment returns to better capture these non-economic dimensions. Such approaches include contingent valuation methods, which estimate individuals' willingness to pay for specific social outcomes, and the use of shadow prices to monetise non-market dimensions of welfare (Fougère and Heim, 2019[36]). For example, the welfare effects of economic shocks or policy reforms can be evaluated by deriving income-equivalent values for non-income dimensions of well-being, based on estimated shadow prices obtained from their relationship with life satisfaction (Boarini et al., 2022[37]).

Policies affecting children: what a social investment perspective suggests

Within the social investment framework, investment in children occupies a central place, reflecting the recognition that inequalities emerge early in life as differences in household resources, parental time, and developmental environments accumulate and can translate into long-term disadvantage (Esping-Andersen, 2005[38]; De Schutter et al., 2023[39]; OECD, 2009[40]). Some policies are explicitly designed to support children directly – for example, early childhood education and care, parenting support and family benefits – while others are primarily targeted at adults, such as employment and skills policies, but nevertheless influence children's living standards by improving household resources and economic security. Together, these policies can help prevent or mitigate childhood disadvantage through complementary pathways.

Addressing childhood disadvantage requires continuous and multifaceted support throughout childhood, combining targeted measures for children and their families with broader policies that strengthen and stabilise household resources and living standards. Key dimensions highlighted in the literature include:

- **Early childhood policies**. Early childhood is a critical window for intervention, when well-timed policies can generate particularly high social and economic returns. Early investments support cognitive and socio-emotional development and lay the foundations for future skill acquisition (Heckman, Pinto and Savelyev, 2013[41]; Cunha and Heckman, 2007[42]). High-quality early childhood policies are therefore a cornerstone of a sustainable welfare state: they help prevent the intergenerational transmission of poverty while enabling parents – particularly mothers – to remain in employment, contributing to both gender equality and long-term economic performance.
- **Sustained support for material and social needs**. Children and their families often require continued support into late childhood and adolescence – stages marked by new developmental and well-being challenges (OECD, 2021[43]). Evidence shows that interventions during these periods can have lasting effects on well-being, educational attainment, and labour market outcomes. Crucially, support must address not only income needs but also material and social conditions and adapt to children's changing needs as they grow.
- **Pro-employment policies and work-care reconciliation**. Effective active labour market policies (ALMPs) and measures supporting the reconciliation of work and family life are essential to reducing family poverty (Cantillon and Vandenbroucke, 2014[33]; Sakamoto, 2023[44]). They help secure stable incomes while preserving parents' capacity to provide care (Bakker and Van Vliet, 2022[45]; Sakamoto, 2024[46]; Nieuwenhuis, 2022[47]; Gingrich and Ansell, 2015[27]).
- **Family support and income protection**. Policies that strengthen families' resources and resilience are also critical. This includes income protection in the event of economic shocks or changes in family circumstances, as well as access to family and social services when families face more complex needs or difficulties affecting family functioning (Daly, 2025[48]; Riding et al., 2021[17]).

Social investment in practice

Although increasingly prominent in social policy debates, the extent to which the social investment approach is recognised and implemented in practice varies widely across countries. In Europe, the European Union (EU) has played a particularly important role in advancing this agenda since the early 2010s (European Commission, 2013[49]). The EU social investment vision closely aligns with the virtuous circle described earlier, which prioritises early intervention over later remediation and places strong emphasis on policies that support children and families, expand access to high-quality early childhood education and care, and prevent disadvantages from accumulating over the life course (European Commission, 2013[49]). A second pillar focusses on lifelong human capital development through continuous learning, skills upgrading, and active labour market policies, with the aim of helping individuals adapt to economic change and maintain attachment to employment. The third pillar views social protection as an enabling force: income-support systems, social services, and work-family reconciliation policies are designed not only to cushion social risks but also to empower individuals to participate fully in the labour market and contribute to economic growth and broader societal functioning (European Commission, 2021[50]).

In practice, social investment has materialised to varying degrees and in different forms across European countries (Bouget et al., 2015[18]). An analysis of social investment strategies across European countries over 2004-2018 identifies three main clusters.[1] balanced, basic, and bent (Baiocco et al., 2022[51]).

- Countries pursuing *balanced strategies* combine relatively high spending across all major social investment domains throughout the life course – family and childcare, education, and labour market activation – with strong participation of children and young individuals in both pre-primary and tertiary education and comparatively high levels of spending on early childhood services.
- *Basic strategies* are characterised by low to medium overall spending and similarly modest enrolment rates in pre-primary education. These countries focus primarily on more traditional investment areas, such as compulsory schooling and, to a lesser extent, tertiary education, while devoting comparatively limited resources to early childhood supports.
- *Bent strategies* also involve low to medium levels of overall spending but differ in their emphasis on early-life interventions. These countries feature medium to high participation in pre-primary and tertiary education and allocate a relatively larger share of resources for services benefiting very young children (and the first years of life), often through cash-based family supports such as parental leave.

A key driver behind the renewed emphasis on social investment in Europe is the need to address the EU's competitiveness challenge, including stagnating productivity growth and persistent labour and skills shortages, in the context of shrinking working-age populations. Accordingly, many social investment policies and reforms are framed not only as tools to achieve social objectives, but also as public investments expected to generate economic returns through strengthened human capital and higher productivity (Council of the European Union, 2024[52]).

In New Zealand, the social investment approach emerged during the 2011-2012 welfare reforms as an effort to shift social policy from a reactive model to one focussed on long-term outcomes. Central to this shift was the use of actuarial assessments and integrated administrative data to estimate individuals' future social and fiscal trajectories. Its first major application was in the welfare system, where long-term liability estimates informed the redesign of employment and income-support programmes (Government of New Zealand, 2013[53]; Chapple, 2013[54]). Over subsequent years, the framework expanded to child protection, justice, and health, supported by the growing analytical capacity of Statistics New Zealand's Integrated Data Infrastructure (OECD, 2024[55]; Gluckman, 2017[56]).

After 2017, part of this approach was reframed from a broader "well-being" perspective, which reduced the emphasis on actuarial liability while retaining core features such as data-driven targeting, cross-agency

co-ordination, and a stronger focus on addressing complex needs (Government of New Zealand, 2019[57]). This approach recognises that inclusive activation policies require not only labour-market services and income support (e.g. childcare assistance, job-search support) but also a wide range of social services, including parenting programmes, housing provision, and financial counselling for the most disadvantaged groups. As part of this shift, the government enacted landmark legislation in 2018 to make reducing child poverty and improving child well-being an enduring national priority (Government of New Zealand, 2025[58]; OECD, 2023[59]). The legislation requires successive governments to adopt and regularly update a national child well-being strategy, first introduced in 2019 as an open-ended, integrated policy framework. As a result, New Zealand's social investment model has evolved from a fiscally oriented tool for welfare reform into a whole-of-government strategy aimed at improving long-term social outcomes, and more recently it has placed a particular focus on supporting the most vulnerable populations facing entrenched and complex disadvantages.

Other OECD countries have also implemented social investment strategies. Comparative studies of welfare state reforms – most notably Garritzmann, Häusermann and Palier (2022[20]) – show that a wide range of countries have introduced policies aimed at creating, mobilising, and preserving human skills and capabilities. These strategies differ not only in their core functions but also in their financing models and distributive profiles. In some cases, social investment programmes are conceived as repayable or short-term instruments expected to deliver measurable fiscal returns; in others, they are framed as long-term public investments generating diffuse social benefits, often embedded within broader "well-being" policy frameworks.

The way distributional considerations are integrated into social investment strategies also varies. Some approaches are inclusive, providing broad-based and relatively egalitarian support that fosters large and cohesive constituencies. Others are stratified, offering differentiated levels of support across social groups, thereby potentially reinforcing existing inequalities while maintaining political support. A third approach is more targeted, directing resources primarily towards lower-income or otherwise disadvantaged groups based on assessed need. These differences in design and financing give rise to diverse models of social investment, each associated with distinct distributive outcomes (Garritzmann, Häusermann and Palier, 2022[20]).

The remainder of this chapter shows that key aspects of the evolution of social expenditure are consistent with a social investment approach, while also documenting substantial cross-country variation in dimensions central to supporting children and their families. It highlights, first, the overall expansion of social spending, including a growing share devoted to in-kind benefits (Section 2.2). It then documents the strengthening of support for families with children – particularly in the early years – reflecting a greater emphasis on early intervention and prevention (Section 2.2).

The chapter also examines the reinforcement of labour market activation policies, including expanded employment support and efforts to reduce barriers to work for parents, notably through increased provision of early childhood education and care services and tax-benefit reforms aimed at improving work incentives for low-income families (Section 2.3). Finally, it points to a decline in the redistributive impact of income transfers in some countries, consistent with a shift away from predominantly compensatory welfare models (Section 2.4).

2.2. Expansion of in-kind social expenditures

Expenditure on social benefits in kind is central to a social investment perspective, as it directly builds human capital and expands access to essential services – such as childcare, health, and housing – thereby strengthening long-term opportunities and reducing inequalities more effectively than income transfers alone. In OECD social expenditure data, in-kind benefits encompass publicly or privately provided services, including healthcare (in- and out-patient care, medical goods, and preventive services), early childhood education and care, housing support, and a broad range of social services (such as care for persons with disabilities, and families).

While not formally classified as in-kind benefits, many elements of active labour market policies share similar characteristics, as they provide service-based support – including public employment services (placement, counselling, job-search assistance), training programmes, hiring incentives, integration support for people with disabilities, and direct job-creation subsidies.

In most OECD countries, the largest share of social spending is devoted to in-kind support, which accounted for about 64% of total social expenditures per capita in 2021 across the OECD, up from around 58% at the start of the 2000s (Figure 2.3, Panel A). Reliance on in-kind provision is particularly strong in Colombia, Costa Rica, Mexico and the United States, where 85% or more of social spending takes this form. By contrast, Greece, Italy and Poland allocate social expenditures almost evenly between cash and in-kind support.

Levels of in-kind spending – and how this spending is distributed across social risk areas – vary widely across countries (Figure 2.3, Panel B). In 2021, OECD countries spent on average around a total of USD 4 700 (in 2015 prices) per capita on in-kind support, but this amount is over twice as high in the United States and almost six times lower in Mexico. Looking at the composition of in-kind provision, health-related services account for by far the largest share: on average, nearly three-quarters of per-capita in-kind spending goes to health services. In-kind support for families is the second most important area, although spending levels are much lower – on average, about seven times lower than in health. Nordic countries (notably Denmark, Iceland, Norway and Sweden) and Luxembourg stand out, with spending on in-kind family support roughly twice the OECD average.

Active labour market policies also show substantial cross-country variation. Per-capita spending is highest in Ireland – around USD 1 260 (in 2015 prices), which is nearly four times the OECD average – and is also comparatively high in Denmark, Luxembourg, the Netherlands and the United States. In Denmark, this reflects substantial investments in training and upskilling programmes, vocational rehabilitation and supported employment for people with reduced work capacity, as well as wage-subsidised “flex jobs” for individuals with disabilities or health limitations. In Luxembourg, high spending is driven mainly by extensive training programmes and employment incentives. In the United States, elevated spending reflects strong investment in training programmes, youth-focussed initiatives such as Job Corps – which supports young people transitioning from school to work – and measures promoting job rotation and job-sharing schemes.

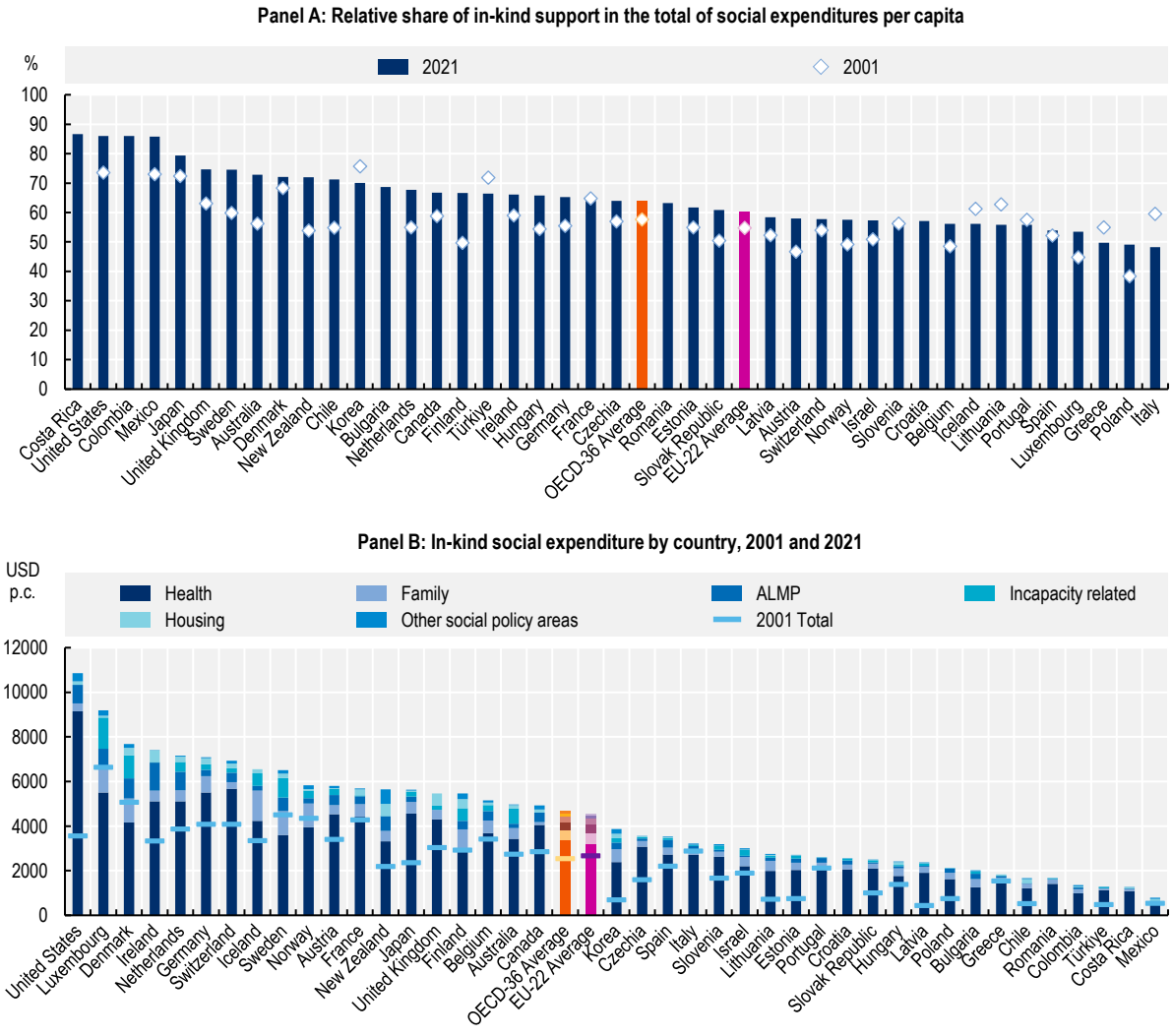
In-kind support related to incapacity is likewise particularly elevated in Denmark and Luxembourg, where per-capita spending exceeds the OECD average by a factor of four or more. Most of this spending goes to residential care for people with disabilities or incapacity, rehabilitation services, and subsidies for the care of children and adults with disabilities, as well as specialised day-care facilities for children requiring special support.

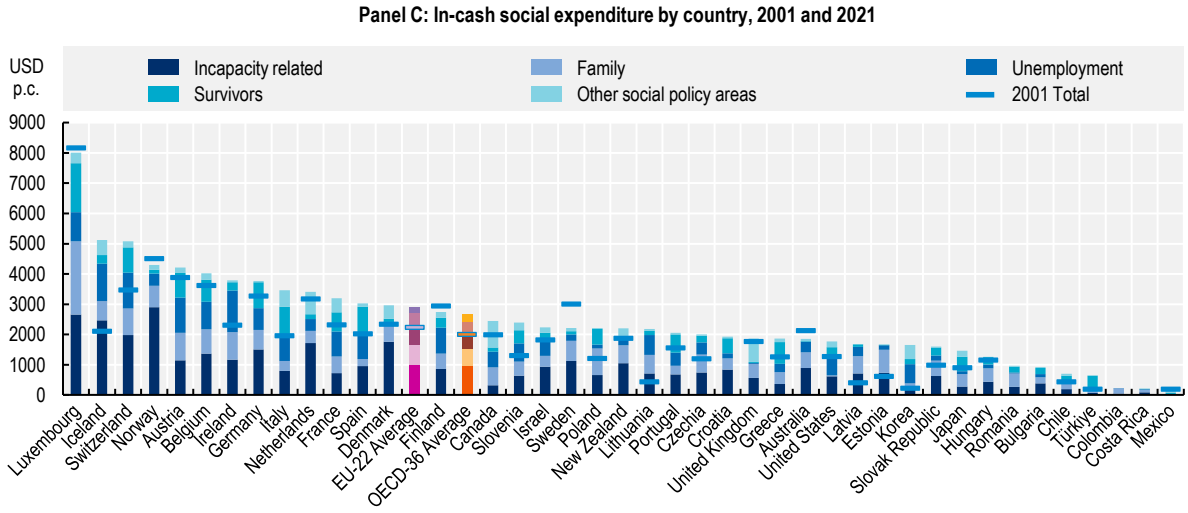
Regarding in-cash support, total per capita expenditures have risen markedly since the early 2000s in many countries, increasing by about 30% on average in constant USD compared with 2001 (Figure 2.3, Panel C). However, this type of spending has declined in Luxembourg, Norway, Sweden, Finland, Australia

and Mexico during the same period. Levels vary even more widely across countries, and in-cash support remains particularly low in Chile, Colombia, Costa Rica, Mexico and Türkiye.

Among the different categories of in-cash support outside pensions, incapacity-related benefits account for the highest average spending, though with substantial cross-country variation. Spending is especially high in Luxembourg, Iceland, Norway and Switzerland, where a large share is devoted to disability pensions – and, in Norway, also to paid sick leave and care allowances. In all countries, unemployment benefits and family-related cash benefits also represent important components of in-cash expenditure; the scope and design of family benefits are discussed in the next section.

Figure 2.3. Composition of social expenditure over time and across countries





Note: The data show per capita spending across public, mandatory private and voluntary private programmes. There is no in-cash spending on housing, and no in-kind spending on unemployment. Spending on active labour market programmes is included in the in-kind expenditure despite not being classified as in-kind or in cash spending in the *OECD Social Expenditure Database*; in-kind expenditure on survivors is excluded as it mostly covers funeral-related expenses, which are less relevant for this analysis; in-cash expenditure on health is excluded as it is only relevant for Chile. Similarly, old age spending is excluded from all figures.
OECD and EU averages are computed for all respective Member countries with available data for both 2001 and 2021. Data refer to 2021 unless specified otherwise. In each panel, "Total 2001" refers to the 2001 total spending amount across all categories shown in the figure. Panels A and C: Data for Chile refer to 2022 instead of 2021. In Chile, cash support for families expanded during COVID-19 through the "Programa Ingreso Familiar de Emergencia" (Emergency Family Income Programme) which in 2021 amounted to 7.3% of GDP. The programme was phased out in 2022. Panels B and C: Data are reported in per capita USD PPP in constant prices.
Source: OECD (n.d.[1]), *OECD Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html.

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2.3. Expanded support for families with children

Families with children are the direct target of a broad set of supports that pursue multiple, interconnected goals: (1) supporting families in raising children and reducing the economic costs of childrearing; (2) promoting gender equality and helping parents – especially mothers – reconcile work and family life; (3) reducing child poverty and social inequalities; and (4) fostering children's development and long-term opportunities through investments in early education, childcare, and parenting support. (Adema, Clarke and Thévenon, 2020[14]; Thévenon, 2011[60]).

Public spending on family benefits can be grouped into three broad categories:

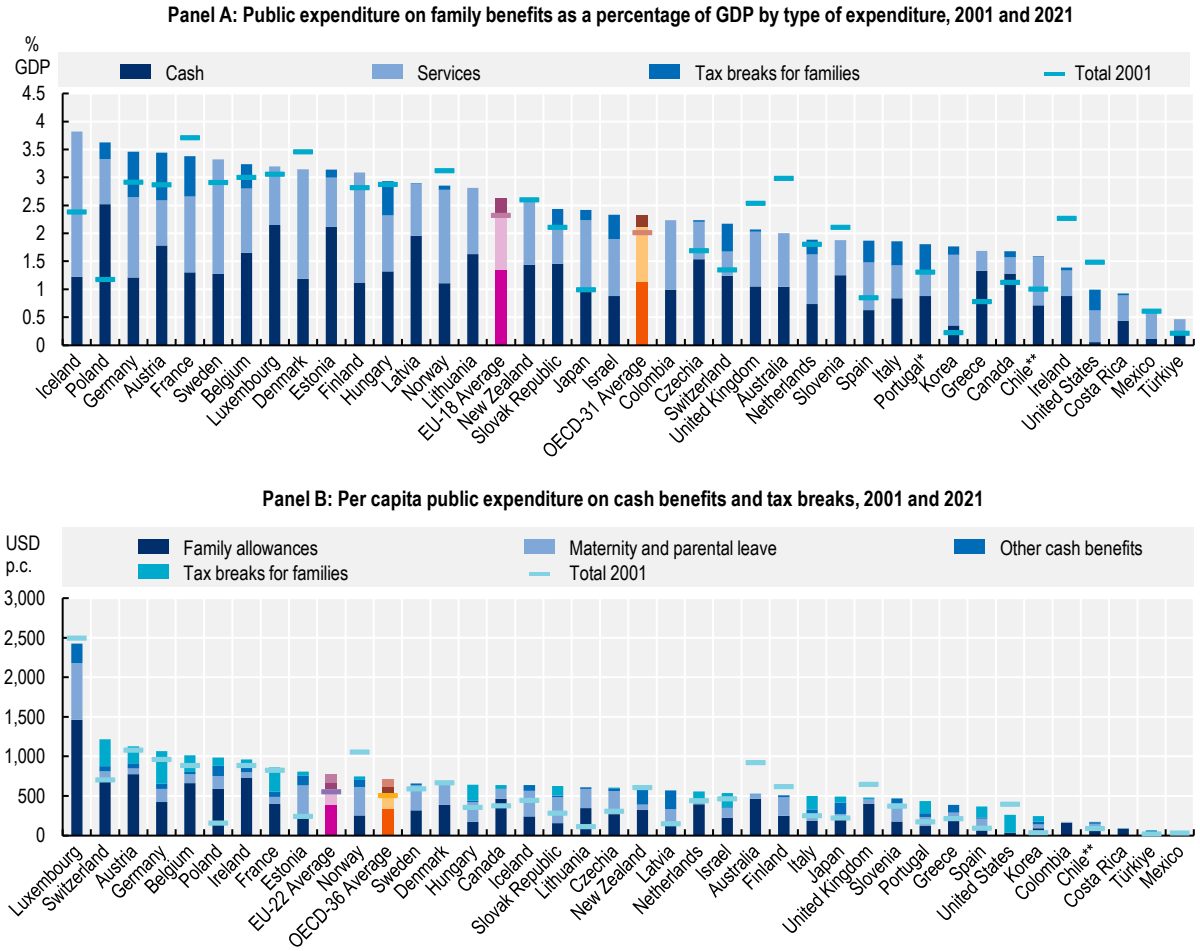
- Child-related cash transfers, including child allowances (sometimes income-tested and often varying with the age or number of children), income support during parental leave, and – in some countries – specific support for single-parent families.
- Public spending on services for families, such as the direct financing or subsidisation of childcare and early childhood education, earmarked childcare payments to parents, support services for young people and residential care facilities, and broader family services, including centre-based support and home-help services for families in need.
- Tax-based financial support, including tax exemptions (e.g. excluding child benefits from taxable income), child tax allowances (amounts deducted from gross income), and child tax credits (amounts deducted from the tax liability).

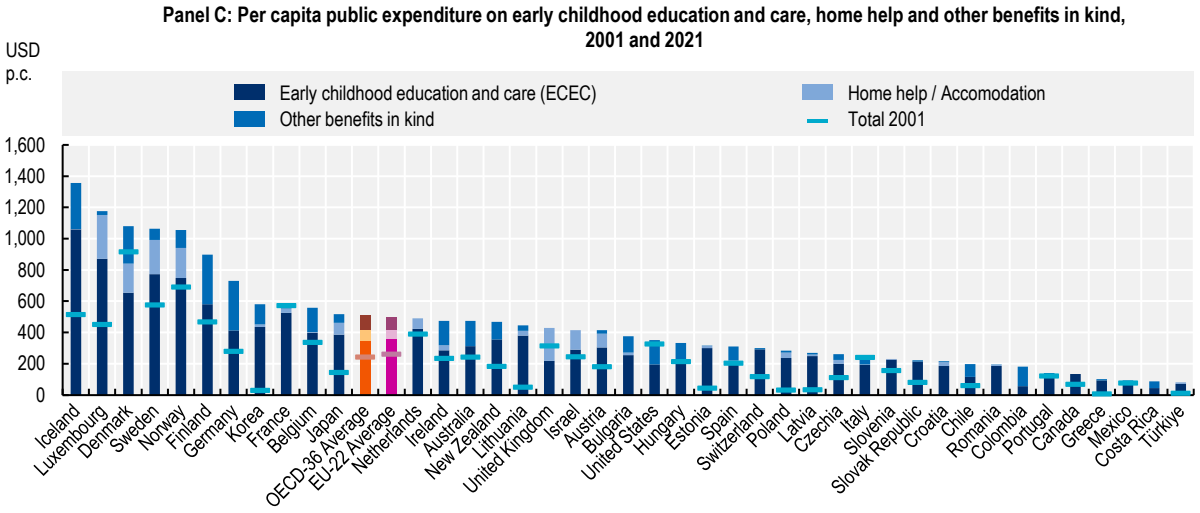
An increasing allocation of national income to families with children

Most OECD countries have strengthened their support for families since the early 2000s, as reflected in the rise in family spending as a share of GDP – from about 2% in 2001 to 2.3% on average in 2021 (Figure 2.4, Panel A). Increases were particularly pronounced in Iceland (+1.4 p.p.), Poland (+2.4 p.p.), Japan (+1.4 p.p.), Korea (+1.5 p.p.) and Spain (+1 p.p.). By contrast, family spending declined in a few countries, most notably in Australia (-1 p.p.) and Ireland (-0.9 p.p.), where GDP grew more rapidly than family spending.

Trends are broadly similar in per-capita terms.[2] Most countries increased per-capita family support in cash, though there are notable exceptions – including Luxembourg, Norway, Australia, Finland, the United Kingdom and the United States – where per-capita cash support declined (Figure 2.4, Panel B). In many countries, family allowances account for the largest share of expenditures to raise families' income, although income replacement during maternity and/or parental leave also represents a substantial expenditure in several cases. Growth in in-kind support for families has been even more pronounced: on average across the OECD, per-capita in-kind family spending in 2021 was over twice its 2001 level (Figure 2.4, Panel C). The bulk of this in-kind expenditure is devoted to early childhood education and care (ECEC) services for preschool children, which account for around two-thirds of in-kind family spending on average.

Figure 2.4. Rising public expenditure on families





Note: OECD and EU averages are computed for all respective Member countries with available data for both 2001 and 2021. Data refer to 2021 unless specified otherwise. In each panel, "Total 2001" refers to the 2001 total spending amount across all categories shown in the figure. * Data refer to 2002 for lack of available data in 2001. ** Data for 2021 refer to 2022. In Chile, cash support for families expanded during COVID-19 through the "Programa Ingreso Familiar de Emergencia" (Emergency Family Income Programme) which in 2021 amounted to 7.3% of GDP. The programme was phased out in 2022. Panels B and C: Spending is denoted in per capita expenditure in USD PPP in constant prices. Per capita refers to the total population size rather than per-child expenditure.

Public spending accounted for here concerns public support that is exclusively for families (e.g. child payments and allowances, parental leave benefits and childcare support), only. Spending in other social policy areas such as health and housing support also assists families, but not exclusively, and is not included here. Coverage of spending on family and community services in the OECD Social Expenditure data may be limited as such services are often provided and/or co-financed by local governments. The latter may receive general block grants to finance their activities, and reporting requirements may not be sufficiently detailed for central statistical agencies to have a detailed view of the nature of local spending. In Nordic countries (where local government is heavily involved in service delivery) this does not lead to large gaps in the measurement of spending, but it does for some countries with a federal structure, for example, Canada and Switzerland. National authorities provided estimates on the value of tax breaks for Switzerland. Spending for the United Kingdom is likely to be underestimated, as information on the tax part of the WTC and CTC are no longer available they have been estimated.

Source: OECD (n.d.[61]), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html and OECD (n.d.[1]), *OECD Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html.

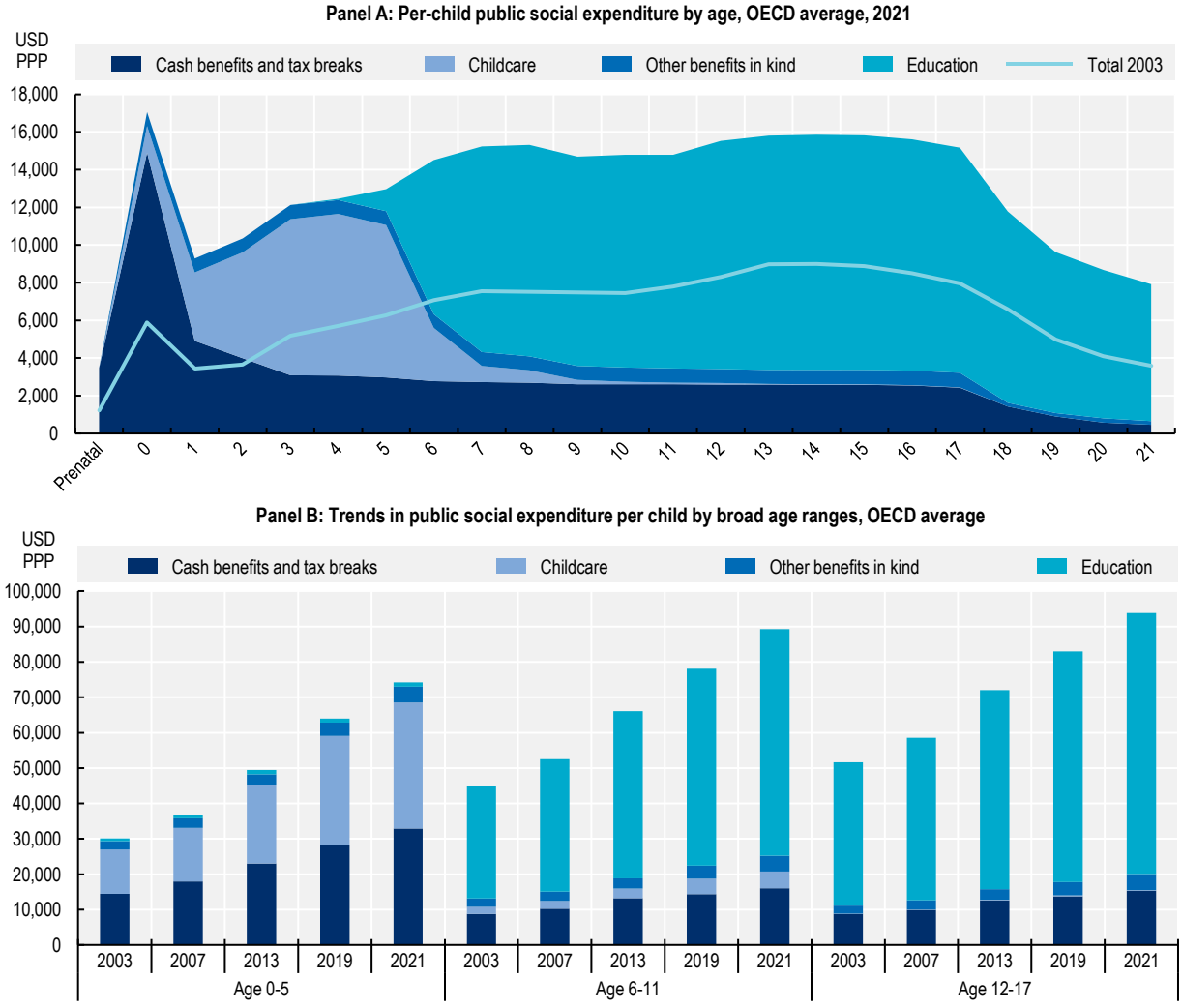
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A shift towards greater investment across childhood, especially in early years

A closer examination of how public social and education expenditures are distributed across different stages of childhood shows that per-child spending has increased substantially since the early 2000s at all ages, with particularly strong growth for children below compulsory school age. As shown in Figure 2.5 for the OECD average, the sharp rise in support for families with preschool-aged children reflects significant increases in both cash benefits around childbirth – linked to the expansion of maternity, paternity and parental leave income support (Box 2.3) – and in the provision of childcare and early education services.

Nevertheless, despite this significant expansion, the early years (children under age 6) continue to account for a smaller share of total public expenditure on children than later stages of childhood. On average across the OECD, spending on the early years represented 29% of total child-related expenditure in 2021, compared with 35% for middle childhood (children between age 6 and 11) and 36% for adolescence (ages 12-17) (OECD, n.d.[62]). Only a limited number of countries – namely Iceland, Lithuania, Estonia, Hungary, Latvia and Japan – allocate sufficient resources to families with preschool-aged children for the early years to account for one-third or more of total public spending on children. By contrast, the early-years share remains below 15% in Costa Rica, Türkiye and the United States (OECD, n.d.[62]).

Figure 2.5. Public social expenditure by children's age



Note: The graphs show OECD averages of per-child spending patterns by age and by type in USD PPP. Spending figures are central government spending amounts, and do not include spending at a local or regional level since these data are not readily available. The figures offer approximate spending patterns, developed from aggregate spending data and spending rules for each benefit (e.g. eligibility by age or enrolment in education, payment amounts). The indicators are calculated using the Age-Spending Profiles methodology used in OECD (2011[63]), *Doing Better for Families*, https://doi.org/10.1787/9789264098732-en.

Panel A: Data refer to 2021 unless specified otherwise. "Total 2003" comprises all spending categories shown in the figure for 2003.

Panel B: The age categories represent the sum of per-child spending for each year within the age range, providing an estimation of what would be the cumulative spending on one child during that age period if the spending rules for the given year remained unchanged.

For more information on the Age-Spending Profiles methodology, see Annex 2.A1 in OECD (2011[63]), *Doing Better for Families*, https://doi.org/10.1787/9789264098732-en.

Source: OECD (n.d.[61]), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html based on OECD (n.d.[1]), *OECD Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html and OECD (n.d.[64]), *OECD Education Database*, https://data-explorer.oecd.org/s/5ca.

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Box 2.3. Trends in parental leave policies

Paid leave entitlements have expanded considerably across OECD countries over the past five decades. In 1970, mothers had access to an average of just 16 weeks of paid leave, rising to 43 weeks by 1995 and roughly one year by 2024. The largest increases occurred in Finland and the Slovak Republic, where mothers can now receive more than three years of paid leave, compared with just 9 and 26 weeks respectively in 1970. Reductions in total paid leave are rare and mostly due to reforms introducing flexible payment-rate options, as seen in Czechia and Germany.

Countries that offer the longest leave entitlements today are generally those that introduced parental leave earliest (OECD, n.d.[65]; Thévenon, 2018[66]). With the exception of Italy and Spain, all countries that had parental leave policies in place by 1980 provide mothers with at least one year of employment-protected leave, and many of these early adopters offer two years or more. By contrast, countries that introduced parental leave after 1980 – especially after 1990 – tend to offer shorter durations, though Germany and Portugal stand out as later adopters that now provide mothers with more than two-and-a-half years of protected leave.

Paid father-specific leave is a much more recent development. In 1970 it existed in only three OECD countries, and by 1995 the OECD average remained under one week. Since then, however, most countries have introduced dedicated entitlements for fathers: by 2024, 35 of 38 OECD countries offered paid father-specific leave, averaging 12.7 weeks. Major reforms in Korea and Japan have extended fathers' individual entitlement to one year of paid leave, while several EU countries expanded their provisions to comply with the 2019 Work-Life Balance Directive, which requires at least 10 working days of paternity leave and a minimum of two non-transferable months of paid parental leave for each parent.

Source: OECD (n.d.[65]), *OECD Family Database*, PF2.5 Trends in leave entitlements around childbirth since 1970, https://www.oecd.org/en/data/datasets/oecd-family-database.html.

A broad portfolio of cash-based family support

Expenditure on cash transfers that support family incomes is particularly sizeable during the early years of a child's life. In most countries, however, cash benefits continue throughout childhood until the child reaches adulthood – and in some cases beyond, when young adults remain financially dependent on their parents' household. Across OECD countries, cash support for families typically takes the form of a combination of benefits, either broadly available to families or targeted at specific groups defined by income level, family circumstances (such as single-parent households), and in some cases conditional on certain behaviour.

Among the 35 OECD countries with available data, all provided at least one type of family benefit in 2024, and the large majority (30 countries) offered two or more. Greece, Spain, Switzerland, Türkiye and the United Kingdom provided only one family benefit, while Norway offered six distinct benefits, each with its own eligibility criteria and not necessarily mutually exclusive (OECD, n.d.[67]). Around half of OECD countries apply means testing to their main family benefit, requiring household income – and, in Spain and Portugal, also assets – to fall below a specified threshold.

In addition, 22 OECD countries provide benefits specifically targeting single-parent families or equivalent forms of support. Ten countries – Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, the Slovak Republic, Sweden and Switzerland – also operate alimony-advance schemes, which are often (though not always) activated when the non-resident parent fails to pay child support, as is the case in Denmark, Estonia, Germany (where the scheme is also activity-tested), Lithuania, Norway, the Slovak Republic and Sweden.

Several OECD countries also provide cash benefits linked to child characteristics, most commonly school-related allowances intended to help cover the costs of school supplies, clothing, and materials, or to support low-income students by reducing or eliminating voluntary or ancillary school fees. Three countries – France, Italy and Norway – offer means-tested benefits targeted specifically at families with younger children.

Finally, some OECD countries provide family benefits linked to parents' labour market status, typically through in-work benefits or tax credits or childcare allowances, as observed in Belgium, Czechia, Finland, Korea and Norway (OECD, n.d.[67]). Additional financial support is often delivered through the tax system rather than direct cash transfers. This includes tax exemptions (e.g. excluding child benefits from taxable income), child tax allowances (amounts deducted from gross income before taxation), and child tax credits (amounts directly deducted from tax liability).

A recent comparative study of child benefit distribution by Nightingale et al. (2025[68]) shows that European countries cluster into distinct models of child-benefit spending based on three dimensions: overall investment levels, the balance between cash and in-kind support, and the extent of means-testing. Among high-investment countries, some combine generous spending with limited targeting and a strong reliance on cash transfers (Austria, Poland, Estonia, Lithuania, Luxembourg), while others prioritise in-kind services under similarly low levels of means-testing (Bulgaria, Denmark, Finland). Germany stands alone in pairing high investment with strongly targeted benefits delivered mainly in-kind. Notably, no country adopts a model that features both high overall investment and a strong emphasis on cash support with extensive means-testing.

Among lower-investment countries, three broad approaches emerge. A first group relies heavily on means-tested cash transfers despite limited overall spending (Ireland, Greece, Cyprus, Portugal, Slovenia). A second, larger group maintains low means-testing and favours cash benefits (Romania, the Slovak Republic, Czechia, Croatia, Italy, Latvia, Hungary, Belgium). A final set of countries combines low investment with low means-testing but places more weight on in-kind support, including Spain, France, Malta, the Netherlands and Sweden. No low-investment country combines heavy means-testing with a strong emphasis on in-kind benefits.

Cash support responds to immediate income needs and leaves parents free to decide how resources are used. In contrast, in-kind support is designed to respond more directly to specific needs. In-kind support to families with children consists of benefits provided as services or goods rather than as cash transfers. The most important forms include early childhood education and care, education and health services, housing support, school meals and transport, and a range of family, child protection and disability-related services (Box 2.4).

Compared with cash transfers, in-kind support has the advantage of ensuring that public resources are spent on specific goods and services which are considered as essential for child healthy development and well-being, thereby helping governments pursue objectives such as promoting health and human capital formation, equal access to essential services. In-kind provision can also reduce inequalities in access that would otherwise depend on family income, information or preferences, and therefore help prevent the formation of long-term disadvantage. Universal or heavily subsidised services limit the extent to which children's opportunities are shaped by parental resources, while subsidised childcare in particular lowers barriers to employment for parents – especially mothers – making in-kind support an important complement to family cash benefits. Moreover, in-kind services can address market failures, such as under-provision or uneven quality of childcare and education, that cash transfers alone may not resolve.

For this reason, most OECD countries rely on a combination of cash and in-kind support. Cash benefits help stabilise household incomes and reduce child income poverty, and are expected to enable parents to invest more in the goods and services needed for children to grow and develop well. In-kind services, by contrast, are more directly linked to policy objectives such as promoting child development, ensuring equal access to essential services, and supporting parental employment. In addition, conditioning cash transfers on the take-up of targeted services can help focus support on priority groups while ensuring that households have the resources needed to access those services (Box 2.4).

Box 2.4. Family support services across OECD countries

Family support services encompass a broad range of public and community-based interventions designed to strengthen parenting capabilities, improve family functioning, and help children thrive across childhood. In the OECD context, these services are typically organised along several key areas of support, each responding to different aspects of family and child well-being (Riding et al., 2021[17]).

Basic material needs

Support for basic material needs helps families meet essential everyday requirements, including food, clothing and housing. Programmes include school meal schemes, food and clothing vouchers, direct provision of items through community services, and access to subsidised or social housing. These supports play a crucial role in reducing short-term deprivation and removing barriers to equitable participation in school and community life.

Healthcare services

Health-related family support services promote maternal, child and adolescent health. This includes prenatal and postnatal care, regular check-ups and vaccinations, specialist referrals, prescription coverage and mental health support such as counselling or therapy. These services are essential for preventive care and early intervention in health risks that can affect long-term development.

Family functioning support

These services assist families with strengthening relationships and coping with everyday challenges. They include family counselling, casework and specialised social services, respite care during family crises, and in-home support tailored to individual family needs. Such services help families manage stress, improve caregiving practices, and address issues before they escalate to higher-risk situations.

Parenting support and early intervention

Parenting programmes and early intervention services aim to build parental skills and enhance the parent-child relationship. They can be delivered through home-visiting practitioners, community centres or schools and take the form of goal-oriented casework, individual or group counselling, and evidence-based parenting curricula. These interventions are particularly effective in supporting families before crises develop.

Specialised services for complex needs

Specialised support targets families facing multiple or deep-seated challenges. This includes services for children with disabilities, families affected by addiction, and supports tailored to socially marginalised groups such as migrants or refugees. These specialised programmes help bridge gaps that universal supports alone cannot fill.

A growing body of evidence highlights pregnancy and the first 1 000 days of life as a critical window for child development and long-term outcomes. In response, several countries have adopted a

"first 1 000 days" approach that co-ordinates policies to provide tailored, continuous support to pregnant women and families with infants. This approach emphasises early identification of needs through health and social services, timely referral to appropriate support, and preventive interventions to address emerging difficulties before they escalate, including coaching and guidance for new and expectant parents.

Families with school-age children can access a broad range of services delivered through schools, which are well placed to identify disadvantaged children, assess their needs, and maintain contact with parents or caregivers. By bringing children together in a single setting, schools facilitate regular follow-up and access to services that might otherwise depend on parental availability, including health check-ups provided by school health services, whose scope and frequency vary across countries. Many education systems also integrate psychological support, as in Copenhagen, where school counsellors can refer adolescents to targeted interventions with psychologists addressing issues such as stress, loneliness, substance use, depression or anxiety. In addition, schools play a key role in delivering school-meal programmes in many countries, often with income-tested or targeted eligibility, both to support family budgets and to promote child nutrition and food security, sometimes in partnership with local authorities, NGOs and voluntary organisations.

Combining conditional cash transfers with support services can effectively increase service take-up and improve family outcomes by linking financial assistance to participation in programmes such as health screenings, school meals or parenting classes. Evidence from experimental "Cash+" programmes shows that this integrated approach delivers better educational, health and nutrition outcomes than providing cash or services alone (Little et al., 2021[69]). Reflecting this, conditional cash transfers are increasingly used in OECD countries, with around half of capital cities supporting vulnerable families through such schemes, particularly when higher benefit levels, longer payment durations and well-timed transfers help sustain engagement with services.

2.4. Strengthening supports to working parents

An important dimension of support for families with children is aimed at promoting parents' employment and helping them remain in work after the birth of a child, by facilitating the reconciliation of work and family life and ensuring that paid employment remains financially worthwhile for both partners in couple households as well as for single parents. This objective is pursued primarily through child-related leave entitlements for pregnant women and parents of newborn children – which, as discussed in the previous section, have expanded substantially over recent decades (see Box 2.3) – and through the provision of early childhood education and care (ECEC) services. Beyond enabling parents to balance employment and caregiving responsibilities, ECEC services also seek to provide children with high-quality, professionally delivered early learning and care, helping to foster child development and reduce inequalities in early life opportunities (OECD, 2025[70]; Duncan et al., 2022[71]).

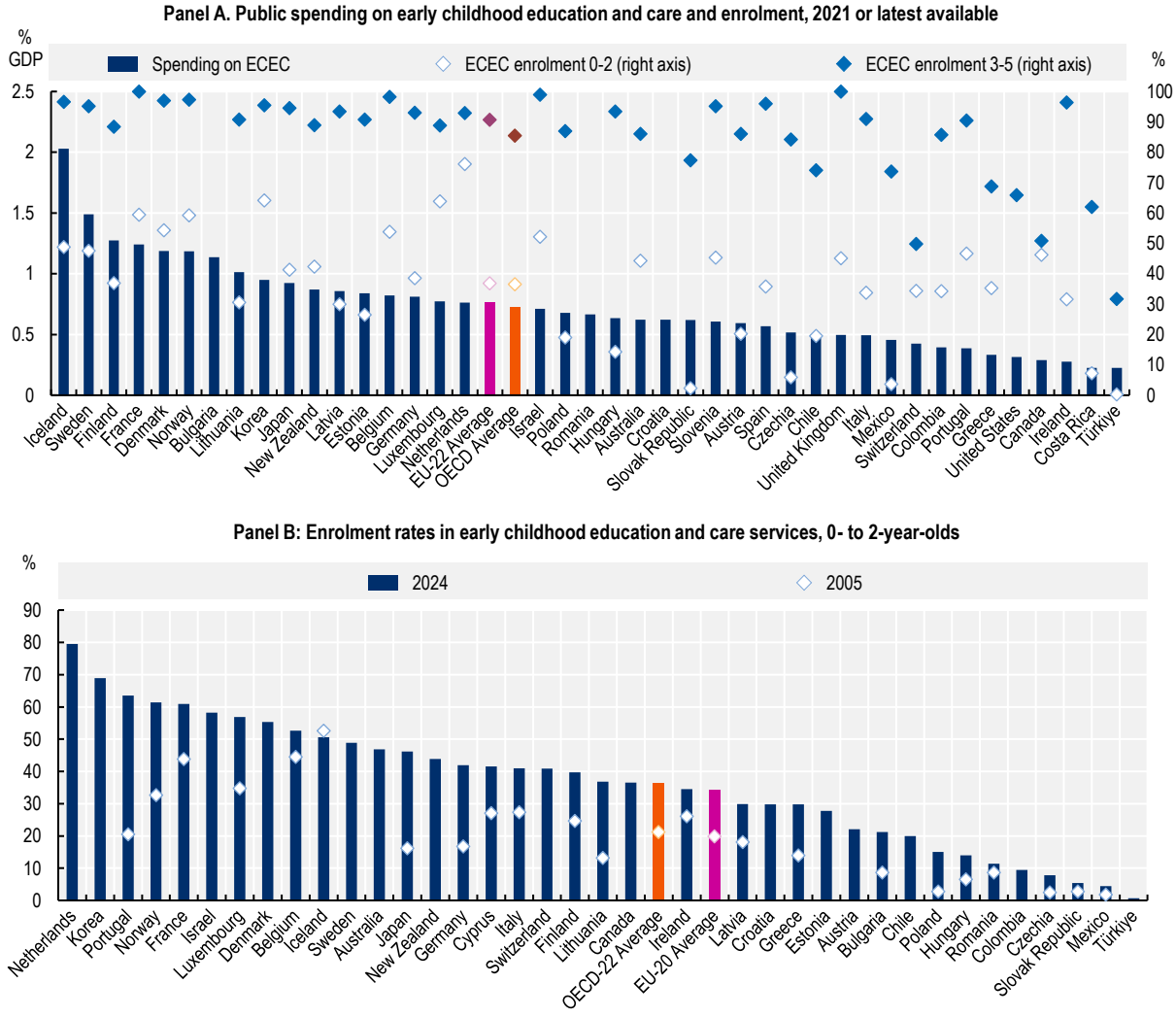
Unequal development of early childhood childcare and education services

As illustrated in Figure 2.5, public investment in ECEC services has grown substantially across the OECD since the early 2000s. However, spending on ECEC services as a percentage of GDP varies widely across countries, ranging from less than 0.3% in Türkiye to more than 2% in Iceland – around seven times higher (Figure 2.5, Panel A). These differences reflect varying national priorities in expanding service availability, improving affordability for families, and enhancing the quality of early childhood education and care.

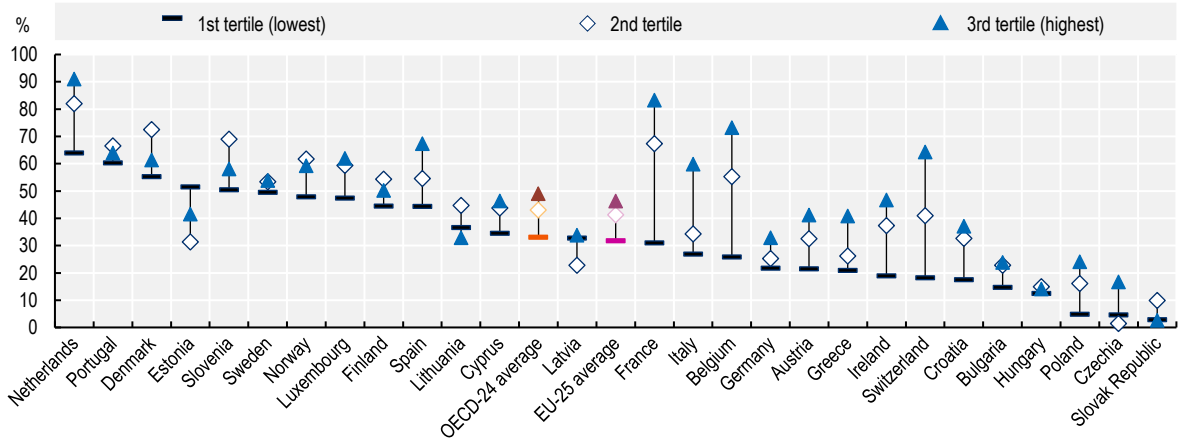
Childcare service coverage is particularly important for enabling parents – especially mothers, who still provide the bulk of childcare – to participate in the labour market and progress in their careers. As shown

in Figure 2.5, Panel B enrolment in formal childcare for children under age 3 has risen markedly since the mid-2000s, increasing from around one in five children to more than one in three across the OECD by 2024. These aggregate trends, however, conceal substantial inequalities by family income. In many European countries with available data, children from low-income families are significantly less likely to attend formal childcare services. On average across European countries in 2024, about 49% of children under age 3 from the highest income third were enrolled in formal childcare, compared with 33% among those from the lowest income third. This disparity reflects the so-called “Matthew effect”, whereby childcare provision disproportionately benefits more advantaged families, for a variety of structural, financial, and informational reasons (Box 2.5).

Figure 2.6. Spending on and coverage of early childhood and care services



Panel C: Participation rates in early childhood education and care by household income, 0- to 2-year-olds, 2024 or latest available



Note: Panel A: Enrolment rates for ages 0-2 refer to 2019 for Canada and Japan and to 2018 for Costa Rica and the United Kingdom; for ages 3-5, data refer to 2019 for Belgium, Canada and Greece and to 2018 for the United States. In some countries local governments play a key role in financing and providing childcare services. Such spending is comprehensively recorded in Nordic countries, but in some other (often federal) countries it may not be fully captured by the OECD social expenditure data. Panel B: Data from the 2024 series for Hungary refer to 2022; for Australia, Austria, Brazil, Chile, Colombia, Denmark, Estonia, Finland, Germany, Iceland, Israel, Japan, Korea, Lithuania, Mexico, New Zealand, Norway, Slovenia, Spain, Sweden, Switzerland and Türkiye to 2023; for Canada to 2025. Data from the 2005 series for Bulgaria and Romania refer to 2007; for Malta to 2008. Data generally include children enrolled in early childhood education services (ISCED 2011 level 0) and other registered ECEC services (ECEC services outside the scope of ISCED 0, because they are not in adherence with all ISCED-2011 criteria). See notes of Chart PF3.2.A in the *OECD Family Database* (n.d.[61]) for differences in data source and service definition. Panel C: Data for Switzerland refer to 2023; for Germany and Hungary to 2022. Data are OECD estimates based on information from EU-SILC. Data refer to children using centre-based services (e.g. nurseries or day care centres and pre-schools, both public and private), organised family day care, and care services provided by (paid) professional childminders, regardless of whether or not the service is registered or ISCED-recognised. Equivalised disposable income tertiles are calculated using the disposable (post tax and transfer) income of the household in which the child lives – equivalised using the square root scale, to account for the effect of family size on the household's standard of living – and are based on the equivalised disposable incomes of children aged less than or equal to 12.

Source: Panel A: "PF3.1 Public spending on childcare and early education" in OECD (n.d.[61]), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html; Panels B and C: "PF3.2 Enrolment in childcare and pre-school" in OECD (n.d.[61]), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html.

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Box 2.5. The Matthew effect in childcare services: what it is, why it happens, and why it matters

The "Matthew effect"[1] in early childhood education and care (ECEC) describes a pattern where policies or service expansions intended to help all children end up disproportionately benefiting better-off families – so the advantaged gain more and the disadvantaged fall further behind. In the context of childcare this typically shows up as higher uptake and better quality experiences among children from higher-income or more educated families, even where overall provision grows (Pavolini and Van Lancker, 2018[72]; Van Lancker, 2023[73]; OECD, 2025[70]).

Key determinants of the "Matthew effect" include:

- **Supply constraints and uneven availability**. Limited places, long waiting lists and geographically uneven provision mean better-connected or higher-income parents (who can commute, pay higher fees or navigate admissions) benefit first (OECD, 2025[70]).

- **Cost and affordability barriers**. Fee structures and poor targeting of subsidies leave low-income families facing higher effective prices or administrative obstacles to take-up (OECD, 2020[74]).
- **Demand-side factors and parental resources**. Differences in parents' employment patterns, access to information, preferences, social networks, and capacity to navigate and use available services (e.g. because of irregular working hours, language barriers, administrative complexity or limited familiarity with the social protection system) can reduce service uptake among disadvantaged families. Recent work teases apart how much of the gap is about preferences versus structural constraints (Wood, Neels and Maes, 2023[75]).
- **Policy design and sequencing**. Policies that expand high-quality places but leave fees, accessibility or complementary supports unchanged tend to favour those already best placed to benefit (Van Lancker, 2023[73]).

The Matthew effect in early childhood education and care (ECEC) has far-reaching consequences for both children and families. When better-off households are more likely to access high-quality services, early cognitive and socio-emotional gaps widen and can persist throughout schooling and into adulthood, reinforcing existing patterns of inequality (OECD, 2025[70]). At the same time, the labour-market and anti-poverty benefits typically associated with ECEC expansion are weakened: if advantaged parents are the main beneficiaries, improvements in maternal employment, family income and poverty reduction fall short of expectations (OECD, 2018[76]). Finally, unequal take-up can undermine the legitimacy and efficiency of social-investment strategies. Reforms that deliver disproportionate gains to higher-income families risk political backlash and fail to meet their redistributive goals, limiting their long-term impact and public support (Van Lancker, 2023[73]).

Reversing the Matthew effect in ECEC requires a comprehensive policy approach that tackles both supply- and demand-side barriers. Expanding the supply of high-quality places – particularly in underserved neighbourhoods-helps ensure that limited availability does not systematically favour better-off families (Abrassart and Bonoli, 2015[77]). Affordability is equally critical: progressive fee structures, simple subsidy rules and automatic or streamlined enrolment can substantially reduce financial barriers for low-income households (OECD, 2020[74]). At the same time, complementary policies such as well-aligned parental leave, extended opening hours, targeted outreach and accessible information, and strong staff training are essential to address the administrative, cultural and practical hurdles that often deter disadvantaged parents (OECD, 2011[63]; Adema, Clarke and Thévenon, 2020[14]). Finally, governments need to monitor not just overall coverage but who benefits: regularly collecting and publishing data on participation and quality by income, education and location allows early detection of emerging Matthew effects and supports timely policy correction (Van Lancker, 2023[73]).

1. In social policy, the "Matthew effect" is named after a passage in the Gospel of Matthew ("to those who have, more will be given"), reflecting the idea that social benefits often disproportionately advantage those who are already better off.

Increased investments in active labour market policies

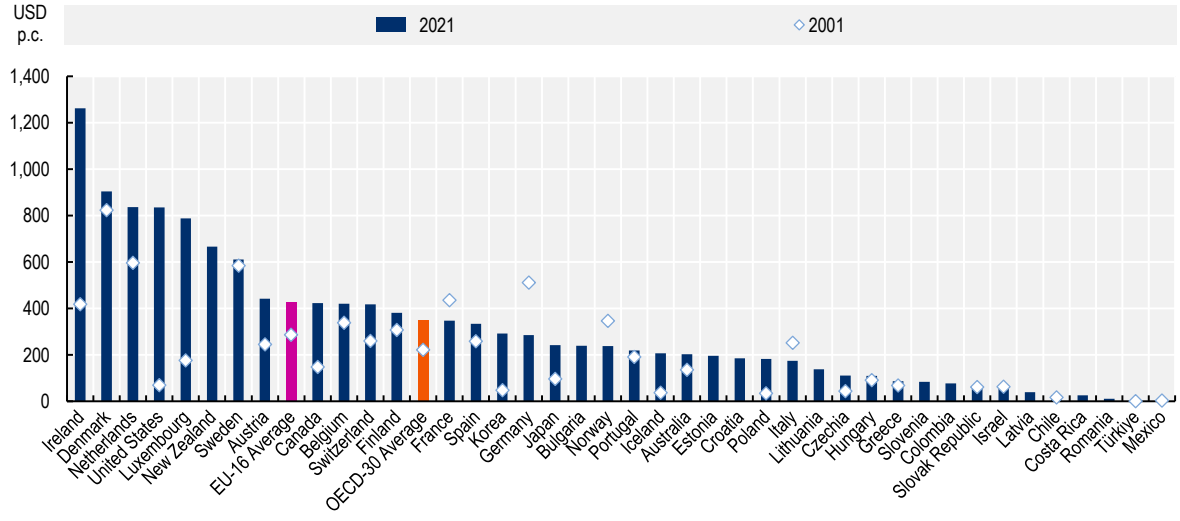
Active labour market policies constitute another important pillar of support for working-age adults. While not specifically targeted at parents, families with children can benefit substantially from these measures, as care responsibilities remain a significant barrier to employment for many – particularly women (Fernandez et al., 2016[78]; Farchy and Immervoll, 2021[79]). Parents may rely on these programmes to re-enter employment following career interruptions related to caregiving, to upgrade skills that facilitate a return to work, or to support longer-term career progression. Active labour market policies encompass a range of measures, including public employment services (such as job placement, counselling and job-search assistance) and training programmes designed to improve labour market integration for groups

facing specific barriers. These groups often include people with disabilities, single parents, and parents who have been out of the workforce for extended periods following the birth of a child (Martin, 2015[80]; Nieuwenhuis, 2022[47]).

Available data do not allow for spending to be disaggregated by beneficiary group, making it difficult to determine to what extent families with children benefit from these programmes. Evidence in Figure 2.7 shows that per-capita spending on ALMPs has increased in many countries over the past two decades, with substantial cross-national variation. Ireland stands out as the country experiencing the largest increase, with per-capita spending of almost four times the OECD average in 2021. While a significant share of the 2021 spending patterns can be expected to reflect countries' responses to the COVID-19 pandemic, the overall trend of increased per-capita spending on ALMP across the OECD also holds for comparisons with pe-pandemic years (see Figure 2.7, Panel B above). The same is true for the large cross-national variation in both trends and levels (not shown).

Figure 2.7. Increasing expenditures on ALMP

Per capita expenditures in constant USD PPP, 2021 and 2001



Note: OECD and EU averages are computed for all respective Member countries with available data for both 2001 and 2021. Spending is denoted in per capita expenditure in USD PPP in constant prices. Per capita expenditure refers to the total population size rather than expenditure per unemployed person or per working-age population. Active labour market programmes (ALMPs) include all social expenditure (other than education) which is aimed at the improvement of the beneficiaries' prospect of finding gainful employment or to otherwise increase their earnings capacity. This category includes spending on public employment services and administration, labour market training, special programmes for youth in the transition from school to work, special labour market and rehabilitation programmes for persons with disabilities, and labour market programmes to provide or promote employment for all other groups of unemployed and inactive persons.
Source: OECD (n.d.[3]), *Social Expenditure database*, https://data-explorer.oecd.org/s/46u.

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Making work pay for low-income families

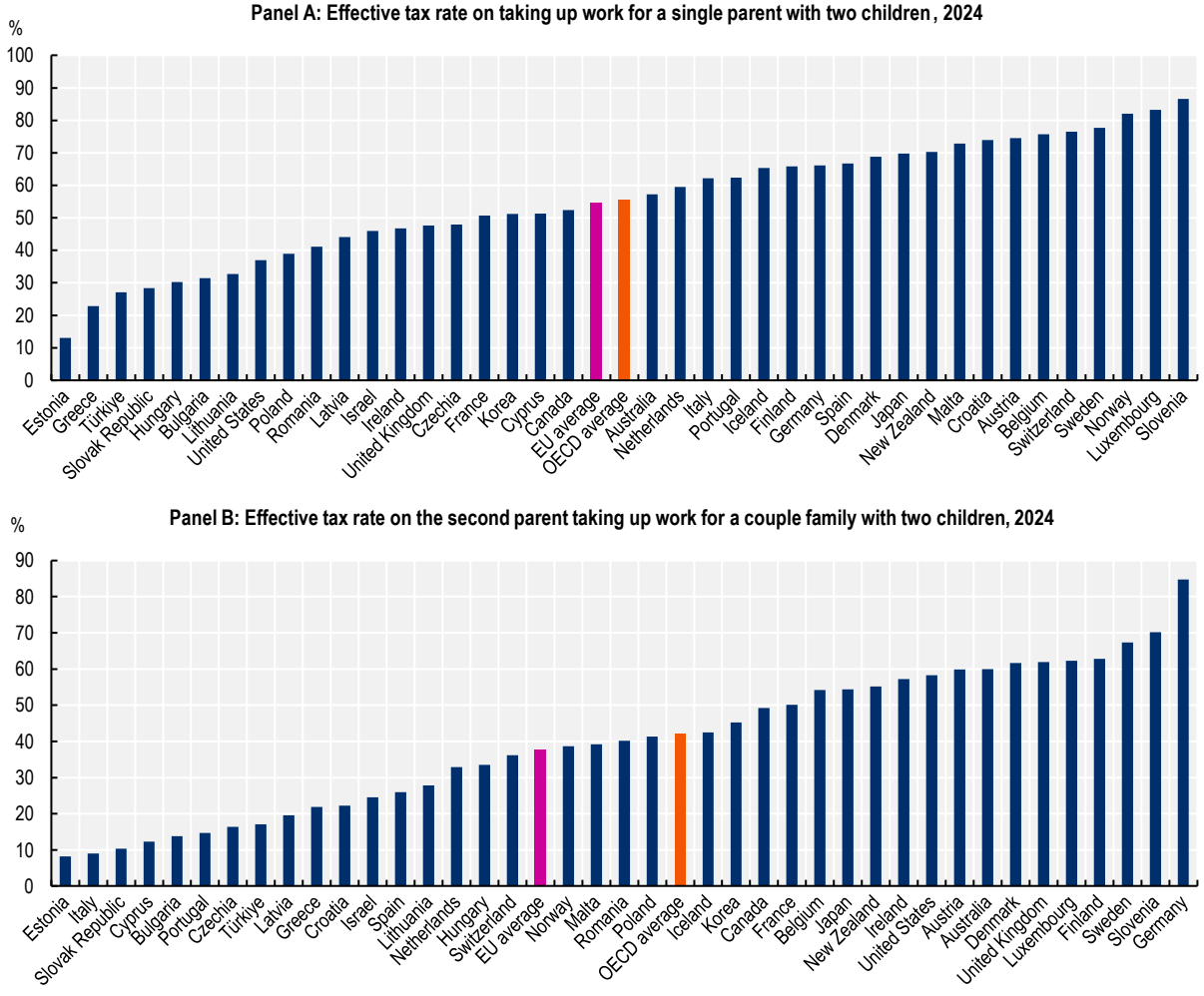
The financial returns to employment – in other words, whether work pays – are another critical determinant of parental labour market participation and families' ability to escape poverty. These returns depend not only on wage levels, but also, crucially, on the design of tax and benefit systems, which shape the effective tax rates faced by low-paid working parents. Figure 2.8 shows effective tax rates for parents with two children who move into full-time employment after five years of unemployment. The figure shows the share of additional earnings that is effectively "taxed away" through higher taxes and reduced benefits,

reported separately for single parents earning 67% of the average wage and for partnered parents who are both employed full-time at 50% of the average wage. This earnings level represents a relatively modest income and, for a family with two children, is close to the poverty line in many OECD countries, highlighting the importance of tax-benefit design for making work financially worthwhile for low-income families.

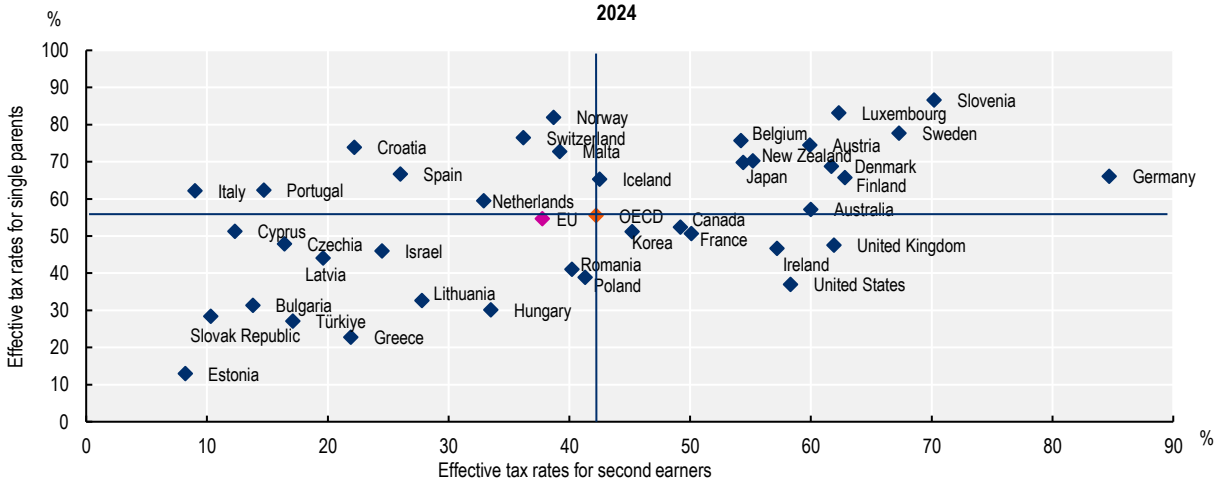
Panel A of Figure 2.8 shows substantial cross-country variation in the share of earnings that single parents effectively "pay back" through higher taxes or reduced benefits when taking up such employment. In Estonia, only about 13% of earnings are lost – far below the OECD average of 56% – while Slovenia displays the highest effective tax rate, with around 87% of earnings offset by lower benefits or higher taxes, leaving households with a take-home gain of just 13% of their earnings gained from work.

Similar cross-national disparities appear for couple households in which a second earner enters employment (Figure 2.8, Panel B). On average, effective tax rates for these couples are lower than for the selected category of single parents, partly because single parents are more likely to lose access to social assistance and other minimum-income benefits when they take up work. Figure 2.8, Panel C maps countries according to whether effective tax rates for single parents and for couple families fall above or below the OECD average. The lower-left quadrant identifies countries with below-average rates for both household types, whereas the upper-right quadrant highlights those with above-average rates for both.

Figure 2.8. Effective tax rates on taking up employment



Panel C: Lower than average effective tax rates for single parent families do not always apply to couple families, 2024



Note: This indicator measures the financial disincentives to participate in the labour market after five years of unemployment. It calculates the proportion of earnings in the new job that are lost to either higher taxes or lower benefit entitlements when a jobless person takes up full-time employment paid at 67% of average wage for single-parents and at 50% for a second earner in couple families. The indicator assumes the presence of two children in the household, aged 4 and 6. Childcare benefits or costs are not accounted for and in couple families, the primary earner is assumed to work full time at 50% of the average wage. Cash housing benefits are calculated assuming private market rent, plus other charges, amounting to 20% of the full-time wage for all family types.

Source: OECD Secretariat calculations based on output from the OECD (n.d.[81]) *Tax-Benefit Model (version 2.7.1)*, https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html.

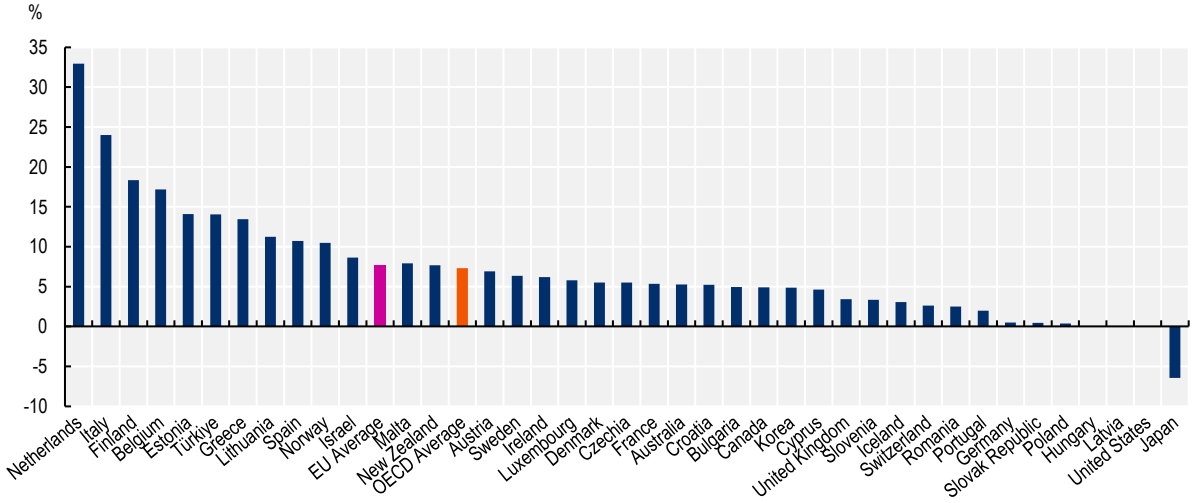
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In couple families, having two partners creates the potential to draw on two sources of labour income, which can raise overall family income and provide greater income stability over time. This is particularly important for low-income households with children, where the first earner (often the father) is employed in a low-paid job and the second earner (often the mother) can enter the labour market to help lift the family out of poverty. Whether this second earner chooses to work, however, depends crucially on the effective tax rates they would face and on whether supplying labour as a second earner is financially more attractive than increasing the income of the first earner. Differences in the tax and benefit burden associated with a given level of household income – depending on how earnings are split between partners – therefore provide a useful indication of the financial incentives for second earners in low-income families to enter employment, compared with achieving the same income through a single earner.

Figure 2.9 shows the difference in net household income between single-earner couples and couples where both partners earn the same gross income (assumed to equal the average earnings in total). A larger difference indicates a stronger financial gain from having two earners rather than one. The results suggest that the financial advantage of dual earner families is particularly strong in the Netherlands, Italy, Finland and Belgium, where the gain is at least twice the OECD average. In contrast, countries on the right-hand side of the figure have tax systems that are broadly neutral with respect to the distribution of earnings, and only in Japan do single-earner couple families appear to have a financial advantage.

Figure 2.9. Financial incentives for dual-earner couples vary significantly across countries

Additional net household income of an equal dual-earner couple compared to a single-earner couple, as a proportion (%) of net household income for the single-earner couple, 2024



Note: The estimates here relate to the situation for a couple household with two children aged 4 and 6 and gross household earnings equal to 100% of average earnings. In those situations where one member of the household is not working, it is assumed that they are not entitled to unemployment benefits (for example, because their entitlements have expired). The household is however assumed entitled to social assistance and other means-tested benefits, subject to the relevant income conditions. Where receipt of social assistance is subject to activity tests (such as a non-working household member engaging in an active job-search or being "available" for work), these requirements are assumed to be met. Cash housing benefits are calculated assuming private market rent, plus other charges, amounting to 20% of the full-time wage for all family types. Neither childcare benefits nor childcare costs are considered.
Source: OECD Secretariat calculations based on output from the OECD (n.d.[81]) *Tax-Benefit Model (version 2.7.1)*, https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html.

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2.5. The eroding redistributive impact of transfer policies

As noted earlier, labour market income can provide families with durable protection against poverty when employment is stable and earnings are sufficient once shared among household members. However, the rise in in-work poverty documented in Chapter 3 suggests that, for many households with children, labour income is increasingly insufficient to lift families above the poverty line.[3] In such cases, policies that address the structural drivers of in-work poverty – including adequate minimum wages, skills development, secure employment contracts, and access to affordable childcare – are essential to prevent poverty among working households. At the same time, income support through cash benefits, tax credits, or tax reductions for low-income families can be also important. The need for these income transfers – and the extent to which they must complement low earnings – depends critically on working hours during a week, month and a year, and how wages compare to poverty threshold at the lower end of the income distribution.

Stronger protection from minimum wages, yet insufficient to curb in-work poverty

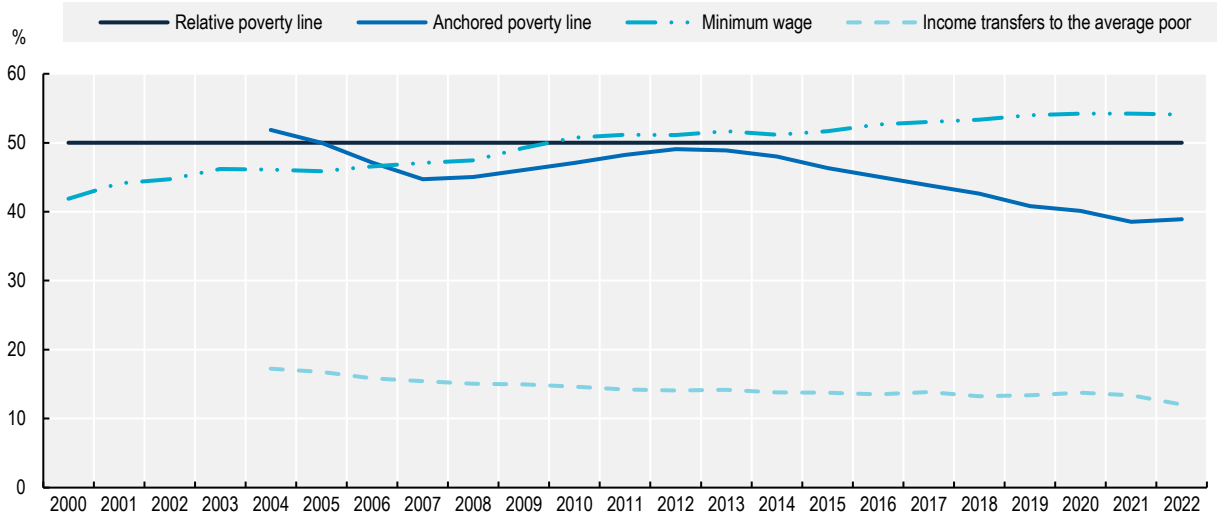
Figure 2.10 shows that, on average across the OECD, minimum wages have increased relative to median income over time – from just over 42% in the early 2000s to around 55% in 2023 – suggesting that minimum-wage employment now offers better protection against poverty than two decades ago. This upward trend is not universal, however. In a significant number of countries the increase has been modest,

and in some cases the minimum wage relative to median income has declined, notably in the United States and, more recently, in Türkiye (Annex 2.A).

At the same time, the poverty line anchored in 2005 represents a declining share of median income, suggesting that minimum wages may have played an increasingly important role in mitigating child and family severe poverty during the 2010s. However, although earnings from full-time work at the statutory minimum wage have, on average, risen slightly above the relative poverty threshold, the growing incidence of in-work poverty indicates that low-paid employment – often combining low wages with insufficient working hours – frequently fails to provide adequate income to lift families with children out of poverty (OECD, 2023[82]). In principle, this gap could be compensated by income transfers. Yet Figure 2.10 shows that transfers received by the average poor household have, on average, declined, despite considerable cross-country variation (see Annex), and in many countries have remained broadly stable as a share of median income. Taken together, these trends suggest that while earnings from minimum-wage (full-time) employment have become relatively more important in reducing income poverty, the stagnation – or decline – of income support has made it increasingly difficult for households with low earnings to escape poverty.

Figure 2.10. An increasing role of minimum wage in protecting against poverty

OECD average evolution of poverty lines, minimum wage and income transfers, as a share of median income



Note: Data are expressed as a percentage share of the median equivalised disposable income in a given year. Transfers to the average poor household are computed by comparing the average equivalised household income of individuals below the relative poverty line before and after income transfers. The anchored poverty line displays the inflation-adjusted relative poverty line from 2005. The minimum wage represents the theoretical earnings of a full-time employee under the national minimum wage legislation, averaged across countries where such legislation exists. Across all series, the composition of the OECD average changes over time according to data availability (ranging from 14 to 36 countries across series and years). However, the displayed trends are not sensitive to the fluctuation of countries in the composition of the average.
Source: OECD (n.d.[83]), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

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The redistributive role of income transfers

Tax and benefit systems pursue multiple objectives, of which income redistribution and poverty protection are only one – albeit a central – component.[4] Their redistributive role operates along two dimensions: vertical and horizontal redistribution. *Vertical redistribution* involves transfers from higher-income to lower-

income households, ensuring that individuals and families have access to a minimum income sufficient to meet basic needs and are protected against key social risks such as unemployment, disability, old age, or family-related shocks. *Horizontal redistribution*, by contrast, reallocates resources between households with similar incomes but different needs – particularly due to differences in family size and composition. In this context, it typically involves transfers from childless households to those with children, helping to ensure that families have adequate resources to meet the costs of raising children.

Vertical redistribution

The vertical redistributive effect of taxes and transfers is typically assessed by comparing household income inequality before and after taxes and transfers, using indicators such as the Gini coefficient. Looking at trends since the early 1990s, Causa and Hermansen (2017[84]) show that redistribution through taxes and transfers has declined on average and in most countries with data extending back to the mid-1990s. Most of this decline occurred between the mid-1990s and mid-2000s. The onset of the 2008-2009 crisis temporarily halted the trend, as automatic stabilisers and discretionary fiscal measures cushioned the labour market and social shock (Causa and Hermansen, 2017[84]). The decrease in redistribution was largely driven by reductions in cash transfers, while changes in personal income taxes played a smaller and more heterogeneous role across countries. In particular, the fall in transfer-based redistribution mainly reflected less generous social insurance benefits – especially unemployment-related transfers – though in some countries this was partly offset by more progressive social assistance in the form of means-tested benefits (Causa, Browne and Vindics, 2019[85]).

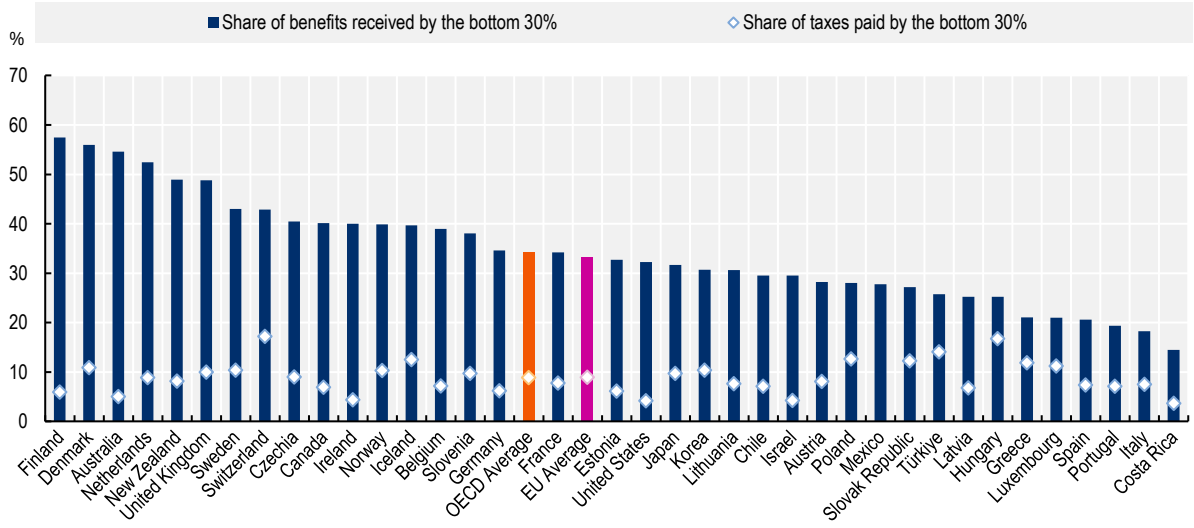
Another stylised fact highlighted by Causa and Hermansen (2017[84]) is that the redistributive effect of transfers is driven primarily by their overall size and less so by the degree of targeting. Social insurance transfers account for the largest reduction in inequality primarily because they represent the bulk of transfer spending. By contrast, social assistance transfers are more tightly targeted but smaller by design, which limits their aggregate impact on inequality. Nonetheless, they remain crucial for ensuring income adequacy and securing minimum living standards for vulnerable groups (Causa and Hermansen, 2017[84]).

Across OECD countries, cash transfers constitute the main source of redistribution. Personal income taxes play a comparatively larger role in countries where overall redistribution is low – such as Japan, Korea, Israel and the United States – but remain secondary to transfers in most systems. Social security contributions, while generally having a weak redistributive impact, can exert a modest disequalising effect in several countries (Causa and Hermansen, 2017[84]).

The degree of redistribution across income groups can be assessed by examining shares of taxes paid and benefits received by lower-income groups relative to their population shares. Figure 2.11 shows that, on average across OECD countries, roughly one-third of all cash benefits from public social security accrue to households in the bottom 30% of the income distribution. In several countries – including Australia, Denmark, Finland, the Netherlands, New Zealand and the United Kingdom – this share reaches or exceeds one half, indicating comparatively strong targeting of cash benefits towards low-income households. By contrast, countries located on the right-hand side of the figure display much weaker vertical redistribution towards the 30% bottom income, with around 20% or less of total transfers accruing to this group, as seen in Costa Rica, Greece, Luxembourg, Spain and Portugal. In comparison, cross-country variation in the share of taxes paid by the bottom 30% is much more limited, averaging around 8% of total tax revenues. Overall, redistribution towards the bottom 30% is particularly pronounced in countries on the left-hand side of Figure 2.11, where this group receives more than half of all cash benefits while contributing around 10% or less of total taxes paid.

Figure 2.11. Cash redistribution through public social security at lower incomes

2022 or latest available year



Note: Data for Germany and the Netherlands refer to 2021, for France to 2020, for Belgium and Iceland to 2017, for Türkiye to 2015 and for Luxemburg to 2014. Benefits received include current transfers received from social security (including accident and disability benefits, old-age and survivor cash benefits, unemployment benefits, maternity allowances, child and/or family allowances, all income-tested and means-tested benefits that are part of social assistance, including quasi-cash transfers given for a specific purpose such as food stamps) but exclude transfers received from employment-related social insurance, non-profit institutions and other private households (e.g. alimonies). Taxes paid comprise direct taxes on income and wealth paid by households (net of refunds), as well as contributions paid by households to public social security schemes. They exclude contributions paid by households to employment-related social insurance schemes, non-profit institutions and other households.

Source: OECD (n.d.[83]), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

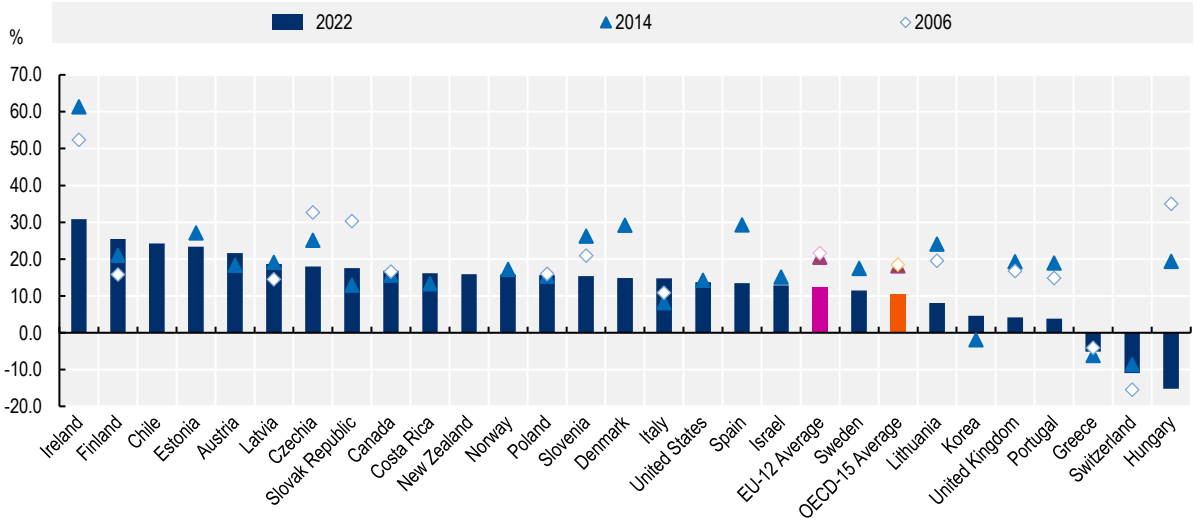
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Although households in the bottom 30% of the income distribution remain a key target of income transfers, the share of net transfers to their disposable income has declined since the early 2000s. Figure 2.12 shows that net transfers to households in the bottom 30% of the income distribution are positive overall – meaning they receive more in benefits than they pay in taxes. However, in many countries, the share of income represented by these net transfers has declined over the past two decades, following a period of increase between the mid-2000s and the mid-2010s in the aftermath of the 2008 financial crisis.

This pattern is consistent with findings by Causa and Hermansen (2017[84]), who document a reduction in income support from social transfers to workless households in the bottom 40% of the income distribution. According to the authors, this decline has been largely driven by reductions in insurance-based transfers and only partly offset by increases in means-tested assistance in some countries. By contrast, income support for working households in the bottom 40% has tended to increase, mainly reflecting declines in income taxes and social security contributions, which have only partially compensated for widespread falls in market incomes and reductions in social transfers (Causa and Hermansen, 2017[84]).

Figure 2.12. Declining contribution of net transfers to the disposable income of the bottom 30%

Income contribution of net public transfers among the bottom 30% of the income distribution



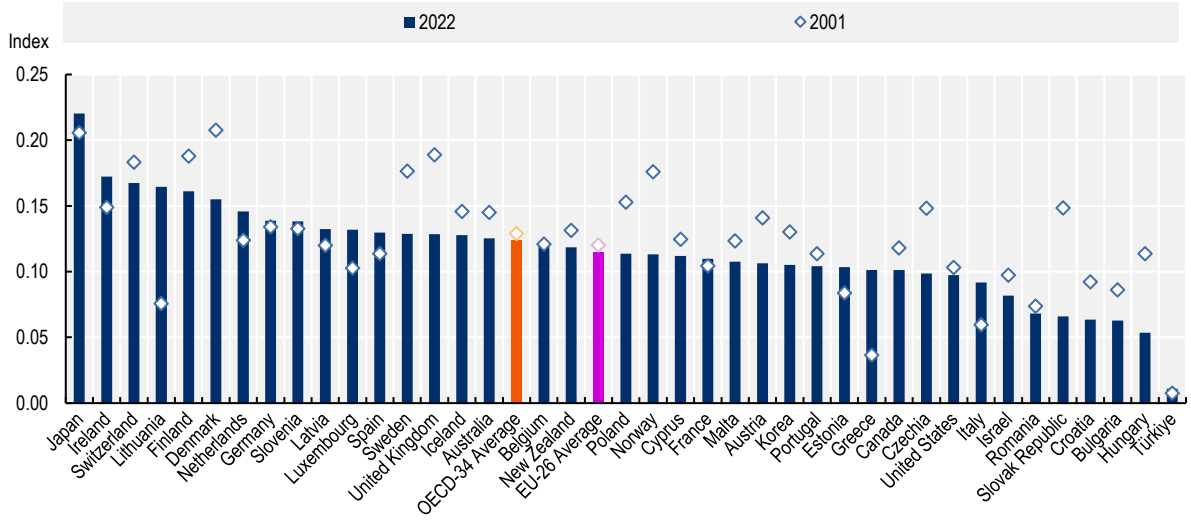
Note: OECD and EU averages are computed for all respective Member countries with available data across the three years. Data refer to mean equivalised net public transfers received by the bottom 30% divided by the mean equivalised disposable income of households in the bottom 30%. Net public transfers received are calculated as the mean equivalised current transfers received from social security minus the sum of mean equivalised direct taxes paid on income and wealth (net of refunds) as well as contributions paid to public social security schemes.
Source: OECD (n.d.[83]), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

StatLink https://stat.link/iobngm

Redistribution levels can vary for various reasons, including family composition and employment across income groups that influence the respective tax and benefits rates that apply, as well as the take-up level of benefits, and the tax-benefit design parameters themselves. The RED index provides a summary measure specifically of the redistributive design of tax-benefit policies[5] for a set of hypothetical household types, in this case low- and middle-income families in different employment situations (OECD, 2024[86]) (Box 2.5). Increases in the index indicate that changes in tax-benefit policies have strengthened redistribution towards household types with greater financial needs, whereas declines signal that designs have become less redistributive. Figure 2.13 shows that, in most OECD countries, and for families with children, the design of tax-benefit policies has in fact become less redistributive between the early 2000s and 2022. Notable decreases are observed in countries whose policy design is comparatively less redistributive (e.g. Hungary, the Slovak Republic), shows medium levels of redistribution (e.g. Norway, the United Kingdom), but also among countries with traditionally highly-redistributive tax and benefits systems (e.g. Denmark). Only in a small group of countries – including Japan, Ireland, Lithuania, the Netherlands, Latvia, Luxembourg, Spain, Estonia, Greece and Italy – has the redistributive design become more generous toward low-income families since the early 2000s.

Figure 2.13. The redistributive design of tax and benefits systems is becoming less generous towards low-income families in most countries

Evolution between 2001 and 2022 of the RED index measuring the progressivity of net taxes with growing income



Note: Data in the 2001 series refer to 2005 for Cyprus, Estonia, Latvia, Lithuania, Malta, Slovenia and Türkiye; to 2008 for Bulgaria, Israel and Romania; and to 2013 for Croatia. OECD and EU averages are computed for all respective Member countries with available data for both 2001 and 2022. The RED index theoretically ranges from -1 (in the case of fully regressive transfers) to +1 (when net taxes and social contributions are all paid by the highest income groups). All countries display positive values, indicating that the tax and benefit systems for the income and family groups considered are progressive. A value of zero indicates that net transfers are strictly proportional to gross income, implying neither progressivity nor regressivity. Higher positive values reflect greater progressivity, meaning that higher-income households pay higher net taxes as a proportion of their gross income. For more details, see Box 2.6.

Source: OECD Secretariat calculations based on output from the OECD (n.d.[81]) *Tax-Benefit Model (version 2.7.1)*, https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html.

StatLink https://stat.link/48lbwu

Box 2.6. Indicator of redistributive design (RED index)

The RED index measures the progressivity of taxes and benefits weighted by the volume of redistribution for a hypothetical set of households, following the methodology outlined in the OECD tax-benefit simulation model (OECD, 2024[86]). Social contributions are counted as "taxes" in the computation of the RED index. For every pair of country i and time t, the formula is.

$$RED\ index_{it} = I_{it} * K_{it}$$

where

- $I_t = t_{it}/(1 - t_{it})$ measures the size of redistribution, or the incidence, and $t_{it} = \sum_i (taxes_{itj} - benefits_{itj})\ / \sum_i gross\ income_{itj}$ is the total of net taxes paid as a share of total gross income of across households J.
- $K_{it} = Concentration\ index_{it}\ (taxes_{itj} - benefits_{itj}) - Gini\ index_{it}\ (gross\ income_{itj})$ is the Kakwani index and the formula for the concentration index takes the form $Concentration\ index_{it} = 2 * \sum_i ((taxes_{itj} - benefits_{itj}) * R_j) / \sum_i (taxes_{itj} - benefits_{itj}) - 1$ with the rank of household j being calculated as $R_{itj} = (j * 0.5)/J$ where J represents the total number of households

The RED index yields values between -1 and 1, with higher values indicating a more progressive tax schedule. A tax schedule that is exactly proportional to gross income has a RED index of 0 as the concentration of net tax liabilities would be exactly the same as the distribution of gross income, which results in a Kakwani index of 0. A tax schedule that generates larger tax liabilities as a percentage of gross income for higher-income groups will result in a positive RED index. The incidence – or size – weighs the redistributive effect by the volume of redistribution; as a consequence, highly progressive benefits will not change the RED index by a lot if the benefit size is small.

The set of hypothetical households is comprised of observations across 7 types of families, each with 0-3 children (28 household types in total). The seven family types are:

- a single earner working full-time,
- a single earner working part time (50%),
- a single earner who is unemployed,
- a couple where the first earner works full-time and the second earner is employed full-time at 67% of the average wage,
- a couple where the first earner works full-time and the second earner is employed part-time (50%) at 67% of the average wage,
- a couple where the first earner works full-time and the second earner is employed does not work, and
- a couple where both are unemployed

The earnings of the first earner, where they are employed, range from the national minimum wage (or the equivalent of the OECD average where there is none) to 1.5 times the national median equivalent disposable income. Every percentile of the national average wage within that range represents one observation of a hypothetical household. In addition, observations for the two household types where all adults are unemployed are replicated to represent 10% of the other five family types.

Source: OECD (2024[86]), "TaxBEN: The OECD tax-benefit simulation model Methodology, user guide and policy applications", https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/income-support-redistribution-and-work-incentives/OECD-TaxBEN-methodology-and-manual.pdf.

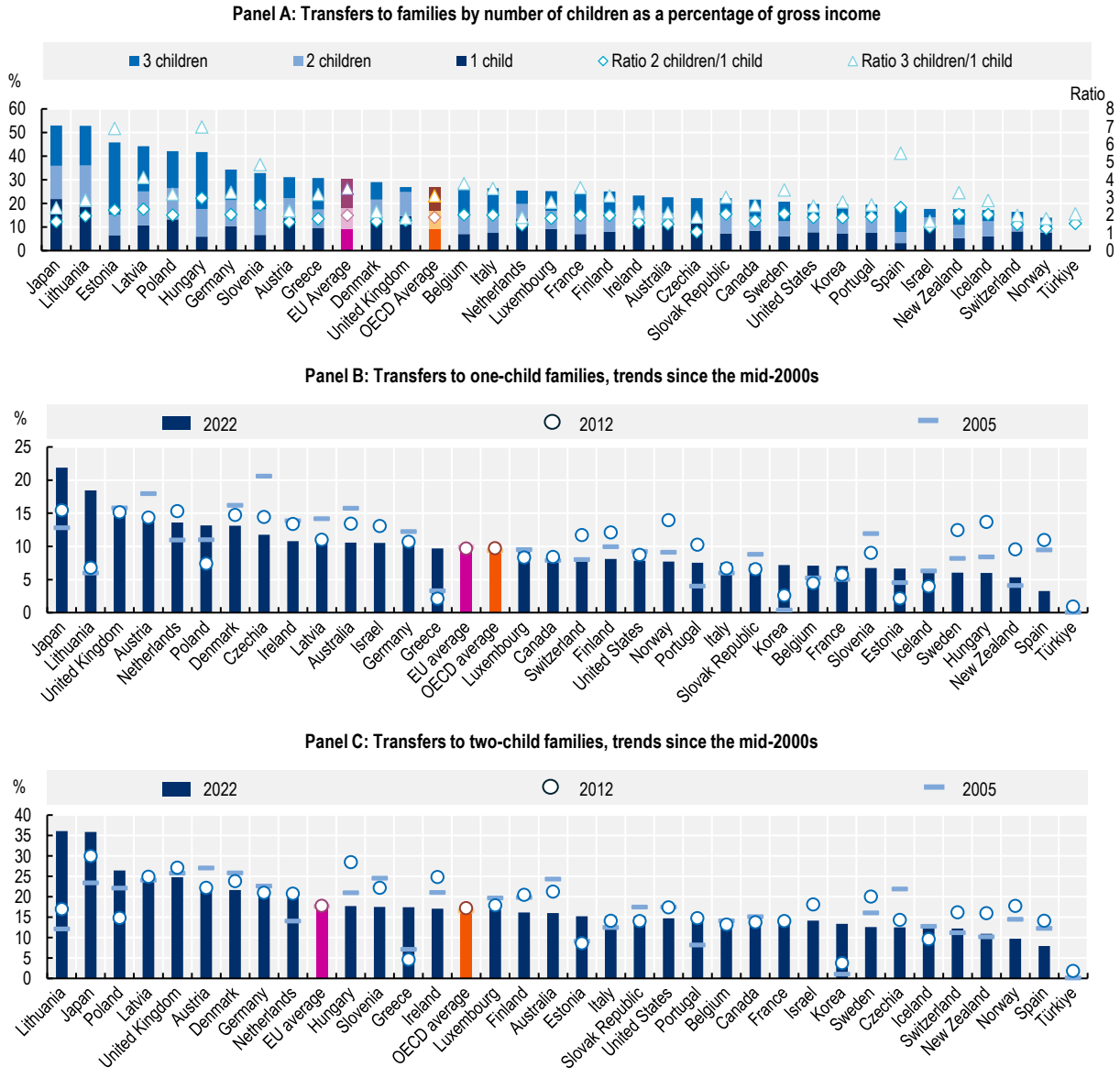
Horizontal redistribution

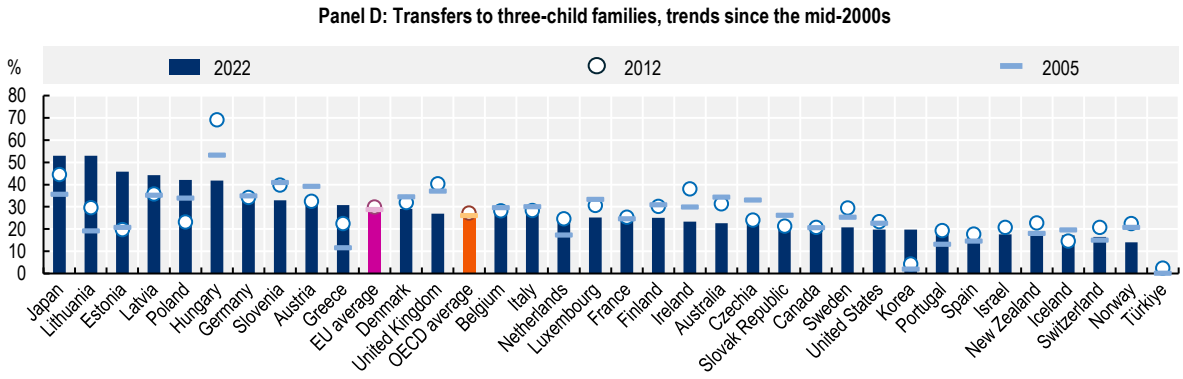
Horizontal redistribution refers to the reallocation of resources across households with different needs or circumstances, such as household size and the presence of children, with the aim of narrowing living standards gaps for a given level of market income. One way to assess how horizontal redistribution operates is to examine how transfers increase with the number of children, holding households' gross income constant. Figure 2.14 shows the average additional net transfers received by households with children – relative to otherwise identical childless households – by number of children, expressed as a percentage of gross income. The level of support provided to families with children varies substantially across countries. For example, net transfers to families with children exceed the OECD average for all family sizes in Japan and Lithuania (Figure 2.14, Panel A).

As expected, support increases with family size. On average across countries, households with two children receive about 1.9 times more in net transfers than households with one child, while households with three children receive roughly 3.1 times more. However, cross-country differences are large. In some countries, support for two-child families is significantly more than double that for one-child families (notably in Hungary and Slovenia). An even larger group of countries provides substantially higher support to families with three children relative to one-child families, particularly in Estonia, Latvia, Hungary, Slovenia and Spain, where the ratio exceeds four.

Looking at trends over time, additional support for families with children in most countries peaked in the early 2010s, following the financial crisis. By 2022, levels of support in many countries had returned close to those observed in the mid-2000s. There are, however, notable exceptions. Estonia, Greece, Korea, Latvia, Lithuania, Japan and Poland have seen significant increases in transfers for families with three children. In contrast, support for two and three children families has declined substantially in Hungary, Ireland and the United Kingdom compared to the mid-2000s, although in Hungary it remains well above the OECD average. One-child households have also seen marked increases in Japan, Lithuania, Greece and Korea. For two-child families, sizeable increases are visible in Lithuania, Japan, Ireland, Israel, Switzerland and France.

Figure 2.14. Child-related progressivity of transfers for low-income families





Note: This indicator measures the additional benefits (net of taxes and social contributions paid) that a hypothetical set of low- to middle-income families with 1 child (or 2 or 3 children, respectively) receive compared to the same set of families without any children, as a share of their gross income. The hypothetical set of families comprises single parents who are unemployed, working part-time or full-time as well as couple families where both parents are unemployed and where one parent works full-time and the other parent either does not work, works part-time or full-time. For each of the employment situations, a range of different earnings are considered ranging from the minimum wage to 1.5 times the national median equivalent disposable income. Panel A: The stacked bars represent the additional equivalised transfers that the average hypothetical family receives when a child is added to the family. The sum of the stacked bars shows the additional equivalised transfers compared to a family without any children. The ratios show the additional equivalised benefits that families with 2 (or 3) children received compared to families without children, relative to the additional equivalised benefits that families with 1 child receive compared to families without children.
Source: OECD Secretariat calculations based on output from the OECD (n.d.[81]) *Tax-Benefit Model (version 2.7.1)*, https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html.

StatLink https://stat.link/fcsv8j

References

Abrassart, A. and G. Bonoli (2015), "Availability, Cost or Culture? Obstacles to Childcare Services for Low-Income Families", *Journal of Social Policy*, Vol. 44/4, pp. 787-806, https://doi.org/10.1017/S0047279415000288. [77]

Adema, W., C. Clarke and O. Thévenon (2020), "Family Policies and Family Outcomes in OECD Countries", in Neuwenheuwiss, R. and W. Van Lancker (eds.), *The Palgrave Handbook of Family Policy*, Palgrave Macmillan, https://doi.org/10.1007/978-3-030-54618-2_9. [14]

Baiocco, S. et al. (2022), "Changing Social Investment Strategies in the EU", *JRC Working Papers Series on Labour, education and Technology*, No. 1, European Commission - Joint Research Center, https://publications.jrc.ec.europa.eu/repository/handle/JRC127769. [51]

Bakker, V. and O. Van Vliet (2022), "Social Investment, Employment and Policy and Institutional Complementarities: A Comparative Analysis across 26 OECD Countries", *Journal of Social Policy*, Vol. 51/4, pp. 728-750, https://doi.org/10.1017/S0047279421000386. [45]

Boarini, R. et al. (2022), "Well-being during the Great Recession: new evidence from a measure of multi-dimensional living standards with heterogeneous preferences*", *The Scandinavian Journal of Economics*, Vol. 124/1, pp. 104-138, https://doi.org/10.1111/SJOE.12461. [37]

Bonoli, G., B. Cantillon and W. Lancker (2017), "Social investment and the Matthew effect: Limits to a strategy", in Hemerijck, A. (ed.), *The Uses of Social Investment*, Oxford Academic, https://doi.org/10.1093/oso/9780198790488.003.0005. [26]

Bouget, D. et al. (2015), *Social investment in Europe – A study of national policies 2015*, European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Liser, European Social Observatory, Applica, Publications Office, https://data.europa.eu/doi/10.2767/084978. [18]

Cantillon, B. (2011), "The paradox of the social investment state: Growth, employment and poverty in the Lisbon era", *Journal of European Social Policy*, Vol. 21/5, pp. 432-449, https://doi.org/10.1177/0958928711418856. [24]

Cantillon, B. and F. Vandenbroucke (2014), *Reconciling Work and Poverty Reduction. How Successful Are European Welfare States?*, Oxford University Press, https://ssrn.com/abstract=2989529. [33]

Causa, O., J. Browne and A. Vindics (2019), "Income redistribution across OECD countries: Main findings and policy implications", *OECD Economic Policy Papers*, No. 23, OECD Publishing, Paris, https://doi.org/10.1787/3b63e61c-en. [85]

Causa, O. and M. Hermansen (2017), "Income redistribution through taxes and transfers across OECD countries", *OECD Economics Department Working Papers*, No. 1453, OECD Publishing, Paris, https://doi.org/10.1787/bc7569c6-en. [84]

Cefalo, R. and R. Scandurra (2023), "What, for whom, and under what circumstances: Do activation policies increase youth employment in the EU?", *Journal of European Social Policy*, Vol. 33/4, pp. 391-406, https://doi.org/10.1177/09589287231199568. [29]

Chapple, S. (2013), "Forward liability and welfare reform in New Zealand", *Policy Quarterly*, Vol. 9/2, https://doi.org/10.26686/PQ.V9I2.4449. [54]

Council of the European Union (2024), *Council conclusions on the role of the labour market, skills and social policies for resilient economies*, https://www.consilium.europa.eu/en/meetings/epsco/2024/06/20/ (accessed on 1 December 2025). [52]

Crowe, D. et al. (2022), "Population ageing and government revenue: Expected trends and policy considerations to boost revenue", *OECD Economics Department Working Papers*, No. 1737, OECD Publishing, Paris, https://doi.org/10.1787/9ce9e8e3-en. [10]

Cunha, F. and J. Heckman (2007), "The technology of skill formation", *American Economic Review*, Vol. 97/2, pp. 31-47, https://doi.org/10.1257/aer.97.2.31. [42]

Daly, M. (ed.) (2025), *Families, Welfare States and Resilience – Low-Resource Families Navigating Care, Employment and Welfare in Europe*, Elgar Online, https://doi.org/10.4337/9781035346769. [48]

Daly, M. and S. Ryu (2025), "Child-related Social Policies in Europe during the COVID-19 Pandemic", *Journal of Social Policy*, Vol. 54/3, pp. 894-911, https://doi.org/10.1017/S0047279423000351. [6]

De Schutter, O. et al. (2023), *The Escape from Poverty: Breaking the Vicious Cycles Perpetuating Disadvantage*, Policy Press, Bristol, https://doi.org/10.51952/9781447370611. [39]

Deeming, C. and P. Smyth (2015), "Social Investment after Neoliberalism: Policy Paradigms and Political Platforms", *Journal of social policy*, Vol. 44/2, pp. 297-318, https://doi.org/10.1017/S0047279414000828. [35]

Dely, B., R. Hyee and C. Prinz (2025), "What worked well in social protection during the COVID-19 pandemic?", *OECD Social, Employment and Migration Working Papers*, No. 325, OECD Publishing, Paris, https://doi.org/10.1787/b31ac155-en. [5]

Duncan, G. et al. (2022), "Investing in Early Childhood Development in Preschool and at Home", *NBER Working Paper Series*, No. 29985, https://doi.org/10.3386/w29985. [71]

Esping-Andersen, G. (2005), "Education and Equal Life-Chances: Investing in Children", in Kangas, O. and J. Palme (eds.), *Social Policy and Economic Development in the Nordic Countries. Social Policy in a Development Context*, Palgrave Macmillan, London, https://doi.org/10.1057/9780230523500_6. [38]

Esping-Andersen, G. (ed.) (2002), *Why We Need a New Welfare State*, Oxford Academic, https://doi.org/10.1093/0199256438.001.0001. [21]

European Commission (2021), "European Pillar of Social Rights Action Plan", https://employment-social-affairs.ec.europa.eu/policies-and-activities/european-pillar-social-rights-building-fairer-and-more-inclusive-european-union/european-pillar-social-rights-action-plan_en (accessed on 1 December 2025). [50]

European Commission (2013), *Towards Social Investment for Growth and Cohesion – including implementing the European Social Fund 2014-2020*, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0083 (accessed on 7 September 2026). [49]

Farchy, E. and H. Immervoll (2021), "Faces of joblessness in Finland: A people-centred perspective on employment barriers and policies", *OECD Social, Employment and Migration Working Papers*, No. 258, OECD Publishing, Paris, https://doi.org/10.1787/ca3bc4a4-en. [79]

Fernandez, R. et al. (2016), "Faces of joblessness: Characterising employment barriers to inform policy", *OECD Social, Employment and Migration Working Papers*, No. 192, OECD Publishing, Paris, https://doi.org/10.1787/5jlwvz47xptj-en. [78]

Fougère, D. and A. Heim (2019), "L'évaluation socioéconomique de l'investissement social : Comment mettre en oeuvre des analyses coûts-bénéfices pour les politiques d'emploi, de santé et d'éducation", *Document de travail*, No. 6, France Stratégie, https://www.strategie-plan.gouv.fr/files/files/Publications/2019/dt-investissement_social-fougere-heim-19novembre-final.pdf. [36]

Garritzmann, J., S. Häusermann and B. Palier (eds.) (2022), *The World Politics of Social Investment : Volume I Knowledge Economy*, Oxford University Press, London, https://global.oup.com/academic/product/the-world-politics-of-social-investment-volume-i-9780197585245. [20]

Gingrich, J. and B. Ansell (2015), "The Dynamics of Social Investment: Human Capital, Activation, and Care", *The Politics of Advanced Capitalism*, pp. 282-304, https://doi.org/10.1017/CBO9781316163245.012. [27]

Gluckman, P. (2017), *Enhancing evidence-informed policy making*, Office of the Prime Minister's Chief Science Advisor, New Zealand, https://www.dpmc.govt.nz/sites/default/files/2021-10/pmcsa-17-07-07-Enhancing-evidence-informed-policy-making.pdf (accessed on 1 December 2025). [56]

Government of New Zealand (2025), *Putting the Strategy into action - Taking a social investment approach*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/child-wellbeing-and-poverty-reduction/child-youth-strategy/putting-the-strategy-into-action.html (accessed on 12 September 2025). [58]

Government of New Zealand (2019), *The Wellbeing Budget*, https://www.treasury.govt.nz/sites/default/files/2019-06/b19-wellbeing-budget.pdf (accessed on 29 January 2026). [57]

Government of New Zealand (2013), *The Investment Approach - 2013 Benefit System Performance Report*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/evaluation/investment-approach/2013-index.html (accessed on 1 December 2025). [53]

Guillemette, Y. and D. Turner (2021), "The long game: Fiscal outlooks to 2060 underline need for structural reform", *OECD Economic Policy Papers*, No. 29, OECD Publishing, Paris, https://doi.org/10.1787/a112307e-en. [12]

Haelg, F., N. Potrafke and J. Sturm (2022), "The determinants of social expenditures in OECD countries", *Public Choice*, Vol. 193/3-4, pp. 233-261, https://doi.org/10.1007/S11127-022-00984-4/TABLES/5. [8]

Heckman, J., R. Pinto and P. Savelyev (2013), "Understanding the Mechanisms through Which an Influential Early Childhood Program Boosted Adult Outcomes", *American Economic Review*, Vol. 103/6, pp. 2052-86, https://doi.org/10.1257/AER.103.6.2052. [41]

Hemerijck, A. (2017), "Social Investment and Its Critics", in Hemerijck, A. (ed.), *The Uses of Social Investment*, Oxford University Press, https://doi.org/10.1093/oso/9780198790488.003.0001. [30]

Hemerijck, A. (ed.) (2017), *The Uses of Social Investment*, Oxford University Press, https://doi.org/10.1093/OSO/9780198790488.001.0001. [23]

Hemerijck, A., S. Ronchi and I. Plavgo (2023), "Social investment as a conceptual framework for analysing well-being returns and reforms in 21st century welfare states", *Socio-Economic Review*, Vol. 21/1, pp. 479-500, https://doi.org/10.1093/ser/mwac035. [19]

Jenson, J. (2010), "Diffusing Ideas for After Neoliberalism: The Social Investment Perspective in Europe and Latin America", *Global Social Policy*, Vol. 10/1, pp. 59-84, https://doi.org/10.1177/1468018109354813. [34]

Knize, V., M. Wolf and C. Zabel (2021), "Do Disadvantaged Young Adults Benefit Less from Social Investment? Studying Matthew Effects in Activation Measures", *Youth and Globalization*, Vol. 3/1, pp. 13-55, https://doi.org/10.1163/25895745-03010002. [28]

Koutsogeorgopoulou, V. and H. Morgavi (2025), "Ageing populations, their fiscal implications and policy responses", *OECD Economics Department Working Papers*, No. 1844, OECD Publishing, Paris, https://doi.org/10.1787/6aec03b3-en. [9]

Little, M. et al. (2021), "Effectiveness of cash-plus programmes on early childhood outcomes compared to cash transfers alone: A systematic review and meta-analysis in low- and middle-income countries", *PLOS Medicine*, Vol. 18/9, p. e1003698, https://doi.org/10.1371/JOURNAL.PMED.1003698. [69]

Martin, J. (2015), "Activation and active labour market policies in OECD countries: stylised facts and evidence on their effectiveness", *IZA Journal of Labor Policy 2015 4:1*, Vol. 4/1, pp. 4-, https://doi.org/10.1186/S40173-015-0032-Y. [80]

Miho, A. and O. Thévenon (2020), "Treating all children equally?: Why policies should adapt to evolving family living arrangements", *OECD Social, Employment and Migration Working Papers*, No. 240, OECD Publishing, Paris, https://doi.org/10.1787/83307d97-en. [15]

Morel, N., B. Palier and J. Palme (eds.) (2012), *Towards a social investment welfare state? Ideas, policies and challenges*, Bristol University Press, https://doi.org/10.2307/J.CTT9QGQFG. [25]

Nieuwenhuis, R. (2022), "No activation without reconciliation? The interplay between ALMP and ECEC in relation to women's employment, unemployment and inactivity in 30 OECD countries, 1985-2018", *Social Policy and Administration*, Vol. 56/5, pp. 808-826, https://doi.org/10.1111/spol.12806. [47]

Nightingale, M. (2025), *Filling in the knowledge gaps and identifying strengths and challenges in the effectiveness of the EU Member States' child benefits*, RAND Europe. [68]

OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, https://doi.org/10.1787/b78f8b25-en. [70]

OECD (2024), *New Zealand's Integrated Data Infrastructure: Using data to identify need and improve the well-being of children and youth*, OECD Publishing, Paris, https://www.oecd.org/en/publications/well-being-knowledge-exchange-platform-kep_93d45d63-en/new-zealand-s-integrated-data-infrastructure-using-data-to-identify-need-and-improve-the-well-being-of-children-and-youth_5088d51e-en.html. [55]

OECD (2024), *TaxBEN: The OECD tax-benefit simulation model Methodology, user guide and policy applications*, OECD, Paris, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/income-support-redistribution-and-work-incentives/OECD-TaxBEN-methodology-and-manual.pdf (accessed on 11 December 2025). [86]

OECD (2023), *Exploring Norway's Fertility, Work, and Family Policy Trends*, OECD Publishing, Paris, https://doi.org/10.1787/f0c7bddf-en. [13]

OECD (2023), "Living wages in practice", *OECD Policy Insights on Well-being, Inclusion and Equal Opportunity*, No. 8, OECD Publishing, Paris, https://doi.org/10.1787/699b3f9b-en. [82]

OECD (2023), *New Zealand's Child and Youth Wellbeing Strategy*, OECD Publishing, Paris, https://www.oecd.org/en/publications/well-being-knowledge-exchange-platform-kep_93d45d63-en/new-zealand-s-child-and-youth-wellbeing-strategy_536ab28d-en.html. [59]

OECD (2023), *On Shaky Ground? Income Instability and Economic Insecurity in Europe*, OECD Publishing, Paris, https://doi.org/10.1787/9bffeba6-en. [87]

OECD (2023), *The rise and fall of public social spending with the COVID-19 pandemic*, OECD Publishing, Paris, https://doi.org/10.1787/12563432-en. [2]

OECD (2021), *Measuring What Matters for Child Well-being and Policies*, OECD Publishing, Paris, https://doi.org/10.1787/e82fded1-en. [43]

OECD (2020), "Is Childcare Affordable?", *Policy Brief on Employment, Labour and Social Affairs*, OECD, Paris, https://web-archive.oecd.org/pdfViewer?path=/2020-06-05/554683-OECD-Is-Childcare-Affordable.pdf (accessed on 6 January 2021). [74]

OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, https://doi.org/10.1787/9789264301665-en. [22]

OECD (2018), *Poor children in rich countries: why we need policy action*, OECD, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/child-and-family-well-being/poor-children-in-rich-countries-policy-brief-2018.pdf (accessed on 3 September 2026). [76]

OECD (2017), *Preventing Ageing Unequally*, OECD Publishing, Paris, https://doi.org/10.1787/9789264279087-en. [11]

OECD (2011), *Doing Better for Families*, OECD Publishing, Paris, https://doi.org/10.1787/9789264098732-en. [63]

OECD (2009), *Doing Better for Children*, OECD Publishing, Paris, https://doi.org/10.1787/9789264059344-en. [40]

OECD (n.d.), *Calculator of taxes and benefits*, https://www.oecd.org/en/data/tools/oecd-calculator-of-taxes-and-benefits.html. [81]

OECD (n.d.), *OECD Education Database*, https://data-explorer.oecd.org/s/5ca (accessed on 14 September 2026). [64]

OECD (n.d.), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 14 September 2026). [61]

OECD (n.d.), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.htm (accessed on 14 September 2026). [83]

OECD (n.d.), *OECD National Accounts at a Glance*, https://data-explorer.oecd.org/s/46v (accessed on 14 September 2026). [4]

OECD (n.d.), *OECD Social Expenditure (database)*, https://data-explorer.oecd.org/s/46u (accessed on 14 September 2026). [3]

OECD (n.d.), *OECD Social Expenditure Database (SOCX)*, https://www.oecd.org/en/data/datasets/social-expenditure-database-socx.html (accessed on 14 September 2026). [1]

OECD (n.d.), "PF1.3 Family cash benefits", *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 21 November 2025). [67]

OECD (n.d.), "PF1.6 Public spending by age of children", *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 24 November 2020). [62]

OECD (n.d.), "PF2.5 Trends in leave entitlements around childbirth since 1970", *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 7 September 2026). [65]

Pavolini, E. and W. Van Lancker (2018), "The Matthew effect in childcare use: a matter of policies or preferences?", *Journal of European Public Policy*, Vol. 25/6, pp. 878-93, https://doi.org/10.1080/13501763.2017.1401108. [72]

Rapp, S. and O. Thévenon (2025), "Parenting on a Budget: The Cost of Raising Children in changing family configurations and Its Policy Implications", *OECD Papers on Well-being and Inequalities*, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/bd0b594e-en. [16]

Riding, S. et al. (2021), "Looking beyond COVID-19: Strengthening family support services across the OECD", *OECD Social, Employment and Migration Working Papers*, No. 260, OECD Publishing, Paris, https://doi.org/10.1787/86738ab2-en. [17]

Sakamoto, T. (2024), "Do social investment policies promote employment among the vulnerable? A case of single mothers", *International journal of sociology and social policy*, Vol. 44/5-6, pp. 607-627, https://doi.org/10.1108/IJSSP-08-2023-0194. [46]

Sakamoto, T. (2023), "Poverty, inequality, and redistribution: An analysis of the equalizing effects of social investment policy", *International Journal of Comparative Sociology*, Vol. 65/3, pp. 310-334, https://doi.org/10.1177/00207152231185282. [44]

Taylor-Gooby, P., J. Gumy and A. Otto (2015), "Can 'New Welfare' Address Poverty through More and Better Jobs?", *Journal of Social Policy*, Vol. 44/1, pp. 83-104, https://doi.org/10.1017/S0047279414000403. [32]

Thévenon, O. (2018), "Leave policies for parents in a cross-national perspective: various paths along the same course?", in Eydal, G. and T. Rostgaard (eds.), *Handbook of Family Policy*, Edward Elgar Publishing, https://doi.org/10.4337/9781784719340.00018. [66]

Thévenon, O. (2011), "Family Policies in OECD Countries: A Comparative Analysis", *Population and Development Review*, Vol. 37/1, https://doi.org/10.1111/j.1728-4457.2011.00390.x. [60]

Thévenon, O., C. Clarke and G. Simard-Duplain (2024), "The economic cost of childhood socio-economic disadvantage in Canada", *OECD Papers on Well-being and Inequalities*, No. 25, OECD Publishing, Paris, https://doi.org/10.1787/7abf1837-en. [7]

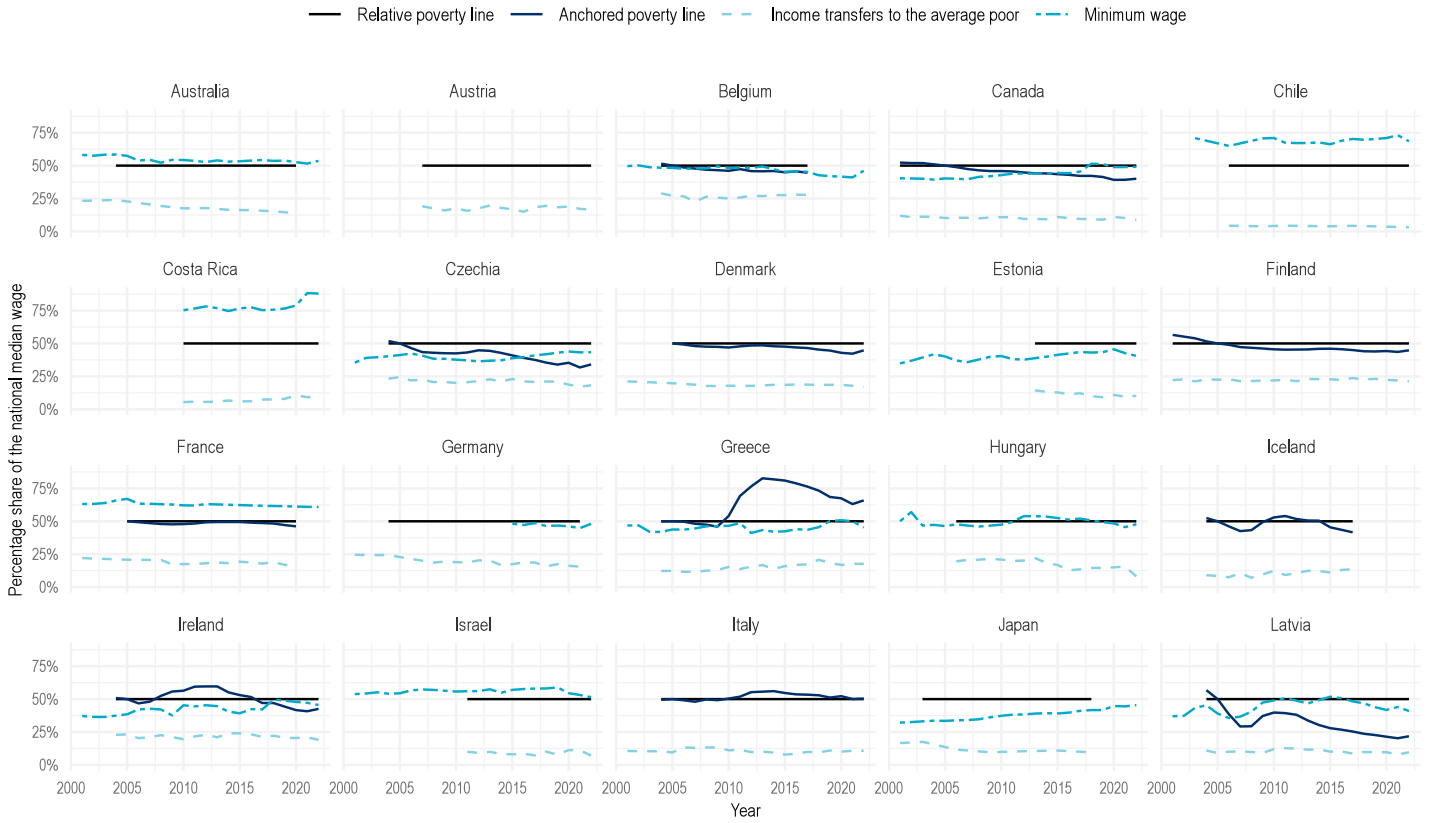
Van Lancker, W. (2023), "The Matthew Effect in Early Childhood Education and Care: How family policies may amplify inequalities", in *The Oxford Handbook of Family Policy: A Life-Course Perspective*, Oxford University Press, Oxford, https://doi.org/10.1093/oxfordhb/9780197518151.013.36. [73]

Vandenbroucke, F. and K. Vleminckx (2011), "Disappointing poverty trends: Is the social investment state to blame?", *Journal of European Social Policy*, Vol. 21/5, pp. 450-471, https://doi.org/10.1177/0958928711418857. [31]

Wood, J., K. Neels and J. Maes (2023), "A closer look at demand-side explanations for the Matthew effect in formal childcare uptake in Europe and Australia", *Journal of European Social Policy*, Vol. 33/4, pp. 451-468, https://doi.org/10.1177/09589287231186068. [75]

Annex 2.A. Country-specific evolution of poverty lines, income transfers and minimum wage evolution

Annex Figure 2.A.1. Evolution of poverty lines, income transfers and minimum wages by country, as a share of the median wage





Note: Data are expressed as a percentage share of the median equivalised disposable income in a given year. Transfers to the average poor household are computed by comparing the average equivalised household income of individuals below the relative poverty line before and after income transfers. The anchored poverty line displays the inflation-adjusted relative poverty line from 2005. The minimum wage represents the theoretical earnings of a full-time employee under the national minimum wage legislation, averaged across countries where such legislation exists.
Source: OECD Secretariat calculations based on OECD (n.d.[83]), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

Notes

[1] At the same time, substantial variation remains within each cluster, both in terms of spending levels and policy design, suggesting that fully developed and coherent social investment strategies have not yet consolidated into clearly defined national models.

[2] Per capita refers to the population as a whole. The amounts are not average per-child expenditures.

[3] Income instability is another important dimension of in-work poverty (OECD, 2023[87]). Across European OECD countries, for example, only around 20% of individuals in working-age households experienced sustained income growth of at least 25% over a four-year period. For most people, income trajectories were instead characterised by either volatility or decline. Such instability is concentrated among groups already at greater risk of poverty, including unemployed individuals, workers in temporary or insecure employment, and members of single-earner or younger households. Financial resilience is often limited: around two-thirds of people in lower-income working-age households lack sufficient liquid assets to remain above the poverty line for more than three months in the event of an income shock.

[4] For instance, fiscal instruments and benefit payments are also designed to support economic growth by creating incentives for education, employment, innovation and risk-taking, as well as by financing public investment. In addition, they play a central role in promoting macroeconomic stability by sustaining demand over the business cycle and cushioning the impact of economic shocks.

[5] In addition to taxes and benefits, social contributions are also considered in the computation of the RED index. Although not always mentioned explicitly, they enter as part of households' "taxes".

3. The value for money of social policies in reducing child poverty

This chapter assesses the “value for money” of social policies in reducing child poverty and material deprivation. It examines how spending across policy areas and specific policy design features affects the effectiveness of social expenditure and influences future spending pressures, while highlighting complementarities between different types of expenditures. The chapter first reviews key trends in child income poverty and material deprivation. It shows that poverty risks remain particularly high among children living in jobless households, single-parent families and large families, while also highlighting the prevalence of in-work poverty. It further stresses that material deprivation affects a significant share of children living in households with incomes above standard poverty thresholds. The analysis finds that pro-employment policies and in-kind support, such as health, education and childcare services, are particularly effective in reducing child poverty and severe material deprivation while helping to contain growth in social spending. By contrast, income support policies tend to be impactful in mitigating child poverty close to the poverty threshold but less effective in addressing deeper forms of poverty and material deprivation and are associated with stronger pressures on public spending. It concludes by discussing policy challenges in strengthening the effectiveness of social policies in reducing multiple dimensions of child poverty while keeping social spending sustainable.

Growing up in poverty can have far-reaching consequences for children's well-being and development. Beyond the immediate hardship associated with limited material resources, poverty can affect children's emotional well-being, living conditions and opportunities to develop well and reach their potential. A large body of research shows that childhood poverty is associated with poorer developmental outcomes, including lower educational achievement, worse physical and mental health, and weaker labour market prospects in adulthood. Children who grow up in low-income households are more likely to leave school with lower qualifications, experience poorer health over the life course, and face lower earnings and less stable employment as adults (Duncan et al., 1998[1]; National Academies of Sciences, Engineering and Medicine, 2019[2]; Clarke et al., 2022[3]). In this way, childhood poverty contributes to the intergenerational transmission of economic and social disadvantage, limiting opportunities for upward mobility and perpetuating inequalities across generations (Corak, 2013[4]; OECD, 2018[5]; De Schutter et al., 2023[6]).

Social policies play a key role in tackling child poverty and limiting its long-term consequences. They can help *prevent* poverty by supporting parents' access to employment, strengthening work incentives and providing opportunities for low-earning parents to develop their skills and improve their labour market prospects. At the same time, social policies can *mitigate* the damaging effects of poverty on children's well-being and development. Income support through cash transfers and tax reductions can help lift families with children above the poverty threshold or reduce the depth of poverty when earnings are insufficient. In addition, in-kind support – such as access to early childhood education and care, health services, housing assistance and other family support services – can both help prevent poverty and reduce its impact on children's living conditions and developmental outcomes (OECD, 2011[7]; Thévenon et al., 2018[8]). Together, these policies form a central component of governments' efforts to promote children's well-being and ensure more equal opportunities across generations.

Chapter 2 provided insights into recent evolutions in social spending patterns and related policy design features across OECD countries. These developments suggest a growing alignment with a social investment approach, characterised by strengthened activation policies, expanded support for families with children – particularly during the early years – and greater recognition of the benefits of early prevention. They also include an increasing share of in-kind social expenditures, reflecting greater emphasis on services such as childcare, education and health. At the same time, reductions in the degree of income redistribution through cash transfers appear to signal a gradual shift away from welfare state models that rely predominantly on compensatory income support. The present chapter examines whether these developments have begun to deliver the expected outcomes in terms of reducing child poverty while helping to contain pressures on social spending. More broadly, it analyses how different social policy design features influence both the effectiveness of policies in reducing child poverty and their implications for social expenditure trends.

The chapter is structured as follows. The first section provides an overview of key trends in child poverty. The second section describes how selected OECD countries have designed their child poverty strategies within a social investment framework. The third section presents the analytical approach used to assess these relationships, while the following section summarises the main findings (with further details provided in the chapter Annexes). Building on these results, the concluding section discusses the main policy challenges in designing social policies that more effectively reduce child poverty while containing pressures on social spending. The analysis of this chapter does not consider the effects of social spending on child outcomes beyond income poverty and material deprivation – which are examined selectively in the next chapter.

3.1. Child poverty trends

Child poverty is a multifaceted phenomenon, encompassing low income, material deprivation, and financial stress, which may occur individually or in combination (Schenck-Fontaine and Panico, 2019[9]; Cooper and Stewart, 2021[10]). These dimensions often reinforce one another, with cumulative effects on children's outcomes. Income poverty, for instance, limits parents' ability to invest in childcare and educational resources, undermining children's cognitive development. It also increases the likelihood that families live in neighbourhoods with poorer infrastructure, lower-quality schools, fewer services, and greater exposure to crime and environmental hazards (Chetty et al., 2014[11]; Chetty and Hendren, 2018[12]; OECD, 2025[13]). In addition, financial strain associated with low income can generate stress for parents, which may affect parenting practices and children's outcomes across multiple domains (Masarik and Conger, 2017[14]). Material deprivation may accompany income poverty but can also affect families with income above the poverty line. When low income, material deprivation, and financial stress overlap, children face the greatest risk of behavioural problems (Schenck-Fontaine and Panico, 2019[9]).

Measuring child poverty is not straightforward, as it inevitably relies on conventions that classify some families as "poor" while excluding others whose incomes are only marginally higher but whose living standards and financial difficulties may be very similar. In high-income countries, the most common approach is to estimate children's "theoretical" income based on parental or household disposable income, typically against a relative poverty threshold that reflects a country's general living standards. Relative income poverty then can be interpreted as an indicator of poverty *risk*, or a proxy of as opposed to actual hardship experienced by children living in low-income families. Parents with limited resources often prioritise children's needs in their spending decisions, which can partly shield children from the full impact of low income on their well-being (Cooper and Stewart, 2017[15]; Page, 2024[16]). At the same time, living on a low income can create insecurity and stress within the household, which may affect parental well-being, parenting, and, in turn, children's outcomes (Schenck-Fontaine and Panico, 2019[9]).

While income-based measures of poverty are convenient for international comparison and provide useful information on income inequality and the prevalence of low-income households, it has important limitations as an indicator of poverty (Thévenon et al., 2018[8]; Perry, 2021[17]). Households with similar current incomes can differ significantly in their access to non-income resources (such as savings, assets, or external support) and in their financial obligations (including housing costs, health expenses, or debt), meaning that income alone does not reliably distinguish between those who can maintain an acceptable standard of living and those who cannot. Although measures such as income after housing costs improve accuracy, they do not fully address these shortcomings (Perry, 2021[17]; OECD, 2025[18]). Importantly, while income remains a key determinant of material well-being – particularly for low-income households – it is not, on its own, a sufficient measure for identifying economic hardship.

A growing body of research calls for complementing income-based measures with additional indicators – such as on material deprivation and financial insecurity – that may more directly capture the material and psychological conditions shaping children's well-being and development. In line with this, countries have started to develop complementary indicators with the aim to provide a more comprehensive picture of households experiencing poverty (see Box 3.1 for more details on indicators developed by the European Union such as the risk of poverty or social exclusion "AROPE", which captures all those who are either at risk of poverty, or severely materially and socially deprived, or living in a household with a very low work intensity).

Material deprivation indicators, however, also have limitations. They rely on predefined lists of items and living conditions, which inevitably reflect choices about which aspects of consumption should be considered essential. As a result, they may omit other dimensions that also matter for children's development (such as for instance personal toys, bicycle or other independent mobility tools, access to safe outdoor play spaces nearby). In contrast, income poverty measures do not depend on the selection

of specific items and may therefore capture children who experience financial strain even if they are not deprived according to the items included in deprivation indicators. They are also informative in highlighting the limited capacity of low-income households to plan and invest in their children's development beyond meeting immediate needs. Taken together, these considerations suggest that using both income poverty and material deprivation indicators provides a more comprehensive picture of child poverty.[1]

One in eight children is at risk of income poverty

Child poverty is most commonly measured through a relative income poverty measure, which captures the share of children living in households with an equivalised[2] disposable income below a defined poverty threshold. By convention, the OECD sets this threshold at 50% of the national median equivalised disposable income.

In 2023, one in eight children under the age of 18 across the OECD (12.5%) were at risk of income poverty – a rate that in many countries exceeds that of the total population (Figure 3.1, Panel A). Child poverty rates are particularly high in countries shown on the right side of Figure 3.1 Panel A, including Chile, Costa Rica, Israel, Spain, the United States, Türkiye and Mexico, where children are disproportionately affected by income poverty. Conversely, child poverty rates are lowest in countries on the left-hand side of the figure, such as in Denmark, Finland, Hungary and Slovenia, where children are less likely than the overall population to live in income-poor households.

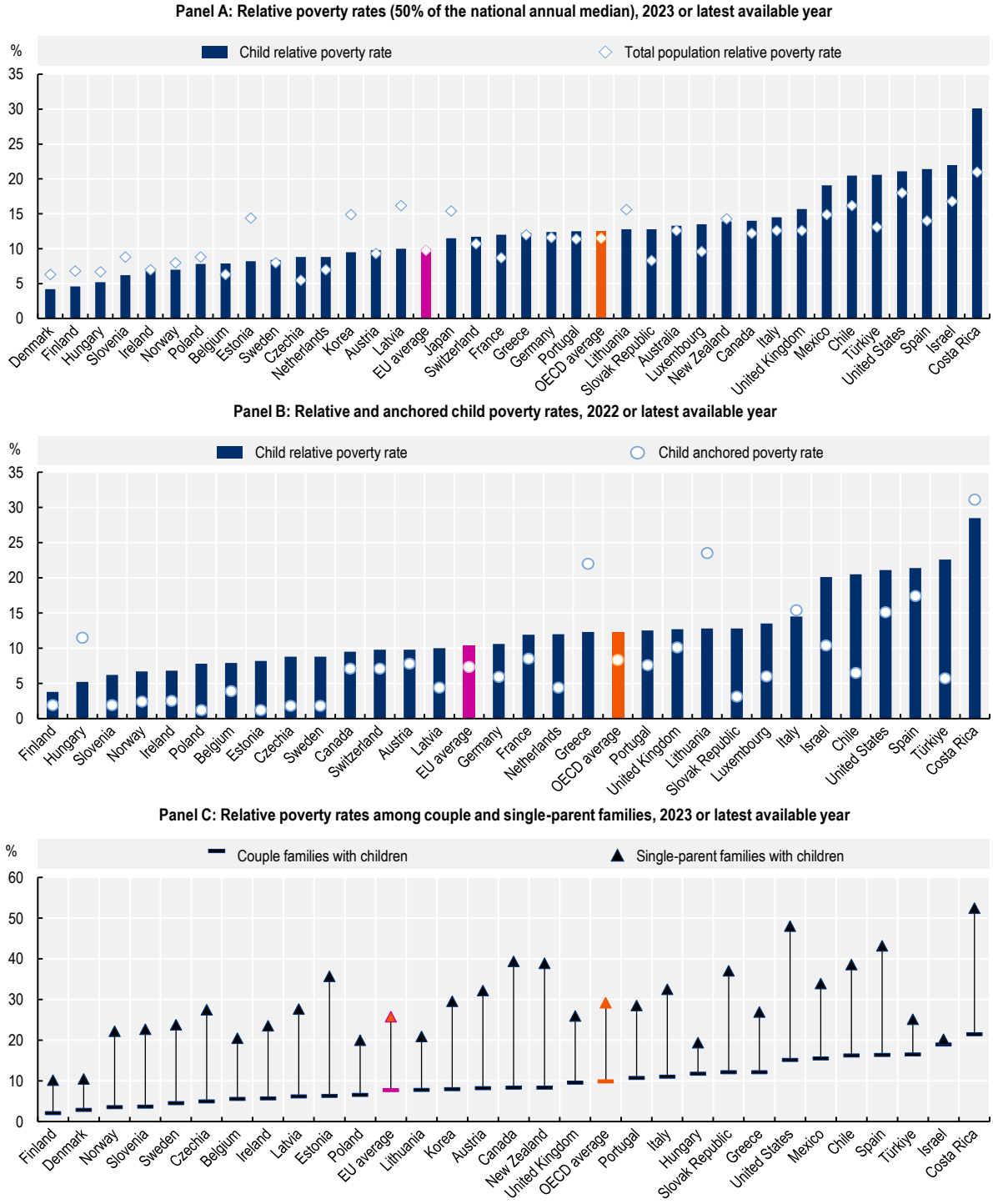
An alternative measure is particularly useful for analysing poverty trends over time against a fixed benchmark: the anchored child poverty rate. This indicator measures the share of children living in households whose real living standard – adjusted for price inflation – remain below the poverty threshold defined at a specific point in the past (here, 2005), usually lower than the poverty line estimated in the current year.[3]

Figure 3.1, Panel B compares the 2022 relative poverty rate with an anchored poverty rate, using a threshold based on 2005 income levels adjusted for inflation. In most countries, anchored poverty rates are lower than relative poverty rates, indicating that median incomes – and therefore relative poverty lines – have increased over time. As a result, some children counted as relatively poor today have living standards that, in absolute terms, are higher than those of children considered poor in 2005. The figure suggests that, among children in relative income poverty, around two-thirds (about 8% of the total child population) fall below the inflation-adjusted 2005 threshold, while the remaining one-third (around 4% of the total child population) are above this lower benchmark.

The relationship between relative and anchored child poverty varies substantially across countries, reflecting differences in income growth and distribution over time. In contrast to most countries, in Costa Rica, Greece, Lithuania and Hungary the anchored poverty rate exceeds the relative poverty rate. This indicates that relative child poverty since 2005 are not driven by improvements in living conditions among poorer households, but rather by falling median living standards, which lower the relative poverty threshold and signal a deterioration in living standards across the lower half of the income distribution.

Family structure also affects child poverty rates, particularly whether a household is headed by one or two parents. Across all countries, single-parent households face a significantly higher risk of income poverty – on average, they are three times more likely to be at risk compared to two-parent families (Figure 3.1, Panel C).

Figure 3.1. One in eight children (13%) live in income poverty across the OECD



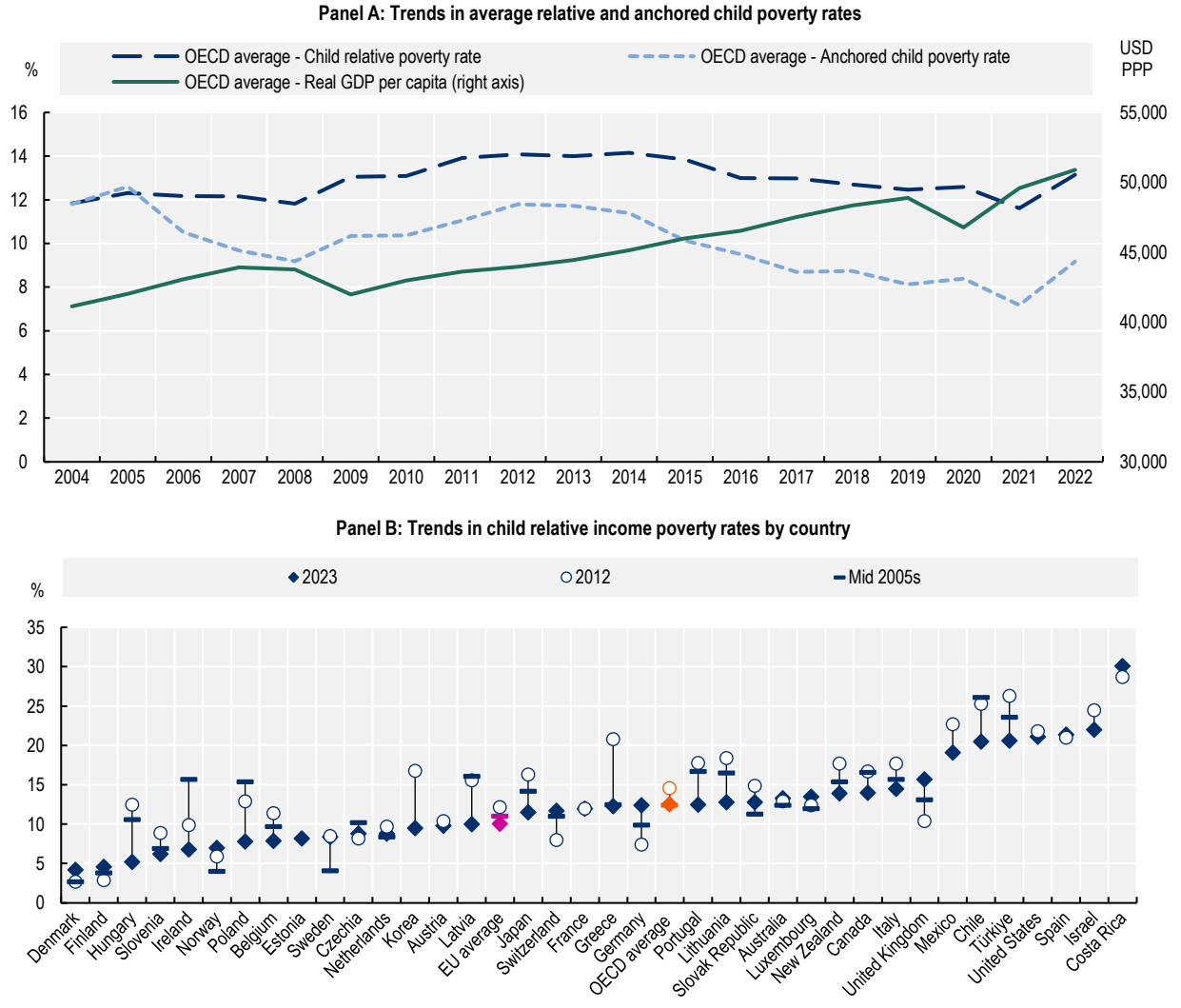
Note: Relative poverty is defined as living in a household with an equivalised post-tax-and-transfer income below 50% of the national annual median. Anchored poverty is defined as living in a household with an equivalised post-tax-and-transfer income below 50% of the national annual median in 2005, adjusted for inflation. Panel A: Data are from 2023, except 2024 for Costa Rica, 2022 for Chile, Denmark, Germany, Israel, Korea, Mexico, New Zealand, Norway, Switzerland and Türkiye; 2021 for Hungary and Japan; 2020 for Australia. For Panel B, the reference years may differ and range from 2019 to 2022, as anchored poverty estimates are not available for all years covered by relative income poverty measures. Panel C: Data refer to 2023 for Costa Rica, Latvia and the United States and to 2022 for the remaining countries.
Source: OECD (n.d.[19]), *Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

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Child poverty has fluctuated with the economic cycle over the past 15 years. Both relative and anchored child poverty rates rose sharply in the wake of the 2008 global financial crisis and remained persistently high until the mid-2010s (Figure 3.2, Panel A). Thereafter, both measures declined, with extensive policy support during the COVID-19 pandemic helping to cushion the economic impact of lockdowns (Dely, Hyee and Prinz, 2025[20]; Daly and Ryu, 2025[21]). Since 2021, however, child poverty has been on the rise again, reflecting the impact of the cost-of-living crisis and surging energy prices (UNICEF Innocenti, 2023[22]; Hiilamo and Lallukka, 2023[23]).

Trends in child relative poverty differ markedly across countries (Figure 3.2, Panel B). In around two-thirds of OECD countries, child poverty rates have declined since the aftermath of the financial crisis, with particularly large reductions (of around 7 percentage points (p.p.) or more) observed in Greece, Hungary and Korea. Among countries with data extending back to the mid-2000s, roughly half recorded decreases in relative child poverty, with the largest declines in Ireland, Latvia and Poland. By contrast, child poverty has risen compared with mid-2000s levels in Sweden (+4.3 p.p.), Norway (+3 points), the United Kingdom (+2.6 points) and Germany (+2.5 points). Nevertheless, child poverty rates in both Norway and Sweden remain well below the OECD average as of 2022.

Figure 3.2. Child income poverty trends are shaped by economic recessions



Note: Relative poverty is defined as living in a household with an equivalised post-tax-and-transfer income below 50% of the national annual median. Anchored poverty is defined as living in a household with an equivalised post-tax-and-transfer income below 50% of the national annual median in 2005, adjusted for inflation. The OECD and EU averages are based on all countries with available data in a given year and hence, changes in the sample of countries with available data from one year to another can impact the average. However, they do not alter the trends substantially. Panel A: Real GDP per capita is measured in constant 2020 PPP-adjusted US dollars. Panel B: Data from the mid-2000s refer to the latest available data between 2004 and 2006.

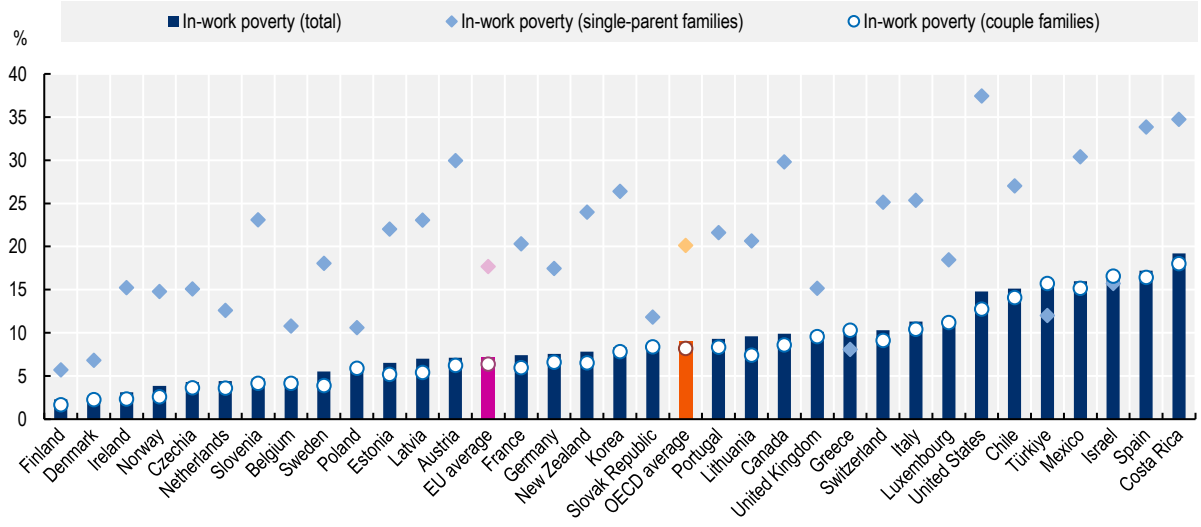
Source: OECD (n.d.[19]), *Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html and OECD (n.d.[24]), *National Accounts at a Glance* (database), https://data-explorer.oecd.org/s/5c4.

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Employment provides important protection against poverty. Nevertheless, a significant share of families with children experience income poverty despite having at least one working parent. On average, around 10% of working families with children are income poor (Figure 3.3). In-work poverty is particularly prevalent among single-parent families: on average, about 20% of working single-parent families live in income poverty, and in some countries like Costa Rica, Spain and the United States this share exceeds one-third.

Figure 3.3. Around one tenth of families with working adults are income poor

Percentage of income poor families with children with at least one working adult, by partnership status, 2023 or latest available year



Note: In-work poverty rates refer to households of working-age individuals with dependent children where at least one adult is employed and where the equivalised disposable income per household member lies below the relative poverty threshold (below 50% of the national annual median).
Source: OECD (n.d.[19]), *Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

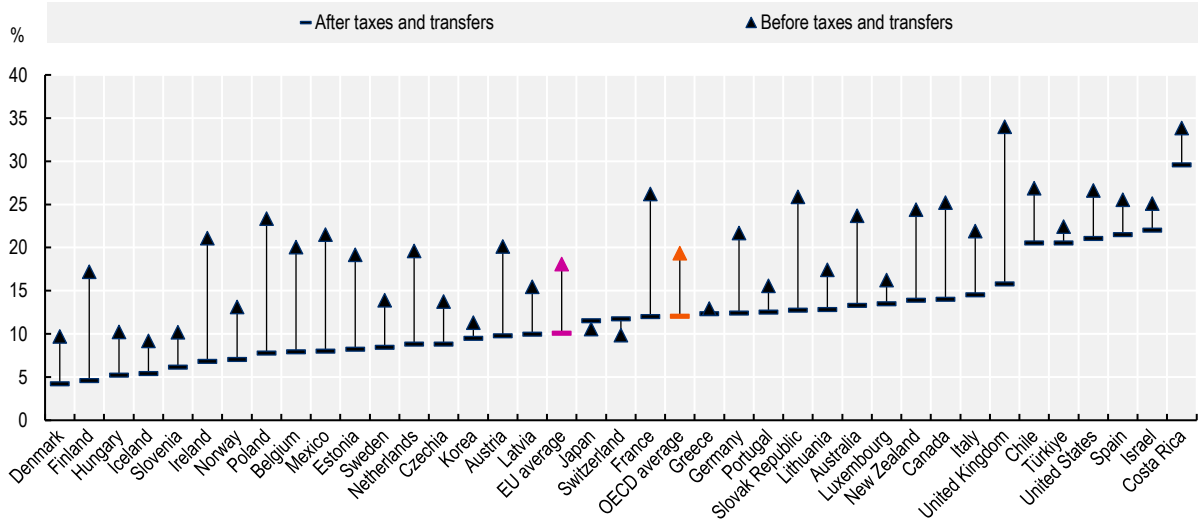
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The effect of income transfers on child income poverty

Figure 3.4 illustrates the critical role of taxes and transfers in reducing child income poverty across OECD countries. On average, redistribution lowers child poverty rates by around one-third – equivalent to about 7 p.p. – highlighting its central importance in supporting children in disadvantaged households. The impact is strongest in relative terms in Finland (-73%), Ireland (-68%), Poland (-67%), Mexico (-63%) and Belgium (-60%). By contrast, redistribution reduces child poverty by half the OECD average or less in Luxembourg (-17%), Korea (-16%), Spain (16%), Costa Rica (-13%), Israel (-12%), Türkiye (-8%) and Greece (-4.6%). In Japan and Switzerland, income transfers are not linked to reductions in child income poverty.

Figure 3.4. Child income poverty rates fall markedly after taxes and transfers

Child relative income poverty rates before and after tax and transfer, 2023 or latest available



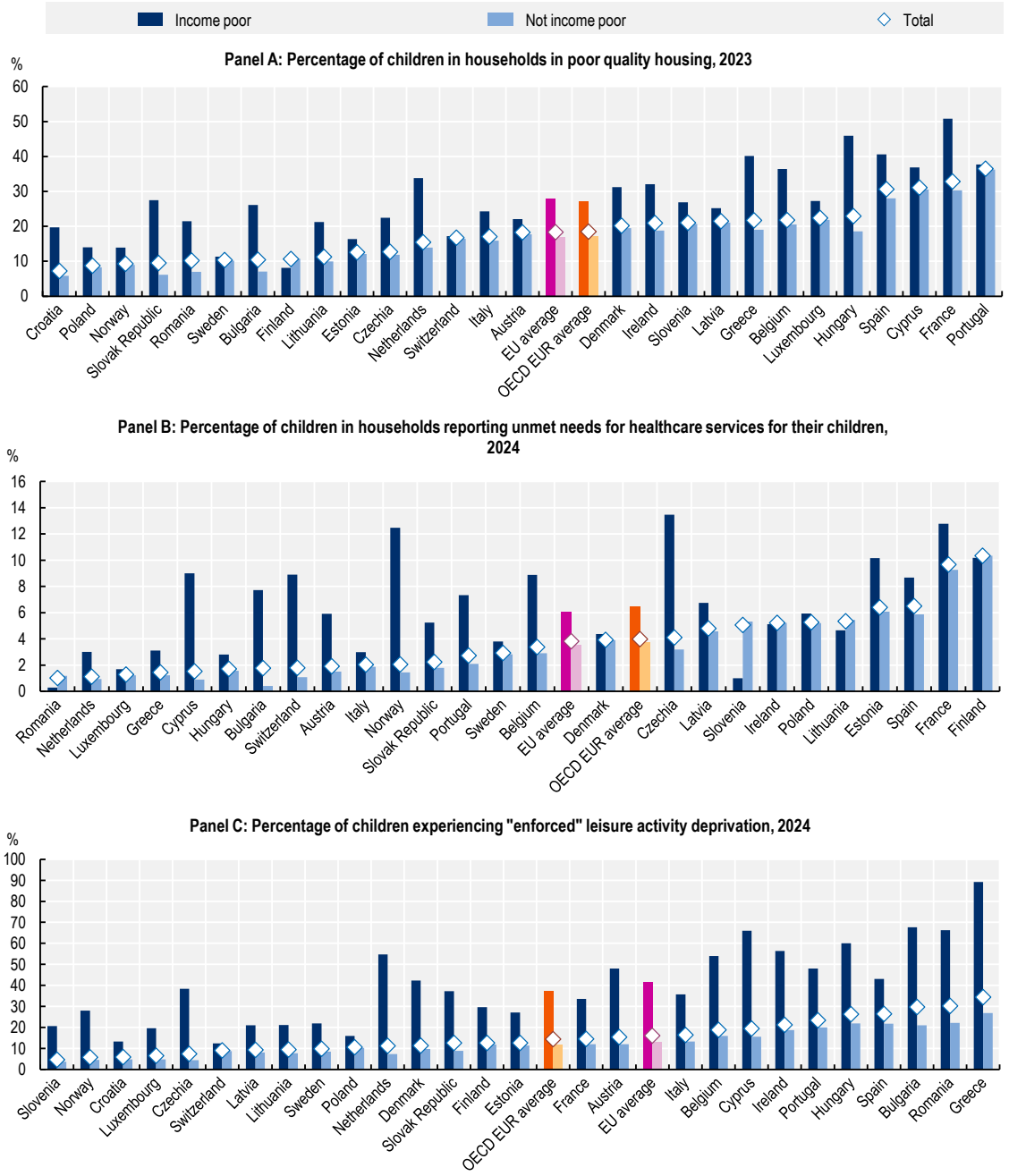
Note: Data are based on equivalised household income, i.e. income adjusted for household size. The poverty threshold is set at 50% of the median annual income in each country. Children are defined as 0-17 year-olds. Data refer to 2023, except for Chile, Denmark, Germany, Israel, Korea, Mexico, New Zealand, Norway, Switzerland and Türkiye (2022); Hungary and Japan (2021); Australia (2020).
Source: OECD (n.d.[19]), *Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html.

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Income poverty increases the risk of hardship in many areas of children's lives

The consequences of income poverty span many dimensions of children's living conditions and access to basic services. For example, children living in income-poor households are more likely than others to live in poor-quality housing, have unmet health needs, and lack regular leisure activities (Figure 3.5). At the same time, while low income significantly increases the risk of experiencing these difficulties, a non-negligible share of children who are not income poor also face similar challenges.

Figure 3.5. Children in income-poor households are more likely to live in poor-quality housing, have unmet health needs, and lack regular leisure activities



Note: "Income poor" refers to children living in households with an equivalised disposable income (i.e. income after taxes and transfers, adjusted for household size) below the poverty threshold (50% of median disposable income). Panel A: Data refer to the per cent of children in households that are reported (by the household respondent) i) to be "too dark", or ii) to suffer from problems with a leaking roof and/or damp ceilings, dampness in the walls, floors or foundation and/or rot in window frames and doors, or both. Panel B: Data refer to the per cent of 1- to 15-year-olds in households reporting an unmet need for either a medical or dental examination for at least one child in the household. Panel C: Data refer to the per cent of 1- to 15-year-olds in households where at least one child (1- to 15-year-olds) does not take part in a regular leisure activity or go on holiday away from home at least one week per year, because the household cannot afford it.

Source: This figure is based on data from Eurostat (n.d.[25]) *European Union Statistics on Income and Living Conditions (EU-SILC) surveys 2023 and 2024*, https://ec.europa.eu/eurostat/web/microdata/collections-research/european-union-statistics-on-income-and-living-conditions. The responsibility for all conclusions drawn from the data lies entirely with the OECD Secretariat.

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Child material deprivation

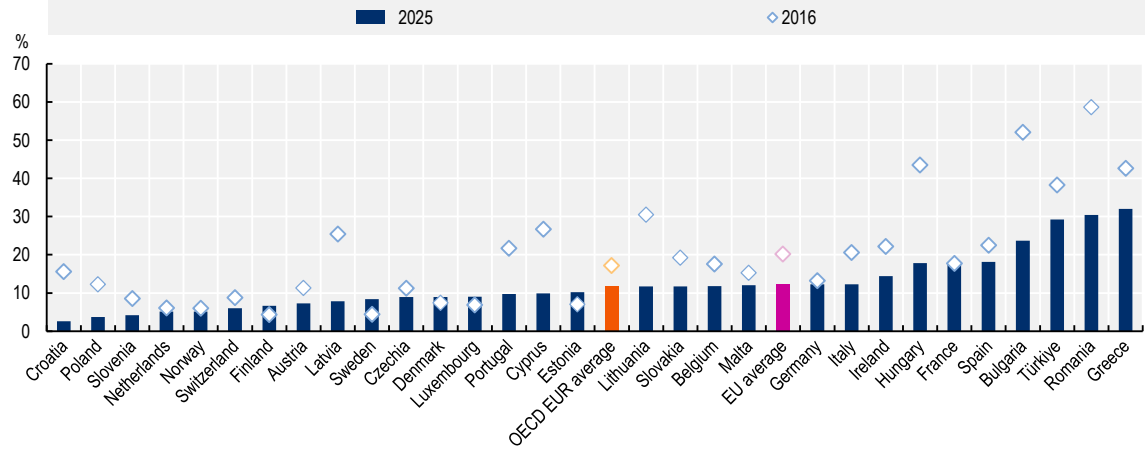
While income poverty is a widely used indicator of economic disadvantage, it does not fully capture the material hardships that children may experience. Families with low income often prioritise spending on their children, meaning that low household income does not automatically translate into child material deprivation (Cooper and Stewart, 2021[10]) and public services like education and care, housing and nutrition programmes may further shield children from the detrimental impacts of low income. Conversely, material deprivation can also affect families whose income is above the poverty line, highlighting that not all children who experience deprivation are classified as income poor (Guio et al., 2018[26]). Examining child material deprivation alongside income poverty therefore provides a more complete picture of children's living conditions and needs, capturing hardships that income measures alone may miss.

In Europe, several indicators have been developed to measure children's exposure to material deprivation, each with its own strengths and limitations (Box 3.1). One widely used measure is the material and social deprivation indicator, which identifies individuals experiencing an enforced lack of essential goods, services, or social activities due to financial constraints. The indicator is defined as the share of the population unable to afford at least 5 out of 13 deprivation items, covering core aspects of living standards such as keeping the home adequately warm, affording meals with adequate nutritional content, coping with unexpected expenses, or participating in regular leisure and social activities. Information on the presence of children in the household is then used to estimate the proportion of children living in households exposed to severe material and social deprivation.

Across Europe, around 12% of children under the age of 16 were exposed to material and social deprivation in 2025, reflecting a marked decline since the mid-2010s (Figure 3.6). Reductions have been particularly large, both in absolute and relative terms, in Latvia (-69%), Lithuania (-62%) and Hungary (-60%), as well as in relative terms in Poland (-70%), where deprivation levels were already comparatively low in the mid-2010s.

Figure 3.6. Material and social deprivation affect around one in eight children in European OECD countries

Percentage of children below 16 years at risk of material and social deprivation, 2025



Note: 2025 data refer to 2024 for Switzerland; 2017 data are used instead of 2016 for Norway and Türkiye. Material and social deprivation is defined by Eurostat as an enforced lack of – i.e. the inability to afford – at least five of a list of 13 essential items of daily life, including adequate heating, unexpected expenses, access to leisure activities. For the full list of items, see Box 3.1.
Source: Eurostat (n.d.[25]), *European Union Statistics on Income and Living Conditions (EU-SILC) survey*, indicator https://doi.org/10.2908/ILC_MDSD07.

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Box 3.1. The European Indicator on child material deprivation

Tackling child poverty and social exclusion is an objective of European Union policies, including the European Child Guarantee. The European Union Social Protection Committee does not have a single and formally approved indicator to measure the prevalence of child poverty and social exclusion. Eurostat has developed a few different indicators to measure child poverty and the risk of social exclusion for children, to which the Social Protection Committee refers to (Eurostat, 2023[27]).

In the European Union, child deprivation is measured by Eurostat in two ways: annually through the Material and Social Deprivation (MSD) rate, and every three years via the child-specific material deprivation indicator.

The MSD rate, part of the EU-SILC data, captures the proportion of the population experiencing an enforced lack of at least 5 out of 13 essential items (6 individual-level, 7 household-level) and is used in the EU's AROPE measure for monitoring poverty and social exclusion. Items include items at household level: Capacity to face unexpected expenses; Capacity to afford paying for one week annual holiday away from home; Capacity to being confronted with payment arrears (on mortgage or rental payments, utility bills, hire purchase instalments or other loan payments); Capacity to afford a meal with meat, chicken, fish or vegetarian equivalent every second day; Ability to keep home adequately warm; Have access to a car/van for personal use; Replacing worn-out furniture; and items at individual level: Having internet connection; Replacing worn-out clothes by some new ones; Having two pairs of properly fitting shoes (including a pair of all-weather shoes); Spending a small amount of money each week on him/herself; Having regular leisure activities; Getting together with friends/family for a drink/meal at least once a month.

For children under 16, items collected only for adults are estimated: if at least half of the adults in a household lack an item, children are considered deprived of it. A lower weight is applied to adult items to avoid overestimating deprivation among children, and at least three of the household items must be lacking for a child to be considered deprived. The indicator thus reflects the share of children living in materially and socially deprived households.

The child-specific material deprivation rate (CSMDR) is another indicator included in the set of indicators proposed by the Social Protection Committee to monitor social inclusion at EU level. This indicator measures the share of children suffering from an enforced lack of at least three of 17 items,[1] including child-specific items relating to food and nutrition, clothing and footwear, social activities, leisure activities, and a few household-level items such as whether the household can afford or not to: avoid arrears; have adequate warmth in home; have (access to) a car for private use; replace worn-out furniture; and have an internet connection at home. The adoption of this indicator in March 2018 follows the work by Guio et al. (2018[26]) which establishes consistently high levels of reliability of this indicator.

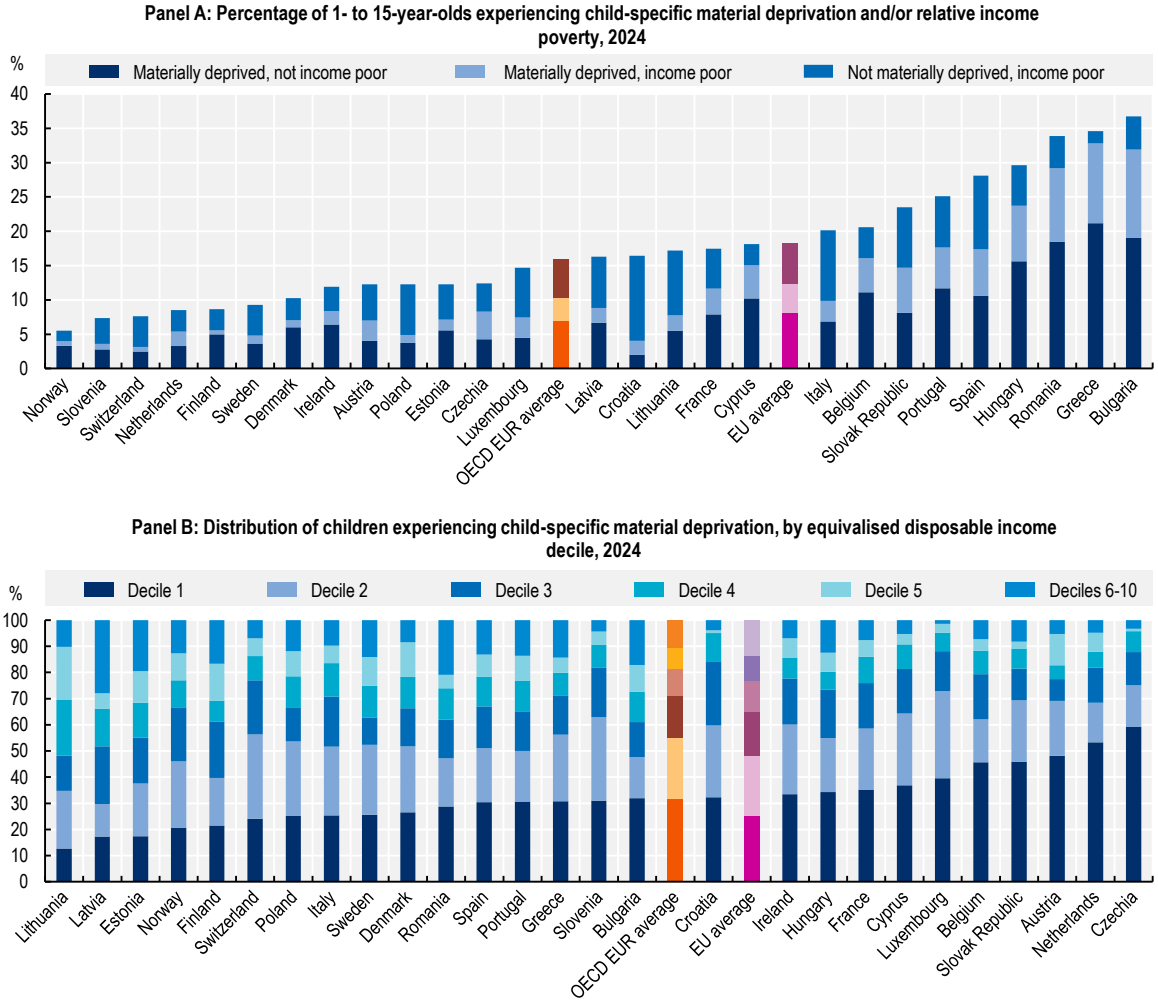
1. The complete list of items taken into account to measure children's exposure to material deprivation include information on household's inability to provide at least one child in the family with: some new clothes; two pairs of shoes; fresh fruits and vegetables daily; meat, chicken, fish daily; suitable books; outdoor leisure equipment; indoor games; leisure activities; to organise celebrations; invite friends; participate in school trips; and go on holiday; it also includes non-child-specific information on whether the household cannot afford to: avoid arrears; have adequate warmth in home; have (access to) a car; replace worn-out furniture; access to Internet.
Source: Eurostat (n.d.[28]), "Glossary: Child deprivation", https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Child_deprivation.

Child material deprivation extends beyond income poverty

The relative risk of material deprivation is higher for children in income-poor households. On average across European OECD countries, children living in income-poor families are nearly five times more likely than their non-income-poor peers to experience child-specific material deprivation. However, most children who experience material deprivation do not come from income-poor households. In 2024, of the 10.3% of children experiencing material deprivation, roughly 3.3% were income-poor, while around 7% were not (Figure 3.7, Panel A). In other words, non-income-poor children account for about two-thirds of all materially deprived children in European OECD countries, with this proportion reaching 89% in Finland.

Figure 3.7, Panel B shows that material deprivation in many countries also extends beyond the lowest-income households. On average across OECD European countries, around 30% of materially deprived children live in households with incomes above the third decile of the income distribution. This share reaches around 50% in Lithuania and Latvia, while in Luxembourg and Czechia it lies at 12% of children.

Figure 3.7. Material deprivation extends beyond income poverty



Note: "Child-specific material deprivation" is defined by Eurostat as experiencing an enforced lack of at least three out of the following 17 items: 1) Some new (not second-hand) clothes; 2) Two pairs of properly fitting shoes (including a pair of all-weather shoes); 3) Fruits and vegetables once a day; 4) One meal with meat, chicken or fish (or vegetarian equivalent) at least once a day; 5) Books at home suitable for their age; 6) Outdoor leisure equipment; 7) Indoor games; 8) Regular leisure activities; 9) Celebrations on special occasions; 10) Invite friends round to play or eat from time to time; 11) Participate in school trips and school events that cost money; 12) Go on holiday away from home at least one week per year; 13) Four household variables collected annually; 14) Replacing worn-out furniture; 15) Capacity to being confronted with payment arrears (on mortgage or rental payments, utility bills, hire purchase instalments or other loan payments); 16) Ability to keep home adequately warm; 17) Have access to a car/van for personal use; and 18) Having internet connection. Panel A: "Income poor" status is defined as children living in households with an equivalised disposable income (i.e. income after taxes and transfers, adjusted for household size) below the poverty threshold (50% of median disposable income).

Source: This figure is based on data from Eurostat (n.d.[25]), *European Union Statistics on Income and Living Conditions (EU-*SILC) survey 2024, https://ec.europa.eu/eurostat/web/microdata/collections-research/european-union-statistics-on-income-and-living-conditions. The responsibility for all conclusions drawn from the data lies entirely with the OECD Secretariat.

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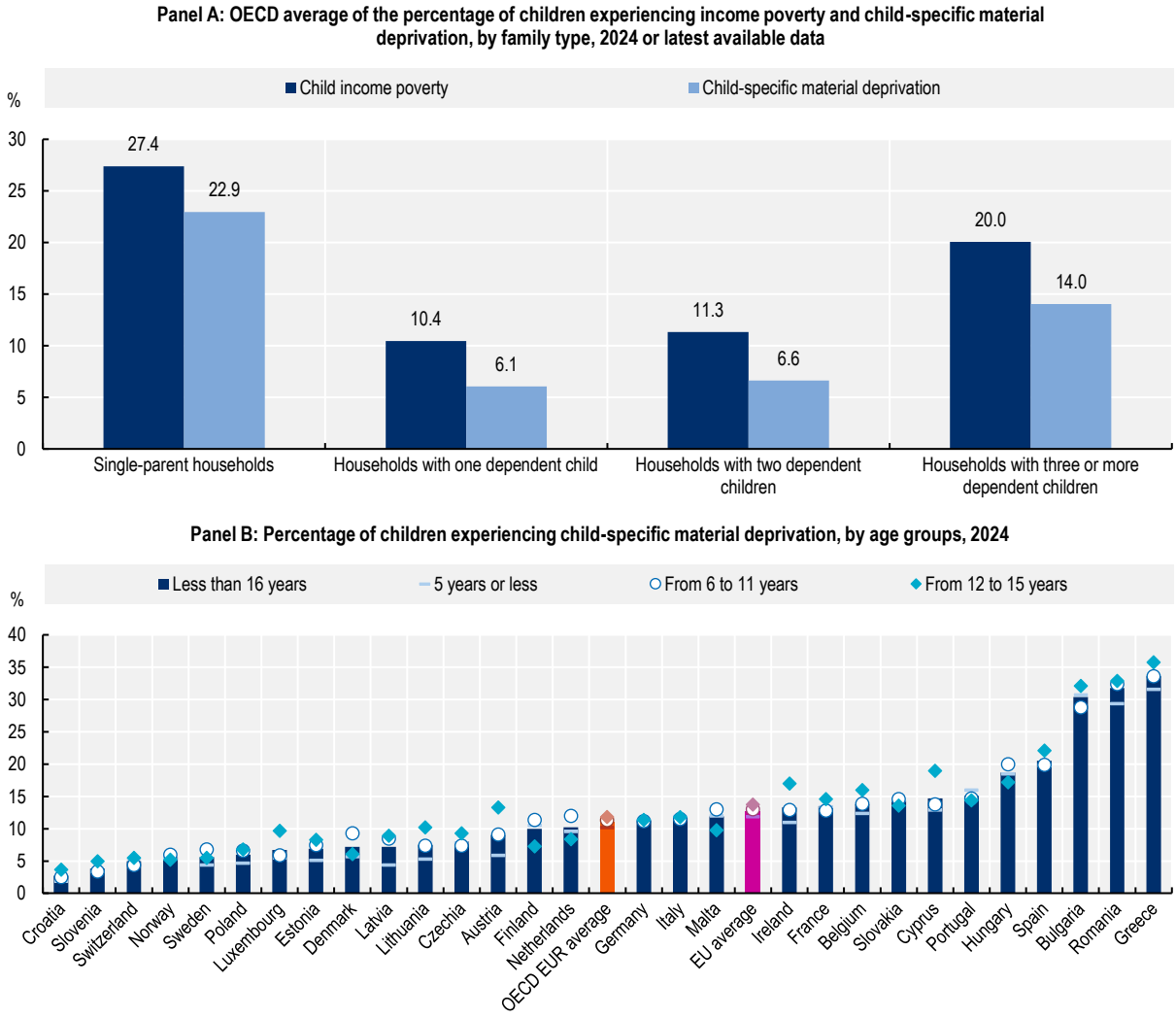
Child poverty is more prevalent in single-parent and large families

Not all family types face the same risk of income poverty and material deprivation. Children living in single-parent and large families are significantly more likely than others to experience these forms of disadvantage. Figure 3.8, Panel A shows that children living in single-parent households face a markedly higher risk of income poverty and child-specific material deprivation than with two adults (see Annex 3.A for data by country). Exposure to poverty and material deprivation also increases with the number of children in the household. On average across the OECD, children living in families with three or more children are twice as likely to experience income poverty and material deprivation as those living in families with only one child. These patterns are consistent with evidence showing that single-parent and large families face disproportionately higher costs of raising children, whether measured through household consumption expenditures or self-reported financial strain (Rapp and Thévenon, 2025[29]; OECD, 2025[30]).

Beyond differences by family structure, Figure 3.8, Panel B also documents age-related patterns. In line with the standard European indicator of child material deprivation – defined as an enforced lack of at least three out of 17 essential items – 13.6% of children under age 16 in the European Union were materially deprived in 2024. In several countries, young adolescents aged 12-15 are more frequently exposed to deprivation than younger children, notably in Austria (+7.4 p.p. relative to pre-school children), Ireland (+6.0 points), and Lithuania (+4.9 points). By contrast, in Norway, Finland, the Netherlands, the Slovak Republic, Portugal and Hungary, material deprivation is lowest among children aged 12-15, diverging from the prevailing pattern.

The age gradient of child poverty reflects how family circumstances and policy support evolve over the life course. Younger children can be at greater risk of poverty resulting from low household market income because their parents tend to have lower and less stable earnings early in their careers and may reduce work due to childcare responsibilities. As children grow older, parental earnings typically increase and family situations stabilise, which can reduce poverty risks. At the same time, the design of public support matters: differences in how benefits and services are targeted across age groups, combined with changing costs of children (e.g. childcare vs. education), can shift poverty risks between younger and older children. Figure 3.8, Panel B suggests that in most countries, social policies protect young children from material deprivation relatively well.

Figure 3.8. Children in single-parent and large families are at higher risk of income poverty and material deprivation



Note: Panel A: Child income poverty rates (at 50% of median disposable income) are averaged across 24 OECD countries with the most recent available data from 2016 to 2023. Child-specific material deprivation rates refer to children under the age of 16 and are averaged across 24 European OECD countries with available data in 2024. Breakdowns by number of children refer to two-parent households only for this measure. "Child-specific material deprivation" is defined by Eurostat as experiencing an enforced lack of at least three out of the following 17 items: 1) Some new (not second-hand) clothes; 2) Two pairs of properly fitting shoes (including a pair of all-weather shoes); 3) Fruits and vegetables once a day; 4) One meal with meat, chicken or fish (or vegetarian equivalent) at least once a day; 5) Books at home suitable for their age; 6) Outdoor leisure equipment; 7) Indoor games; 8) Regular leisure activities; 9) Celebrations on special occasions; 10) Invite friends round to play or eat from time to time; 11) Participate in school trips and school events that cost money; 12) Go on holiday away from home at least one week per year; 13) Four household variables collected annually; 14) Replacing worn-out furniture; 15) Capacity to being confronted with payment arrears (on mortgage or rental payments, utility bills, hire purchase instalments or other loan payments); 16) Ability to keep home adequately warm; 17) Have access to a car/van for personal use; and 18) Having internet connection.

Source: This figure is based on data from the LIS Cross-National Data Center (n.d.[31]), *Luxembourg Income Study (LIS) Database*, https://www.lisdatacenter.org/our-data/lis-database/ and Eurostat (n.d.[25]), *European Union Statistics on Income and Living Conditions (EU-SILC) survey*, indicators https://doi.org/10.2908/ILC_CHMD01 and https://doi.org/10.2908/ILC_CHMD02. The responsibility for all conclusions drawn from the data lies entirely with the OECD Secretariat.

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3.2. Child poverty reduction strategies as a social investment approach

As discussed in Chapter 2, several aspects of the evolution of social policies point to a shift – whether explicit or not always formally articulated – towards the principles underlying a social investment approach. Policies aimed at tackling child and family poverty are among those increasingly guided by the objective of providing children (and their parents) with opportunities to realise their full potential, while supporting children's development, well-being, and the accumulation of human and social capital – central goals of the social investment perspective.

To this end, child poverty policies can operate through both preventive and mitigating channels. Broadly, preventive measures aim to reduce families' reliance on income transfers and public services by supporting parents' access to employment and strengthening their earning potential. Mitigating measures, by contrast, provide cash and in-kind transfers that cushion the effects of low income and material deprivation, helping families remain above the poverty threshold or reducing the depth of poverty among those who remain poor. In practice, the distinction between preventative and mitigating policies is not always clear cut. For example, early childhood education and care can enable parents to increase their employment whilst also supporting child development, particularly in low-income families.

Many countries in the OECD and beyond have shown strong commitments to reducing child poverty but their approaches differ in terms of the policy levers they prioritise and the comprehensiveness of policy strategies (Global coalition to end child poverty, 2025[32]; OECD, 2018[33]). A notable example of a longstanding and comprehensive commitment is Canada, where successive governments have implemented policies and programmes to support families with children, often incorporating progressive adjustments to increase financial assistance for low- and modest-income households (Thévenon, 2018[34]). These efforts were further strengthened with the launch in 2018 of the *Opportunity for All – Canada's First Poverty Reduction Strategy*, which called for a co-ordinated approach with diverse groups, government and non-government alike (Government of Canada, 2018[35]). Key measures included strengthening income support programmes, expanding employment and training opportunities, developing affordable housing, enhancing the education and skills of disadvantaged children, improving access to healthcare and social services, and bolstering community-based initiatives.

New Zealand offers another example of sustained action to combat child poverty. The *Child Poverty Reduction Act of 2018* established mandatory benchmarks requiring the government to set and report on three-year and ten-year targets across multiple indicators, including income poverty (before and after housing costs) and material hardship. Building on this foundation, the *Child and Youth Strategy 2024-2027* (Government of New Zealand, 2024[36]) set out three priorities for children and families: i) supporting children and their families and whānau in the first 2 000 days; ii) reducing child material hardship by increasing household incomes, supporting access to stable housing, lowering essential living costs and addressing long-term disadvantage; and iii) preventing harm against children. A distinctive feature of New Zealand's approach is its integration into a social investment approach, under which policies to break cycles of disadvantage are guided by evidence on community needs and effective interventions. This approach emphasises empowering communities and ensuring that resources are spent efficiently, with a clear focus on delivering measurable value for money (Government of New Zealand, 2025[37]).

Child poverty has been a recurring focus of UK policy over the past decade. The Child Poverty Act 2010 initially established legally binding income-based targets, but these were largely dismantled after 2015, leaving child poverty monitored through statistics rather than enforceable commitments. As child poverty rose to record levels – reaching almost 16% of children in 2023 (Chapter 2) – criticism grew that incremental welfare adjustments were insufficient. In December 2025, the UK Government introduced a new national Child Poverty Strategy, signalling a shift toward a more co-ordinated and structural approach (HM Government, 2025[38]). Central to the strategy is the abolition of the "two-child limit" on Universal Credit (income support, housing benefits and tax credits), a reform expected to lift hundreds of thousands of

children out of relative poverty. The strategy also expands free school meals, extends early years childcare for low-income families, subsidises essential goods such as infant formula, addresses temporary accommodation for homeless families, and strengthens local support through Best Start Family Hubs. Overall, the 2025 reframing moves from piecemeal measures toward a broader package combining income support with cost reduction and service access, though its long-term impact will depend on sustained funding and political commitment.

In the European Union, the question of whether child poverty reduction policies can be effectively guided by a social investment approach has been part of the debate since the early 2000s, focussing on how countries can reform welfare systems and align EU member states around shared priorities to enhance the impact of social spending (Esping-Andersen, Gosta, 2002[39]; Vandenbroucke, Hemerijck and Palier, 2011[40]; Bouget et al., 2015[41]; European Commission, 2024[42]). Several EU-level initiatives adopted since the late 1990s have been instrumental in reducing the risk that children grow up in poverty or suffer from its consequences. This includes the European Employment Strategy, which promotes measures to help parents reconcile work and family life and supports maternal employment, notably through guarantees of paid leave and targets for the provision of early childhood care and services (Thévenon, 2004[43]). Further action was reinforced through a series of EU initiatives explicitly aimed at addressing child poverty and investing in children, with the overarching goal of breaking the intergenerational transmission of disadvantage (Box 3.2).

Box 3.2. European Union initiatives to address child poverty and invest in children

Since the early 2010s, several EU-level initiatives have sought to encourage Member States to take action against child poverty and to ensure that children living in families at risk of poverty or social exclusion have access to quality services that can help break the cycle of disadvantage.

In 2013, as part of the **Social Investment Package** (n.d.[44]), the European Commission issued the **Recommendation on Investing in Children: Breaking the Cycle of Disadvantage** (2013[45]). This Recommendation calls on Member States to prioritise children's rights and well-being by ensuring access to adequate resources, affordable quality services, and opportunities for child participation. It emphasises integrated strategies that combine income support for families, inclusive labour markets, and high-quality education, health, housing, and childcare services. The Recommendation also highlights the importance of early intervention and prevention, focussing on tackling inequality and supporting disadvantaged children to break intergenerational cycles of poverty and social exclusion. In 2017, the Commission, together with experts from the European Social Policy Network, prepared an evaluation of the Recommendation's implementation.

Several principles of the **European Pillar of Social Rights** (n.d.[46]), proclaimed in 2017, support breaking the cycle of disadvantage. These include the right to quality and inclusive education and lifelong learning (Principle 1); fostering equal opportunities for under-represented groups (Principle 3); and, for children, access to affordable early childhood education and care, protection from poverty, and measures to improve opportunities for disadvantaged children (Principle 11). In addition, timely access to quality healthcare (Principle 16) and access to social housing or housing assistance for those in need (Principle 19) are recognised as essential for promoting equality and social inclusion.

The **European Pillar of Social Rights Action Plan** (n.d.[47]), adopted in 2021, sets a target to reduce the number of people at risk of poverty or social exclusion by at least 15 million by 2030, of which at least 5 million should be children. Focusing on children not only provides them with access to new opportunities but also contributes to breaking the intergenerational cycle of poverty, preventing them from becoming adults at risk of poverty or social exclusion, and producing long-term systemic effects.

Building on the above principles and as announced in the **European Pillar of Social Rights Action Plan** (n.d.[47]) and in the **EU Strategy on the Rights of the Child**, the Council established the **European Child Guarantee (ECG)** in 2021 (2021[48]). The ECG is part of a broader set of integrated measures outlined in the Action Plan and aims to ensure that children at risk of poverty or social exclusion have access to fundamental rights, including healthcare and education. The ECG recommends that Member States guarantee children in need effective and free access to early childhood education and care, school-based education and activities, at least one healthy meal every school day, healthcare, healthy nutrition, and adequate housing. Beyond access, the ECG emphasises high-quality and inclusive services, focussing on availability, affordability, timeliness, and public awareness of children's rights to use these services.

Under the ECG, each Member State has appointed a national Child Guarantee Co-ordinator to oversee and monitor implementation, including assessing children in need and the barriers they face in accessing services. By 2030, Member States are asked to develop and implement national action plans, grounded in an integrated policy framework to combat child social exclusion. These plans should align with broader social, education, health, nutrition, and housing policies; increase investment in children; provide support measures for families; address geographical disparities; strengthen co-operation with stakeholders (including children); allocate sufficient resources and EU funds; and integrate a gender perspective.

In May 2026, the European Commission has unveiled a major social policy package aimed at reducing poverty, tackling housing exclusion, strengthening children's opportunities, and enhancing the rights of persons with disabilities across the EU. The package includes the **EU's first Anti-Poverty Strategy** (n.d.[49]), a proposal for a **Council Recommendation on fighting housing exclusion** (2026[50]), a **Communication on breaking the cycle of child poverty** (2026[51]) – strengthening the **European Child Guarantee** (n.d.[52]), and a **Communication on enhancing the strategy for the rights of persons with disabilities up to 2030** (n.d.[53]). The Anti-Poverty Strategy seeks to reduce the number of people at risk of poverty or social exclusion by at least 15 million by 2030 and ultimately to eradicate poverty by 2050. Key priorities include promoting quality employment, improving access to services and adequate income support, and strengthening co-ordination across policies. The package also places strong emphasis on children, recognising that one in four children in the EU remains at risk of poverty or social exclusion and underscoring the importance of early-life interventions to break intergenerational disadvantage. Strengthening the European Child Guarantee is motivated by children's persistently higher risk of poverty or social exclusion compared to adults, with past progress deemed insufficient. The aim is to embed policy efforts to reduce child poverty within a broader policy framework, underpinned by comprehensive approaches across policy areas (e.g. education, healthcare, housing) and by targeted measures tailored to the specific needs of vulnerable groups. To this end, the Communication outlines three pillars: securing parents' access to quality jobs, childcare, and strong safety nets; ensuring vulnerable children's access to essential services; and increasing and better co-ordinating investment in children.

Source: European Commission (2026[54]), "Commission proposes new measures to fight poverty and improve lives of persons with disabilities", https://employment-social-affairs.ec.europa.eu/news/commission-proposes-new-measures-fight-poverty-and-improve-lives-persons-disabilities-2026-05-06_en.

The extent to which recent social policy developments have contributed to reducing child poverty – or preventing larger increases – while also helping to contain growth in social spending, remains an open question. Understanding to what extent, under what conditions, and through which policy designs social expenditures are most effective in reducing child poverty while keeping spending pressures under control is therefore essential for informing future policy strategies. These issues are examined in the following sections.

3.3. The methodology

The analysis goes beyond assessing whether higher social spending is associated with lower child poverty. It examines whether the design and allocation of social spending can influence the value for money, by identifying policy configurations associated with stronger poverty reduction and lower long-term spending pressures. It builds on earlier work by Lorenzoni et al. (2018[55]) that examined the impact of healthcare policies and institutional arrangements on life expectancy and health spending, and by Égert et al. (2020[56]) that investigated how education policies affect public education spending and the accumulation of human capital.

In this framework, value for money is assessed along two complementary dimensions. The first captures the effectiveness of social spending in improving child outcomes, measured here by reductions in child poverty and severe material deprivation. The second captures long-term spending pressure, namely whether particular policy designs are associated with stronger or weaker growth in social expenditure. The analysis therefore seeks to identify policy choices that are associated with a stronger poverty-reducing effect of social spending while also limiting longer-term pressures on public spending.

The analysis is deliberately narrowed to child poverty outcomes to determine the value for money of social policy design alongside the impact on the long-term evolution of social spending. Social policies generate many other benefits for children – including improvements in health and learning outcomes – and pursue wider social objectives that are not captured by this empirical framework. Some of these broader effects are examined separately in the following chapter.

The empirical approach estimates the two value for money dimensions separately but links them through social spending. The first equation estimates the influence of social policy design on the long-run relationship between per capita social expenditure and child poverty, while accounting for demographic and structural factors that also shape poverty risks. Importantly, it allows the influence of policy design on the poverty-reducing effect of social spending to vary according to the level of social expenditure. This makes it possible to assess whether particular policy characteristics are associated with stronger or weaker effects depending on the size of the welfare state.

Child poverty is measured by three complementary variables:

- *Child relative poverty rate*, measuring the share of children considered at risk of poverty, i.e. those living in households with equivalised disposable income that is below 50% of the national median. The threshold rises with annual increases in the median income.
- *Child anchored poverty rate,* capturing the share of children who would be considered at risk of poverty based on living standards in the past, namely those below the inflation-adjusted poverty threshold “anchored” in 2005. As living standards have increased over time in most OECD countries, the anchored poverty rate allows to focus on a subset of children who live in deeper levels of poverty compared to all those falling under the relative poverty line.
- *Severe material deprivation rate* among children, measuring the share of children living in households that experience an enforced inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life. This indicator covers nine core aspects of material well-being, including the ability to keep the home adequately warm, afford nutritionally adequate meals, cope with unexpected expenses, and afford a one-week annual holiday away from home[4] (see Annex 3.B for a detailed definition).

The second equation estimates the long-run determinants of per capita social spending, allowing the relationship between countries’ economic and social spending growth to vary with social policy design features and controlling for demographic factors. There are several channels through which policy design can affect the longer-term evolution of social expenditure. Some policy features may strengthen families’ labour market attachment and economic self-sufficiency, potentially reducing reliance on income support

and moderating future spending pressures. Other policy designs may be less substitutable with other spending areas and thus associated with stronger growth in social expenditure over time. Taken together, the two equations provide a basis for assessing both the effectiveness of social spending in reducing child poverty and the spending implications under alternative policy configurations. The technical details are provided in Box 3.3.

The policy variables capture key design characteristics of social expenditure systems and several dimensions of policy choice, including the allocation of spending across policy areas; the balance between cash transfers and services; employment-oriented policies; and the targeting of income support towards lower-income households. The analysis thus considers, for example, whether allocating a greater share of social expenditure to family policies or employment-oriented policies is associated with stronger poverty reduction; whether support delivered through services, such as ECEC and healthcare, is associated with different outcomes from cash support; and whether greater targeting of income transfers towards lower-income households is associated with stronger poverty-reducing effects.

The policy variables cover both policies directed specifically towards families and children and broader social protection programmes. This reflects the fact that many programmes that are not targeted specifically at parents or children nevertheless affect children's living standards, while accounting for a large share of total social expenditure. Since the policy characteristics are measured in different units, they are standardised before estimation to allow their estimated associations to be compared on a common scale. A coefficient on a policy variable consequently indicates the estimated association with child poverty or social spending of a one-standard-deviation difference in the relevant policy characteristic, based on the historical variation observed across countries and over time. This allows, for example, the estimated association of greater targeting of income transfers to be compared with that of higher participation in ECEC, despite the two indicators being measured on different scales. The estimates should be interpreted as comparisons of the relative importance of policy characteristics of similar magnitude within their observed distributions, rather than as estimates of the effect of an identical investment or p.p. change in each policy variable.

The specific policy indicators included in the analysis are outlined below, and further details on variable definitions and data sources are provided in Annex 3.B.

Box 3.3. How is the long-run value for money of social policies estimated?

The empirical framework consists of two long-run equations estimated independently using dynamic ordinary least squares (DOLS) that assess the two dimensions of value for money:

1. **Effectiveness:** The first equation relates child poverty outcomes to per capita social expenditure and policy design to assess whether a social policy characteristic strengthens or weakens the estimated relationship between social expenditure and child poverty or severe material deprivation.
2. **Spending moderation/pressure:** The second equation relates social expenditure to economic development and policy design to identify whether a social policy characteristic is associated with a stronger or weaker relationship between structural economic pressures and the level of social expenditure.

The framework is designed to identify policy configurations associated with **greater poverty-reducing effectiveness of social spending and/or lower long-run spending pressure** over time, rather than to estimate the fiscal cost of a specific social policy or the poverty-reducing effect of a budget-neutral reallocation of social expenditure in the short run.

Equation 1: Child poverty and the effectiveness of social spending

For country i and year t, the child outcome is specified as:

$$CO_{it} = \alpha_i + \mu_t + TS_{it}\beta + P_{it}^T\gamma + TS_{it}P_{it}^T\delta + XO_{it}^T\eta + \sum_{k=-1}^{1} \Delta LLO_{i,t+k}^T\zeta_k + \varepsilon_{it} \quad (1)$$

where:

- CO_{it} is the child outcome. Three outcomes are considered separately: the relative child poverty rate, the anchored child poverty rate, and the severe material deprivation rate among children;
- TS_{it} is total social expenditure per capita, expressed in constant USD PPP and in logarithmic form;
- P_{it} is a vector of social policy design characteristics;
- $TS_{it}P_{it}^T$ captures whether the influence of policy design features on the effectiveness of social spending in reducing child poverty varies with the size of the welfare state;
- XO_{it} is a vector of demographic and core drivers of child poverty;
- α_i and μ_t denote country and time effects.

Total social expenditure includes public and private expenditure in eight social policy areas: family, health, incapacity-related benefits, unemployment, active labour market programmes, housing, survivors and other social policy areas. Spending on old-age pensions is excluded because it is not directly targeted at families or children and its effects on children's living standards are ambiguous.[1] Its large weight in total social expenditure could also obscure the relationship between spending in child-relevant policy areas and child outcomes.

The vector P_{it} includes indicators capturing the allocation and design of social policy, including the composition of social expenditure across policy areas, participation in ECEC, employment-related policy characteristics, the targeting of income support, and other relevant policy features examined in the analysis. The expenditure share on active labour market policies (ALMP) is lagged by three years to reflect the time needed for employment-oriented interventions to affect household economic circumstances (see (Card, Kluve and Weber, 2017[57])). A full description of the policy variables can be found in Annex 3.B.

The core controls in XO_{it} capture changes in demographic structure and the depth of market-income poverty.[2] They include the average number of children per household,[3] the adolescent fertility rate,[4] the share of single-parent families[5] and the mean poverty gap before taxes and transfers.[6]

Equation 2: Drivers of social spending and spending pressure

The second equation models long-run per capita social expenditure growth, assuming that exogenous, structural macroeconomic and demographic drivers determine the level of per capita social spending by shaping a country's capacity and constraints to spend, as:

$$TS_{it} = \rho_i + \sigma_t + GDP_{it}\theta + \mathrm{P}_{it}^T\kappa + GDP_{it}\mathrm{P}_{it}^T\lambda + \mathrm{XS}_{it}^T\varphi + \sum_{k=-1}^{1} \Delta LLS_{i,t+k}^{\mathrm{T}}\xi_k + \upsilon_{it} \quad (2)$$

where:

- GDP_{it} is GDP per capita net of social expenditure per capita, expressed in constant USD PPP and in logarithmic form. It represents countries' financial resources and capacity for social spending and is hence positively associated with the level of social expenditure per capita;

- XS_{it} captures other core drivers of social spending, notably life expectancy[7] and the dependency ratio,[8]
- P_{it} represents the same set of social policy design characteristics as in Equation 1;
- the interaction between policy characteristics and economic resources ($GDP_{it}\mathrm{P}_{it}^{T}$) allows the influence of social policy characteristics to vary according to a country's level of economic development;
- ρ_i and σ_t denote country and time effects.

The equation therefore separates the role of core factors that shape countries' capacity and pressures to spend from the role of policy choices that can amplify or moderate these spending relationships.

Estimation and interpretation

The modelling assumes that, in the long run, structural macroeconomic and demographic drivers shape countries' capacity and constraints to spend, and, in turn determine the level of per capita social spending. Social policy choices (denoted by the vector P_{it}) amplify or attenuate the long-run, positive relationship between GDP and social expenditure (equation 2). Social expenditure, in turn, affects the child poverty outcome (CO_{it}), alongside other core demographic and economic drivers (vector XO_{it}), as captured by equation (1). Importantly, policy design may also influence the effectiveness of social spending in reducing child poverty, such that the same level of social expenditure can be associated with different child poverty outcomes depending on how social policies are designed (equation 1).

Modelling the determinants of child poverty, equation (1) separates the average effect of increasing the overall per capita social budget (β), from the returns to expanding specific policies (γ) as well as potential variations in policies' effectiveness for different levels of welfare state generosity (δ). Analogously, equation (2) allows to distinguish between the impact of policies on spending moderation/pressures according to different stages of economic development.

Both equations are estimated separately using dynamic ordinary least squares (DOLS). DOLS augments the long-run relationship with leads and lags of first differences of the explanatory variables ($\Delta LLO_{i,t+k}$ and $\Delta LLS_{i,t+k}$, respectively). This helps account for short-run dynamics, including contemporaneous endogeneity, serial correlation and adjustment processes that may otherwise bias estimates of long-run relationships. The limited length of the available time series restricts the number of leads and lags that can be included to three time periods ($t-1$, t and $t+1$).

Although not explicitly modelled, the framework is consistent with the assumption that over time, improvements in child outcomes will translate into enhanced human capital and productivity when they are adults, which results in continued GDP growth.[9]

Value-for-money simulations

The value-for-money simulations use the long-run coefficients estimated in Equations (1) and (2) to simulate the incremental effect of changing a specific policy characteristic when overall social expenditure or GDP per capita also increases. The simulations therefore assess the contribution of policy design over and above the effect of higher overall spending or economic growth.

Effectiveness in improving child outcomes

For a given policy characteristic p_j Equation (1) can be used to calculate the change in the child outcome associated with increasing the policy alongside an increase in per capita social expenditure. The simulated outcome change is:

$$Outcome\ change_j = \widehat{\gamma_j} * \Delta p_j + \widehat{\delta_j} * \Delta p_j * (TS + \Delta TS) \quad (3)$$

where Δp_j represents a simulated increase in the policy characteristic and ΔTS a simulated increase in per capita total social expenditure. In the simulations, ΔTS corresponds to an increase of half a standard deviation in the log of per capita total social expenditure. Equation (3) therefore captures the additional change in the child outcome associated with changing the policy characteristic together with increasing social expenditures, relative to a counterfactual scenario in which social expenditure increases by the same amount but the policy characteristic remains unchanged.[10] The relevant coefficients are taken from the regression specification detailed in Equation (1) where the values for $\widehat{\gamma_j}$ and $\widehat{\delta_j}$ are taken from the regression estimates related to policy j. Statistically insignificant coefficients are set to zero when calculating the simulated effects.

A negative $Outcome\ change_j$ indicates that the policy change is associated with an additional reduction in the child poverty or material deprivation rate relative to the counterfactual. A positive value indicates that the policy change reduces the estimated poverty-reducing effect of the increase in social expenditure. It does not necessarily mean that the policy increases the absolute level of child poverty, since the overall relationship between higher social expenditure and child poverty may remain negative.

Spending pressure

The corresponding simulation based on Equation (2) measures the additional spending pressure associated with changing a policy characteristic for a given level of GDP per capita and an increase by half a standard deviation ($GDP + \Delta GDP$):

$$Spending\ pressure_j = \widehat{\kappa_j} * \Delta p_j + \widehat{\lambda_j} * \Delta p_j * (GDP + \Delta GDP) \quad (4)$$

Based on the estimated regression coefficients $\widehat{\kappa_j}$ and $\widehat{\lambda_j}$ related to policy p_j from equation (2), the simulation compares a scenario in which GDP per capita and the policy characteristic both increase with a counterfactual scenario in which GDP per capita increases by the same amount but the policy characteristic remains unchanged.[11]

A negative value indicates spending moderation, meaning that the projected increase in social expenditure is smaller than in the counterfactual. A positive value indicates additional spending pressure. A negative value should not be interpreted as a reduction in the absolute level of social expenditure.

Magnitude of policy simulations

Two types of policy changes are considered.

- *Standardised policy changes*. For the main set of simulations that spans all policies, the policy characteristic is increased by one standard deviation, while log per capita social expenditure or GDP per capita increases by half a standard deviation. The one-standard-deviation policy change reflects the historical variation of each policy characteristic across countries and over time and provides a common metric for policy variables measured in different units. The half-standard-deviation increase corresponds to approximately 4% of the sample average for log per capita social expenditure and approximately 2% for log GDP per capita, broadly equivalent to around 11 years of average growth in the sample. These simulations are therefore intended to represent policy changes within the range of historical OECD experience rather than marginal changes of an identical absolute size.
- *Spending-allocation changes*. For policy variables defined as the share of total social expenditure allocated to a specific policy area, a second set of simulations is performed. Here, the policy increase represents one p.p. of social expenditure. Because the change is identical across policy areas, this simulation provides a more direct comparison of the estimated implications of allocating additional resources to different areas of social spending. It is

particularly relevant for considering how additional resources might be allocated across competing policy areas.

Interpreting value for money

Based on equations (3) and (4), the "value for money" of policy *j* is then given jointly by its child outcome change and spending pressure. This approach captures the efficiency of policy design rather than absolute policy effects. The objective is not simply to assess whether a policy characteristic influences outcomes, but whether it improves the overall effectiveness of social spending when expenditure is assumed to grow over time. In other words, it examines whether changing the composition or design of social expenditure generates better child outcomes than increasing spending alone. Conceptually, the approach addresses the following question: assuming that governments increase per capita social spending as economies grow, which policy designs are associated with larger improvements in child outcomes without proportionally increasing long-run spending pressures?

The two simulated effects are considered jointly:

	Spending pressure moderated or unchanged	***Spending pressure increased***
Additional reduction in child poverty	**Relatively strong value for money**	Trade-off: stronger child outcomes but greater spending pressure
No additional reduction/ weaker poverty reduction	Trade-off: lower spending pressure but weaker child-outcome effects	**Relatively weak value for money**

The classification is based on the relative performance of a policy change against the relevant counterfactual of no policy change, rather than on whether the policy has a positive or negative effect in absolute terms.

Where the interaction between policy design and the core driver is statistically significant, the simulated value-for-money effect varies with the level of social expenditure or GDP per capita. The same policy characteristic may therefore have different estimated implications in countries at different levels of economic development or with different levels of social spending.

The simulations should not be interpreted as forecasts or as estimates of the effects of a specific budget-neutral reform. In particular, a one-p.p. increase in the share of spending allocated to one policy area is not assumed to be financed by an equivalent reduction in another area. The simulations instead isolate the estimated role of policy design conditional on an overall increase in social expenditure or economic resources.

It should be noted that the "value for money" estimates offer important insights to increase the efficacy of social expenditure in improving child outcomes, but they do not capture the total value of social policies. First, the analysis focusses on a limited set of child outcomes and is therefore likely to overlook additional, unmeasured benefits accruing during childhood. For example, increased employment and demanding work schedules may affect the quality of parental care, ECEC can support children's well-being and development in addition to reducing the share of children living at risk of income poverty, and public healthcare systems not only benefit parental employment but also the physical and mental well-being of children themselves. Second, a key objective of social policies targeting children is not only to improve well-being during childhood itself, but also to strengthen outcomes later in life. In particular, improvements in childhood conditions – including reductions in poverty – have been shown to yield benefits later in life, such as better employment prospects, higher earnings and improved health outcomes (Clarke et al., 2022[3]). These lifelong impacts cannot be fully captured because of the limited length of the available time series. As a result, the present estimates are likely to underestimate the full long-term benefits of investments in children.

1. Retirement pensions and other spending on old age are excluded for several reasons. First, they are not a policy instrument that governments intentionally use to address child poverty; while they may have indirect effects, these are ambiguous, and the available do not allow us to capture the underlying mechanisms. Second, pension spending is so large that it risks dominating overall social expenditure trends, making it harder to control for unobserved factors, which may in turn bias estimates of the impact of social spending on child poverty. If old age benefits are mainly received by households without children, they can raise the poverty threshold more than children's household incomes, thereby increasing measured child poverty. Conversely, when pension benefits accrue to multigenerational households where pension income is pooled with other household resources and may therefore benefit children, they can lift families above the poverty line. Empirical evidence suggests the latter effect dominates in countries where extended family networks play a central role in welfare provision – particularly in Southern and Central and Eastern Europe – where pensions significantly reduce child poverty (Petmesidou et al., 2016[58]; Diris, Vandenbroucke and Verbist, 2017[59]). In these contexts, pension cuts can indirectly increase child poverty. By contrast, in countries where pension spending is largely directed to households without children, higher pension outlays may be associated with higher child poverty.

2. GDP per capita is not included as a separate explanatory variable in the child outcomes equation to avoid multicollinearity with other drivers, especially total social expenditure, and because doing so would make it difficult to disentangle its effects from those operating through social spending and other drivers within this empirical framework.

3. *Average number of children per household*. A decline in fertility reduces the average number of children per household, which can lower the overall risk of child poverty when poverty is concentrated in larger families. However, this effect is weaker if larger families remain most common among households with fewer economic resources, while fertility declines primarily among more advantaged groups (Thévenon et al., 2018[8]). The postponement of family formation associated with lower fertility may further reduce poverty risks, as couples often delay having children until achieving greater labour market stability and income security. This protective effect also depends critically on whether lower socio-economic groups postpone parenthood to the same extent as higher-income groups.

4. *Adolescent fertility rate*. A clearer positive trend is the decline in adolescent fertility, which is strongly associated with higher educational attainment and greater labour market attachment (Schulkind and Sandler, 2019[60]; Hobcraft and Kiernan, 2001[61]), and therefore likely to contribute to reduced child poverty.

5. *Share of single-parent families*. Family dissolution often reduces household resources and single parents continue to bear a disproportionately high cost of children compared to two-parent households, – whether measured through consumption patterns or self-reported difficulties in making ends meet – making single-parent households disproportionately vulnerable to poverty (Rapp and Thévenon, 2025[29]). The rising share of such families has consequently been an important structural driver of child poverty in many OECD countries (Thévenon et al., 2018[8]; Maldonado and Nieuwenhuis, 2015[62]).

6. *Mean poverty gap before taxes and transfers*. The percentage gap between the equivalised income before taxes and benefits of the average individual living in a working-age household and the relative poverty line is a measure of market inequalities, the average "depth" of poverty before public transfers. Deeper forms of poverty before taxes and benefits and can diminish the child poverty-reducing effect of social policies, for example when cash transfers are insufficient in size to cover the income gap relative to the poverty line.

7. *Life expectancy* enters in logged terms as part of the other core drivers, XS_{it}. Increases in life expectancy have had a positive impact on social spending in OECD countries over the past decades. Greater longevity has not fully translated into gains in *healthy* life expectancy and was often achieved by advances in medicine and incurred expensive treatment costs (OECD, 2025[63]). In addition, where greater life expectancy translates into longer periods spent in the labour market, it can bring additional tax revenues and make it more affordable for countries to increase social expenditure.

8. *Dependency ratio*: Another core driver captured by XS_{it}, the ratio of children and the elderly – those below 20 and those 65 years or older – to the working-age population influences per capita social spending by limiting the ability to finance per person social expenditures.

9. The implicit assumption that lower child poverty spurs economic growth relies mainly on improved outcomes in adulthood, such as higher employment, better health, and greater productivity (Clarke et al., 2022[3]), which are key channels through which social investment policies are expected to generate long-term returns.

10. Note that equation (3) is obtained by taking the difference between the predicted outcome under a scenario in which the increase in total social expenditure is accompanied by a change in the relevant policy characteristic and the counterfactual scenario in which total social expenditure increases but the policy mix remains unchanged. Formally: $Outcome\ change_i = \hat{\beta} * (TS + \Delta TS) + \hat{\gamma_i} * (p_i + \Delta p_i) + \hat{\delta_i} * (p_i + \Delta p_i) * (TS + \Delta TS) - (\hat{\beta} * (TS + \Delta TS) + \hat{\gamma_i} * (p_i) + \hat{\delta_i} * (p_i) * (TS + \Delta TS))$

11. Note that equation (4) is equivalent to: $Spending\ pressure_i = \widehat{\theta_i} * (GDP + \Delta GDP) + \hat{\kappa_i} * (p_i + \Delta p_i) + \hat{\lambda_i} * (p_i + \Delta p_i) * (GDP + \Delta GDP) - (\widehat{\theta_j} * (GDP + \Delta GDP) + \hat{\kappa_j} * (p_j) + \hat{\lambda_j} * (p_j) * (GDP + \Delta GDP))$

Social policy leavers to address child poverty and material deprivation

Policy features (P_{it}) capture key design characteristics of social expenditure systems that are assumed to influence both the effectiveness of social spending in reducing child poverty and the way social expenditures evolve in relation to GDP per capita. The set of policy levers allows to explore key choices policymakers face when allocating public resources, including whether to prioritise spending within the family policy domain or through employment-oriented policies; whether support is more effective when delivered in cash or through services (such as childcare, work-life reconciliation measures, or health and social services); whether cash transfers are more impactful when delivered through benefits or tax breaks; and the extent to which targeting support toward low-income households enhances poverty-reduction outcomes. The analysed policy areas comprise elements of social protection and interventions financed through social expenditure that do not target parents or children specifically, as these programmes account for the bulk of total social spending and can play an important role in reducing child poverty. Some policy variables indicate the share of social expenditure dedicated to a specific policy area, irrespective of the size and type of the target population, to assess the average impact of budget allocations on child poverty.[5] Moreover, some of these policy features may – intentionally or not – strengthen families' labour market attachment and self-sufficiency, thereby reducing reliance on benefits and moderating future spending pressures. Others on the other hand, may be drivers of social expenditure growth, resulting in higher long-term pressure on social expenditures.

The specific indicators included in the analysis are outlined below, and further details on variable definitions and data sources are provided in Annex 3.B.

Employment-related policies

Social policies are critical for supporting parents' participation in paid work, increasing work intensity and boosting earnings, and thereby reducing child poverty (OECD, 2018[33]; Bäckman and Ferrarini, 2010[64]; Whiteford and Adema, 2007[65]). Investment in ECEC services is a particularly important lever for addressing child poverty in this respect, even if it is not the primary objective of these policies. On the one hand, affordable, high-quality childcare supports parents in meeting their care responsibilities whilst increasing their labour market participation and long-term earnings potential, thereby reducing poverty risks; on the other, it promotes children's early development and learning (Adema, Clarke and Thévenon, 2020[66]; Hemerijck, Ronchi and Plavgo, 2023[67]). In addition, employment-oriented policies combine a wide range of services that help parents (as well as non-parents) enter, remain in, or progress in employment with financial incentives to take up work. Guidance and mentoring programmes, including support to identify and access childcare arrangements that make employment compatible with family life, as well as training and upskilling programmes that facilitate transitions into better-quality jobs, are especially important. More intensive and tailored services targeted at hard-to-place workers are particularly relevant for low-skilled parents facing multiple barriers to employment. Further, low effective tax rates on earned income can encourage parental labour supply and boost disposable household income by limiting the share of additional earnings repaid as taxes and social contributions. The set of indicators that describe policies with the potential to encourage and facilitate employment includes:

- *ECEC enrolment 0-2*: The share of children aged 0-2 enrolled in formal care;
- *ECEC enrolment 3-5*: The share of children aged 3-5 enrolled in early childhood education and care (ECEC) services;
- *Spending on ECEC*: The share of per capita social expenditure allocated to ECEC services.
- *Spending on ALMP*: The share of per capita social expenditure allocated to active labour market programmes (ALMP). They cover public spending on services and programmes aimed at improving employability and job matching – such as public employment services, job-search assistance, training and upskilling, employment incentives, supported employment and rehabilitation, and

direct job creation – excluding passive income support for the unemployed. The variable is lagged by three years to account for the time it may take for these programmes to translated into greater employment (Card, Kluve and Weber, 2017[57]).

- *Effective tax rates on taking up work:* Two indicators measure the financial disincentives to participate in the labour market for hypothetical families with two children aged 4 and 6. They calculate the proportion of earnings in the new job that are lost to either higher taxes or lower benefit entitlements when i) a jobless single parent takes up full-time employment at 67% of the average wage after claiming unemployment benefits and ii) one parent in a couple takes up full-time employment at 50% of the average wage after claiming unemployment benefits, while the other parent is always employed full-time at 50% of the average wage.
- *Effective tax rates on increasing working hours:* Two indicators measure the fraction of additional earnings that is lost to either higher taxes or lower benefits for hypothetical families with two children aged 4 and 6 when i) a single parent increases their working hours from 50% to 100% of full-time work at earnings of 67% of the average wage and ii) one parent in a couple increases their working hours from 50% to 100% of full-time work at earnings of 50% of the average wage, while the other parent is always employed full-time at 50% of the average wage.

Other social policy expenditures in kind

Health-related social protection and services, as well as social services outside the family policy domain, can play a key role in addressing health problems, social difficulties, or other constraints that limit parents' capacity to work. By helping the most disadvantaged parents to overcome these barriers and sustain employment, such interventions can have substantial downstream effects on children's living standards and their risk of experiencing poverty. The corresponding policy features include.

Redistributive features of income transfers for the total population and for families specifically

Income transfers, through both cash benefits and tax[6] relief, play a crucial role in protecting household incomes against economic shocks and in boosting resources to meet basic needs. Beyond their contribution to poverty reduction, income transfers serve different policy objectives and target different population groups. Some are designed to support households broadly, regardless of whether they have children, while others are targeted specifically at families with children to promote horizontal equity by compensating for the lower living standards associated with child-rearing relative to childless households (Box 3.4).

The extent to which these transfers contribute to reducing child poverty varies markedly across countries. This reflects policy trade-offs between strengthening work incentives and providing adequate protection against poverty, as well as differences in the overall volume of support and in the extent to which redistribution targets low-income households or reallocates resources between childless households and families with children (Verbist and Van Lancker, 2016[68]; Thévenon et al., 2009[69]). Moreover, spending on families (including child and family allowances, maternity and parental leave benefits) may vary across different stages of childhood, with implications for children's risk of poverty at different ages. These variations make it essential to consider carefully whether – and how – income transfer systems can be designed or adapted to strengthen their effectiveness in reducing child poverty. In this analysis, the main policy variables related to income redistribution capture the overall volume and distribution of redistribution, the allocation of cash support to families and children, and the design and progressivity of taxes and transfers.[7]

Box 3.4. How cash transfers for families can help reduce child poverty

Cash transfers are among the most direct policy instruments to reduce child poverty. By providing income support to families, they mitigate income shortfalls, help smooth consumption, and promote investment in children's well-being and development. Their impact depends on benefit adequacy, coverage, and how they interact with tax and employment policies. Main mechanisms include:

- **Increasing disposable income**. Cash benefits directly raise families' resources, enabling them to meet essential needs such as food, housing, clothing and healthcare, and lifting many households above poverty thresholds.
- **Reducing income volatility**. Regular transfers smooth fluctuations in household income – particularly for families facing unstable employment or low wages – helping to prevent poverty spells.
- **Supporting child-related costs**. Family and child allowances compensate for the additional costs of raising children, promoting fairness between households with and without dependents.
- **Promoting investment in children**. Increased household income enables greater spending on children's nutrition, education and health, improving their long-term development and future earning capacity. Earmarking supports for children can be effective at increasing the household allocation of resources to children and to improve their material and developmental outcomes, particularly when financial constraints are high (Page, 2024[16]).
- **Complementing employment policies**. Well-designed transfers can support parental employment – by reducing financial stress, helping with childcare costs, or being conditional on labour market participation – thus reinforcing the income effect.

Assessing value for money

To assess the value for money of different policy designs, we use the estimated relationships from the two value for money dimensions (Equations (1) and (2) in Box 3.3) to simulate how changes in individual policy characteristics would influence the long-run relationships between social spending and child poverty outcomes, and between GDP and social expenditure growth, as inspired by Egert et al. (2020[56]). The simulations compare two scenarios. In the first, overall per capita social expenditure (or GDP per capita, when assessing spending pressure) increases while a specific policy characteristic also changes. In the second, the underlying spending or GDP increase occurs but the policy characteristic remains unchanged. The difference between the two scenarios captures the incremental contribution associated with the change in policy design, conditional on the overall increase in spending or economic resources.

The simulations provide two complementary measures to assess the value for money. The first measures the change in the child outcome associated with strengthening a given policy alongside an increase in overall social spending. A negative value indicates that the policy change is associated with an additional reduction in child poverty or severe material deprivation compared with increasing social spending alone. A positive value indicates that the policy change weakens the poverty-reducing effect of the additional social spending, although it does not necessarily imply an increase in child poverty.

The second measure captures the additional spending pressure associated with changing a policy as economies grow. It compares the projected change in social expenditure when both GDP per capita and the policy characteristic increase with the projected change when GDP increases but the policy characteristic remains unchanged. A negative value indicates spending moderation: social expenditure is projected to increase less than it would in the absence of the policy change. Importantly, spending

moderation does not imply that absolute social expenditure falls; it means only that its projected increase is smaller due to the policy change.

Considering policy changes alongside an increase in overall social spending or GDP reflects the long-run perspective of the analysis. Social expenditure tends to increase as economies grow, and many policy changes cannot realistically be implemented without additional resources. For example, expanding ECEC enrolment is likely to require additional expenditure that may not necessarily be financed through reduced investment in other social policies. Similarly, when a policy variable represents the share of social spending allocated to a particular policy area, increasing the overall social budget allows that share to rise without assuming reductions in the absolute amount spent on other areas.

The value-for-money assessment therefore focusses on whether changing the design or allocation of social spending improves child outcomes relative to an increase in spending alone, while also considering its implications for longer-term spending pressure. A policy is considered to provide relatively strong value for money when its expansion is associated with additional reductions in child poverty while moderating, or at least not increasing, long-term spending pressure. Conversely, a policy provides relatively weak value for money when it weakens the poverty-reducing effect of additional social spending and is associated with greater spending pressure. Some policies may perform well on one dimension but less well on the other, implying a policy trade-off between stronger child outcomes and lower long-term expenditure.

Two sets of policy changes are simulated with different magnitudes. The first set of simulations is conducted for all policy characteristics and considers a *one-standard-deviation increase* in the policy variable, alongside a half-standard-deviation increase in overall social expenditure or GDP per capita. A one-standard-deviation change reflects the historical variation in the policy characteristic across OECD countries and over time and therefore provides a common metric for comparing policy characteristics measured in different units. The half-standard-deviation changes in social spending and GDP correspond to approximately 4% and 2% of the sample averages of the logged values of total social expenditure per capita and GDP per capita, respectively, and are broadly equivalent to 11 years of average growth in both variables over the sample period.[8]

A second set of simulations is performed for policy variables that measure the allocation of social expenditure across policy areas. Here, we consider a *one-p.p. increase* in the share of social spending allocated to the policy area, alongside the same increase in overall social expenditure or GDP. This second approach allows to compare the relative effectiveness of allocating an equivalent amount of additional resources across different policy areas.

The second set of simulations is intended to inform decisions about how to allocate additional resources across competing policy instruments and, conversely, which areas of spending are less likely to generate large increases in child poverty if spending needs to be reduced. In this sense, the simulations can also help identify policy configurations that may better protect child outcomes in a context of future spending constraints. Policies with a relatively small outcome change – indicating that changing the policy has little effect on the poverty-reducing effectiveness of overall social spending – may be less critical to preserve in the event of spending cuts, although this should not be interpreted as evidence that these policies are unimportant for child well-being.

The simulations do not, however, estimate the effects of a budget-neutral reallocation in which additional spending in one policy area is necessarily financed by equivalent cuts elsewhere. Rather, they provide evidence on how the composition and design of social spending may affect child outcomes and spending pressures conditional on an overall change in social expenditure or economic resources.

Where the interaction between policy design and the core drivers is statistically significant, the estimated value for money also varies with the growth of social expenditure or economic development, giving rise to potentially different policy trade-offs across countries. Further details on the simulations and their implementation are provided in Box 3.3 “How is the long-run value for money of social policies estimated?”,

with additional information on the data, applied imputations and regression results provided in Annex 3.B, Annex 3.C and Annex 3.D.

3.4. The value for money of social policies in reducing child poverty

The empirical analysis studies the core drivers of child poverty, material deprivation and how social expenditures impact them. The results are detailed in the annex tables in Annex 3.D.[9] Starting with the influence of core drivers of child outcomes, the results[10] confirm that the prevalence of certain demographic trends is associated with a higher risk of children living in poverty and experiencing severe material deprivation:

- An *increase in the share of children living in single-parent households* is associated with a higher risk of poverty, including severe income poverty (as measured by the poverty line anchored in 2005). Across specifications, a one p.p. increase in the share of single-parent families is associated with an increase in the child relative poverty rate by around 0.3 p.p., which represents around 5% of the average within-country variation in our sample. Similarly, it is linked to a 0.9-p.p. increase in the anchored poverty rate, the equivalent of 10% of the average within-country variation in the anchored poverty rate.
- *Higher rates of teenage pregnancy* are linked to greater child relative poverty. Each additional birth per 1 000 women aged 15-19 is associated with a 0.1-p.p. increase in the child relative poverty rate.
- In contrast, the number of children per household shows no significant relationship with child poverty rates, suggesting that the decrease in the average family size has had no measurable impact on countries' child poverty levels.
- *Depth of poverty* matters: a one p.p. increase in the mean poverty gap is associated with a 0.7 p.p. rise in child anchored poverty rate and a 0.5 p.p. increase in severe material deprivation, indicating that children are not spared when countries experience a deepening of poverty.

Turning to social expenditures, per capita social spending shows the expected strong negative association with child poverty and material deprivation. A half-standard-deviation increase in the log of social spending per capita – representing the average social expenditure growth over one decade approximately – is associated with an additional reduction of nearly one and a half p.p. in the child relative poverty rate. This magnitude is equivalent to lifting one eighth of income-poor children out of poverty, on average across the OECD, as measured by 2023 child relative poverty rates. It is also associated with a decline of more than three and half p.p. in the child anchored poverty rate (nearly half the size of today's average child anchored poverty rates), and over four p.p. in the share of children experiencing severe material deprivation (nearly 70% of children experiencing severe material deprivation).

When analysing the drivers of social spending, the results confirm that increases in GDP per capita are consistently associated with higher levels of per capita social spending.[11] A half-standard-deviation increase in the log of GDP per capita – also representing the OECD average of growth over roughly one decade in the past – is linked to an increase of around 9% in social spending per capita. In contrast, within-country variation in the dependency ratio – the population under age 20 and over age 65 as a share of the population aged 20 to 64 – and in life expectancy are not significantly linked to per capita social spending levels.

Figure 3.9 below visualises the value for money simulations for the full set of policy features based on a hypothetical country with average levels of GDP and social expenditure (derived from the regression coefficients in Annex 3.D). The simulated policy increase represents an expansion of the policy by one standard deviation *alongside* an increase in social spending or GDP by half a standard deviation

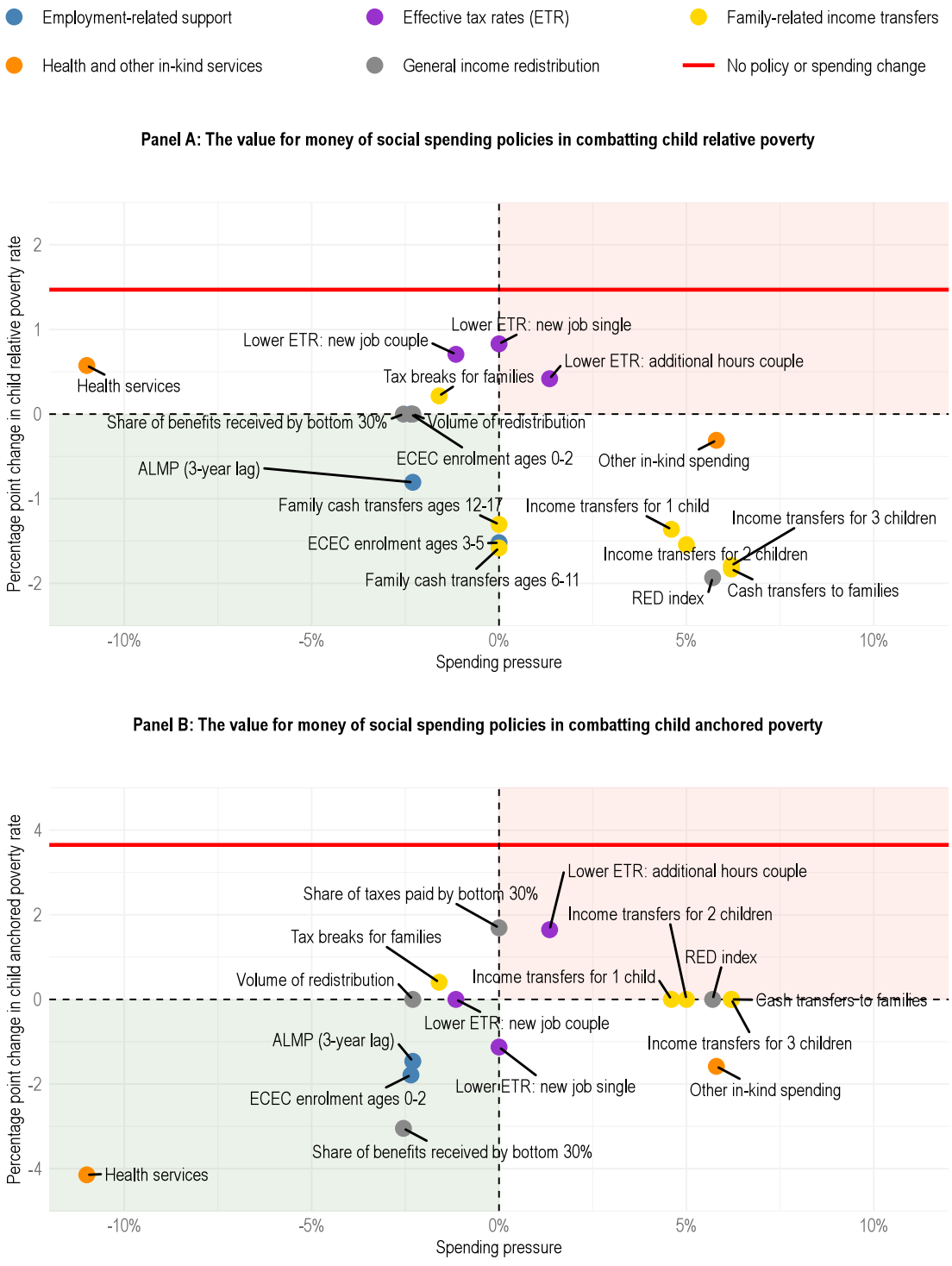
(around 11 years of social spending and GDP growth, based on historical trends). This allows for a stylised comparison of policy changes across different units.

The quadrants on the bottom left, highlighted in **green,** display policies with a **high value for money**. These policies are associated with a higher reduction of the child poverty rate than in the counterfactual scenario in which social expenditure increases without a change in policy design, while also being associated with lower long-term spending pressure – that is, a weaker relationship between GDP per capita growth and per capita social expenditure growth. In contrast, the top right quadrants, coloured red, indicate a low value for money: policies in this area are associated with a smaller decrease or an increase in child poverty or material deprivation than in the counterfactual, whilst at the same time, being associated with greater long-term spending pressure.

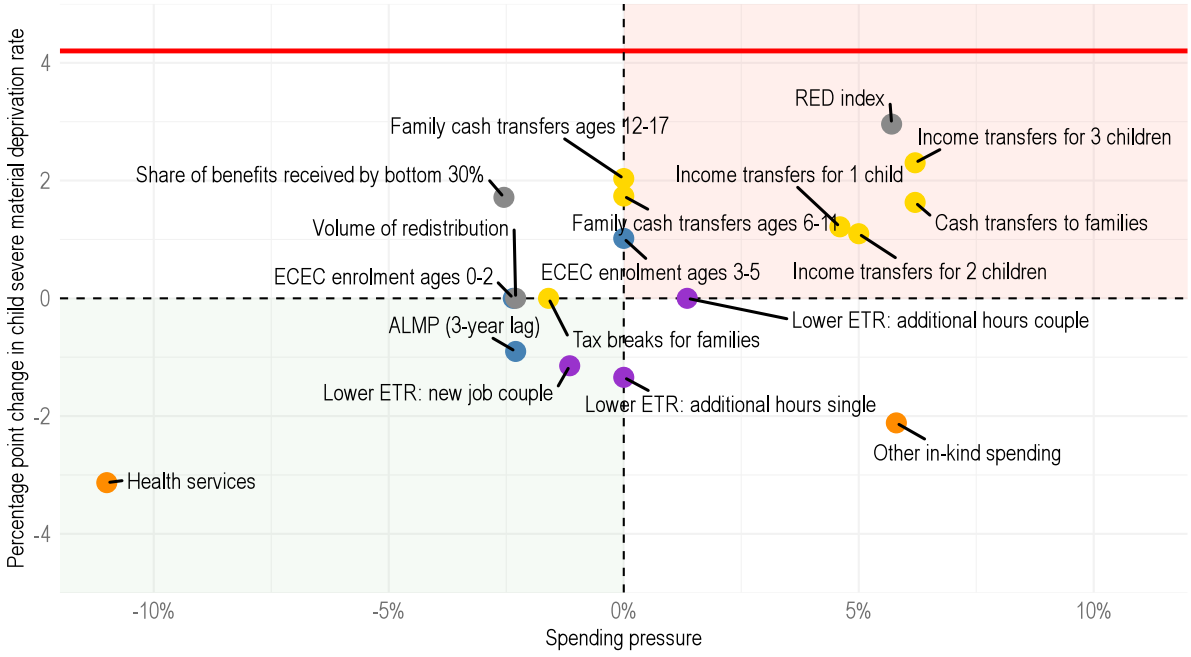
The remaining two quadrants comprise social policies that come with trade-offs between the two dimensions of value for money. Policies in the bottom right quadrant are associated with greater reductions in child poverty or material deprivation but at the cost of higher long-term spending pressure, while policies in the top left quadrant are associated with lower spending pressure but weaker improvements in or worsening child outcomes.

The red horizontal line indicates how much higher child poverty rates would be in the absence of any increase in per capita social expenditure and no change in policy design. The difference between the horizontal axis (0-line) and the red line represents the estimated poverty-reducing effect of a half-standard-deviation increase in social expenditure, with policy design unchanged and based on the cross-country average policy mix. Policies between the red line and the 0-line are estimated to attenuate the social spending effectiveness at reducing child poverty compared to the scenario of a spending increase without any policy change, and policies below the 0-line are estimated to increase the spending effectiveness following an expansion of the policy.

Figure 3.9. The value for money of social policies to reduce child poverty/severe material deprivation, for average levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in combatting severe material deprivation among children



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with average levels of logged per capita social spending, logged GDP per capita and policy settings.

How to read the figure: The vertical axis indicates the p.p. difference in child poverty rates related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving child poverty outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy enhances overall social spending efficacy. Positive values suggest that the policy expansion yields relatively worse outcomes over time than what could be achieved if per capita social expenditure increased and all policies remained at their average levels. Points above the red line indicate that an increase in the given policy by one standard deviation would reduce overall social spending effectiveness to the extent that the increase in social expenditure becomes associated with higher child poverty rates.

Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in either the child outcome or spending regressions are displayed.

Example: Increasing the share of social expenditure dedicated to active labour market programmes (ALMP) by one standard deviation (+2.3 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from the average level is predicted to enhance the overall social spending effectiveness in reducing child relative poverty by 0.8 p.p. (to -2.3 p.p.) compared to the effect of raising social spending levels under the unchanged, average policy mix (-1.5 p.p.). This represents a gain in overall social spending effectiveness by over 50%. At the same time, such an increase in the share of social expenditure dedicated to ALMP is predicted to ease spending pressure by around 2.3% of per capita social expenditure (down from an expected 8.9% increase to 6.6%) for an assumed increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically). This represents a reduction in spending pressure by around 25% compared to the scenario where GDP increases over time, but policies remain unchanged.

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Section 3.3 “Assessing value for money” for a description of the methodology and Annex 3.D for the regression coefficients used in the calculations.

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A general finding for all measures of child poverty is that across all policy simulations, an increase in social expenditure is always associated to a poverty reduction (as shown by the fact that the resulting change in poverty rates always fall below the red lines). However, the effectiveness of social spending varies substantially depending on policy design, with some policies reducing the effectiveness of social spending in lowering child poverty (those above the horizontal 0-line) and others enhancing its impact (those below the horizontal 0-line). The following paragraphs provide further detail on how effectiveness varies across policy settings, focussing on the main categories of policy levers illustrated in the figure.

ECEC enrolment and Active labour market programmes: high value for money

Two dimensions of social spending policies that operate through the labour market show the strongest value for money among the policy areas examined: the enrolment of young children in early childhood and care services and expenditures on active labour market policies. They consistently appear in, or near, the green quadrant at the bottom left of Figure 3.9, indicating that they increase the effectiveness of social expenditure at reducing child poverty while moderating long-term pressures on social spending. A key mechanism is likely higher parental employment, which reduces reliance on income support and lowers expenditure on means-tested benefits. This underscores their role as key levers for promoting parental employment and preventing child poverty, as documented in previous studies (OECD, 2018[33]; Thévenon et al., 2018[8]). More specifically:

- **Coverage (and take-up) of Early Childhood Education and Care (ECEC) Services matters more than overall spending levels alone**. Expanding ECEC coverage is linked to additional reductions in child income poverty, as well as in severe material deprivation in low-spending contexts. Raising participation in ECEC at ages 0-2 by one standard deviation (+18 p.p.) is associated with declines in child anchored poverty rates by 1.8 p.p. – thus enhancing social spending effectiveness by 50% – while reducing spending pressures at higher levels of GDP per capita (Figure 3.9, Panel B). Similarly, a one-standard-deviation increase in ECEC enrolment rates among 3-5 year-olds (+18 p.p.) is estimated to double social spending effectiveness at mitigating child relative poverty (an additional -1.5 p.p.) and to lower rates of severe material deprivation in low-spending contexts. In high spending contexts on the other hand, further increases in enrolment in pre-primary education and care appear to have a more limited effect on reducing severe child material deprivation. One likely explanation is that enrolment rates are already very high and services reach the vast majority of children, leaving relatively little scope for additional gains from further expansion. Moreover, the children who remain outside the system are often among the most disadvantaged. For these groups, participation in pre-primary education alone is unlikely to be sufficient to address the multiple and overlapping forms of disadvantage captured by measures of severe material deprivation. Reducing deprivation among these children is likely to require a broader package of interventions spanning income support, housing, health, and access to other essential services. As a result, in countries where pre-primary coverage is already near universal, additional investments in other policy areas may yield larger reductions in severe material deprivation than further increases in pre-primary participation.[12]

  By contrast, the size of ECEC spending in the social budget shows no detectable effect on child poverty. This finding likely reflects that increased spending does not automatically translate into higher coverage, as resources may also be directed towards improving service affordability and quality, or towards extending the number of hours offered to children already enrolled. The findings suggest that *ECEC contributes to reducing income poverty primarily when increased investment results in higher enrolment*, enabling parents to raise their labour market participation or work intensity, and in turn their earnings. This does not diminish the importance of investing in service quality, which remains essential for children's well-being and development (see Chapter 4). However, when the objective is to reduce child poverty, it is critical that ECEC investments translate into broader and more equitable access for families.

Expanding access for disadvantaged children therefore represents an important lever for reducing child income poverty. For example, across European countries in 2024, around 49% of children under age 3 from the highest-income third were enrolled in formal childcare, compared with 32% among those from the lowest-income third (see Chapter 2).

- **ALMPs show poverty-reducing effects across all measures of poverty**. A one-standard-deviation increase in the share of social spending devoted to ALMPs (around two p.p. of total social spending) is associated with reductions of about 0.8 p.p. in child relative poverty, 1.5 p.p. in anchored poverty – which captures deeper forms of income poverty – and 0.9 p.p. in severe material deprivation, while moderating spending pressures by around 2.25% in the value-for-money simulations (see Figure 3.9). Such a greater policy orientation towards ALMP thus enhances the overall effectiveness of social spending by over 50% for child relative poverty, by around 40% for child anchored poverty, and by 20% for rates of severe material deprivation among children. Although the available data does not allow to single out the particular aspects of ALMP that support parents, the finding suggests that globally, ALMPs are effective in reaching and supporting parents with children on low incomes.[13]

  A greater policy orientation towards ALMPs appears particularly effective at reducing child anchored poverty and severe material deprivation in countries where total social expenditure is low. The effectiveness of allocating higher shares of spending to ALMPs at improving children's living standards decreases at higher social spending levels (see Annex 1.A). Similarly, it is worth noting that ALMPs' capacity to ease fiscal pressures depends on the level of economic development: while ALMPs tend to reduce long-run spending in higher-income countries, they may initially add to budgetary pressures in lower-income contexts (see Annex Figure 3.E.1 for a value for money calculation for a poorer hypothetical country).

  Overall, the findings suggest that countries allocating a larger share of social expenditure to ALMPs have been better able to reduce child poverty and severe material deprivation. However, the aggregate nature of the data does not allow conclusions about which programme types are most effective. Existing evidence suggests that training and skills-development programmes may generate particularly strong long-term returns by improving earnings potential and labour market matching (see Section 3.5). At the same time, the persistence of in-work poverty across many OECD countries highlights that employment support alone is unlikely to lift all poor families out of poverty. To maximise their impact on children's living standards, ALMPs therefore need to be complemented by policies that ensure employment translates into adequate living standards for families with children.

- **Making work pay can further strengthen impacts on living standards**. Reducing effective tax rates on labour income for low-income families have the potential to lower the risk of deep income poverty (as captured by "anchored" poverty rates) and to translate into lower exposure to material deprivation but this depends strongly on their design. For example, in the hypothetical case of single parents considered in the analysis, reductions in effective tax rates for single parents increasing their working hours from part-time to full-time employment are associated with lower rates of severe material deprivation. By contrast, lowering the effective taxation of earnings when moving from unemployment to full-time employment at two-thirds of the average wage shows no significant association with reductions in severe child material deprivation. This suggests that, for single-parent families, reducing effective tax rates may have a stronger impact on material deprivation when it enables parents who are constrained to part-time work to increase their working hours.

  Findings for couple families point in the opposite direction. In the hypothetical case analysed, decreases in effective tax rates when the second parent moves from unemployment into full-time employment are associated with lower rates of severe material deprivation, whereas reductions in effective tax rates linked to transitions from part-time to full-time employment do not show a similar

association. This suggests that lowering the effective taxation of earnings for second earners entering employment may play a key role in reducing severe material deprivation in couple families.

Taken together, these findings indicate that the potential of tax-benefit design to contribute to reductions in child poverty depends on several factors: the definition of poverty considered (income poverty or material deprivation),[14] the income groups targeted, and the specific labour market transitions involved. Policies that reduce effective tax rates therefore need to take into account the different constraints faced by single-parent and couple families in moving into employment or increasing their working hours.

Health spending improves children's living standards and eases fiscal pressure, while other in-kind benefits involve trade-offs

Broader public services available to the population at large – such as healthcare and social housing – can reduce financial strain on families and indirectly support parental employment and contribute to a greater efficacy of social spending in lowering child income poverty and material deprivation rates. The results of the empirical analysis indicate a high potential of these types of in-kind spending to achieve longer-term improvements in children's living standards in low-income families, suggesting that such services can reduce barriers to employment for low-income parents in addition to their possible benefits in the primary outcomes that these policies target. However, the findings also point to possible caveats for each measure, drawing attention to the need for effective policy design and implementation if they are to contribute to child poverty reduction and fiscal moderation. More specifically:

- **Health spending, a major component of in-kind social expenditure, appears particularly effective at reducing deeper forms of child poverty and supporting low-income families.** A one-standard-deviation increase in the share of social spending allocated to health represents a sizeable increase in spending (around 9 p.p. of social expenditure) due to the large shares of social expenditure allocated to healthcare and important sample variations. Consequently, it is associated with a substantial additional reductions in anchored child poverty (-4.1 p.p., doubling social spending effectiveness compared to the simulation in which the social spending mix remains unchanged) and in child severe material deprivation (-3.1 p.p., raising social spending effectiveness by 76%), as well as with lower overall spending pressures (-11%). The relationship with relative child income poverty is more nuanced, however. Higher health spending is associated with stronger reductions in relative child poverty in countries with lower overall levels of social spending, suggesting that health services may reach low-income families particularly effectively in such contexts where overall support remains more limited. By contrast, this association weakens in higher-spending countries, which may reflect shifts in the composition of health spending away from measures that are more strongly targeted at low-income households.

  Although the precise mechanisms cannot be directly identified, higher health spending likely improves access to services, especially for low-income families who might otherwise forgo care due to high out-of-pocket costs. Better access to timely and preventive healthcare can help avoid the development of more serious conditions and support parents' ability to remain in work and earn income. The observed moderation in spending pressures may also reflect employment-enhancing effects, which reduce reliance on cash transfers, including incapacity-related benefits.
- **In-kind spending on housing, incapacity-related and other social policy areas (e.g. social assistance benefits) contributes to reducing child poverty but is accompanied by higher public expenditure.** A one-standard-deviation increase in the share of social spending devoted to these measures (around 3.5 p.p. of per-capita social spending) is associated with an increase in social spending efficacy to mitigate child relative poverty by 20% (an additional -0.3 p.p. compared to the scenario of increasing social expenditure without changing the policy orientation), alongside larger declines in anchored child poverty (-1.6 p.p., representing an increase in spending efficacy

by 40%) and child severe material deprivation (-2.1 p.p.). At the same time, these increases are linked to higher overall social spending pressures (+5.8%), indicating that such benefits tend to complement rather than substitute for other forms of support. As a result, this type of in-kind provision can be a useful additional tool for assisting children in the poorest households, but careful targeting is essential to limit the additional spending pressures these measures may generate.

Income redistribution effectively reduces less severe forms of child poverty, but entails substantial spending pressure

Income redistribution policies can substantially lower child income poverty, particularly at moderate levels of deprivation, but they are generally less effective in addressing the deepest forms of poverty and tend to place upward pressure on public spending. Specifically:

- **Two complementary channels drive poverty reduction.** Vertical redistribution directs resources toward low-income households regardless of household type, which indirectly benefits children because families with children are overrepresented among the poor. Horizontal redistribution provides additional, child-specific support to households with children – through universal or means-tested benefits or other targeted transfers – helping to offset the costs of raising children and, for low-income families, often lifting disposable income above the poverty threshold. In practice, effective systems combine both approaches by targeting poor households while scaling support for families with children.
- **Direct income transfers are main drivers of poverty reduction but design matters.**
  - **Tax-break for families**. Reductions in personal income taxes granted to families with children show mixed associations with child poverty reduction, depending in part on the overall level of social spending and the objectives these tax measures are designed to serve. A higher share of spending on family-related tax breaks (as a percentage of GDP) appears to strengthen the poverty-reducing impact of social spending in lower-spending countries where social supports are scarce, but is less effective than the average spending mix in higher-spending contexts. Moreover, regardless of the overall level of social expenditure, such tax breaks show no significant association with reductions in child material deprivation, suggesting that they are broadly as effective as other forms of spending. This pattern is consistent with the design of most child-related tax reliefs, which tend to benefit a broad range of families as spending increases – including higher-income households – rather than being tightly targeted at low-income families or at reducing poverty.
  - **The volume and progressivity of cash benefits distributed to all households reduce child income poverty (including deeper "anchored" poverty)**. For a given tax structure, a one-standard-deviation increase in average benefit size (around 6 p.p. of disposable income) is associated with a 1.2 p.p. reduction in child relative poverty, increasing the poverty-reducing effectiveness of social spending by around 80% relative to the baseline policy configuration. In addition, each one-standard-deviation increase in the share of benefits directed to the bottom 30% of the income distribution – a broader group than those categorised as income poor – is associated with a further 1.1 p.p. reduction in child relative poverty. Similarly, a one-standard-deviation increase in both, average benefit size and the share that is distributed to the bottom 30% is associated with a 1-p.p. decline in child anchored poverty rates overall (see specification 8 in Annex 3.D).
  - **Targeting support towards low-income families helps reduce income poverty, but is less suited to addressing material deprivation.** Concentrating income transfers on the poorest households is particularly effective in reducing anchored child poverty: a one-standard-deviation increase in the share of cash benefits going to the bottom 30% of households is associated with a 3-p.p. reduction (increasing social spending efficacy by 80%). Conversely,

increasing the tax burden on low-income households is linked to higher anchored poverty rates, underscoring the risks posed by regressive financing structures.

However, stronger targeting towards low-income families – as measured by the share of cash benefits going to the bottom 30% of households – reduces the effectiveness of social expenditure in addressing severe child material deprivation in high-spending contexts. Similarly, Figure 3.9, Panel C indicates that the RED index, which captures the extent of redistribution towards poorer households, lies above to the zero line. This suggests that greater redistribution towards low-income families can come at the cost of effectively addressing severe material deprivation among children.

As discussed in Section 2.1, many materially deprived children live in households with incomes above standard poverty thresholds and may therefore receive little or no support when benefits are more narrowly concentrated on the lowest-income groups. This points to an important policy trade-off: while stricter targeting can be effective in reducing income poverty and containing spending pressures, it may be less well suited to addressing material deprivation more broadly.

- **Horizontal redistribution towards families with children further reduces poverty, but effects vary by family size and spending levels.** Greater income support for families with children, relative to otherwise similar childless households, is associated with reductions in child relative poverty of around 1.4 to 1.8 p.p. – equivalent to increasing the poverty-reducing effect of the simulated increase in social spending by around 95-120%. The association is particularly pronounced in countries with higher levels of social expenditure where the size of transfers is greater. No significant association is found with child deeper (anchored) poverty, possibly because benefit levels are too low or because benefits' take-up among the poorest households remains limited (see further discussion in the conclusion).

  Reductions in severe material deprivation depend on the overall level of spending: in lower-spending systems, transfers are often too small to reach the most disadvantaged children. As social spending increases, the transfers reaching severely deprived children are likely larger, and are therefore associated with lower rates of severe material deprivation among smaller families. However, for families with three children, the results suggest that the level and design of income transfers remain insufficient to meaningfully reduce severe material deprivation among children, even at relatively high levels of social expenditure. This pattern is consistent with the view that, at lower levels of social expenditure, income support primarily aimed at narrowing living-standard gaps between families with and without children is often too limited in size or insufficiently accessible to reach children experiencing severe economic disadvantage.

- **As welfare states mature and social spending levels increase, family cash benefits effectively mitigate relative poverty but they become less decisive for material deprivation.** Increasing the role of family cash transfers in the policy mix enhances the social spending effectiveness at reducing child relative poverty. A one-standard-deviation increase in the share of spending allocated to families in cash further reduces child relative poverty by 1.8 p.p. (more than doubling (+120%) the effect of increasing social spending alone), with stronger results at higher levels of social spending where transfers are larger.

  At the same time, the effectiveness of a strong policy orientation towards family cash benefits in reducing deprivation diminishes at higher levels of social spending, where complementary policies – such as in-kind services, healthcare, and employment supports – play a larger role. Consistent with this, evidence from the present analysis suggests that in-kind transfers and health-related spending are often more directly linked to reductions in material deprivation than cash family benefits.

- **Child-related support for older children may have greater scope reduce poverty.** Analysing family cash benefits by children's age suggests that the mixed results of family cash spending are driven by older children: directing a larger proportion of social spending toward children in middle childhood and adolescence is linked to additional reductions in relative child poverty rates. At the same time, greater spending during these periods of childhood is associated with higher rates of severe material deprivation, suggesting that benefits at these ages may be targeted more towards lower-income families or be insufficient in size to cover the material needs of older children. By contrast, increased spending on the early years appears as effective as social expenditure on average across all three poverty outcomes, pointing towards a broadly efficient allocation and distribution of family cash benefits for young children in OECD countries.
- **However, income transfers tend to raise social spending pressure**. While cash transfers are effective in reducing poverty directly and timely, they tend to add more pressure on social spending than other social policies. Income transfers alleviate hardship but appear to generate weaker feedback effects than other forms of social expenditure, which would durably reduce future spending needs. In particular, they do not consistently translate into higher employment or a reduced demand for other public services, meaning that increases in transfers typically add to overall expenditure pressures. These results do not imply that the public returns to spending on family benefits are negative. Instead, they suggest that social income transfers are related to higher social expenditure levels than other child-poverty reducing policies,

  At the same time, stronger targeting of benefits towards low-income households can help moderate spending pressures as GDP grows. A one-standard-deviation increase in the share of social benefits received by the bottom 30% of households is associated with a 2.6% reduction in spending pressure in the value-for-money simulations (Figure 3.9). However, as highlighted above, the trade-off is that stricter targeting may reduce the effectiveness of transfers in addressing severe child material deprivation.

Comparing the value for money of equivalent investments (in monetary terms) across social policy domains

As countries seek to improve child outcomes while maintaining fiscal sustainability, an important question is where additional social spending should be directed. Figure 3.10 addresses this issue by comparing the value for money of allocating the same amount of additional spending to different social policy domains. Unlike the previous value for money simulations, which examined increases of one standard deviation in each policy area (representing different absolute amounts of spending), the simulations here compare *identical* increases in spending across policy domains, thereby providing a more direct assessment of their *relative effectiveness* in reducing poverty and containing long-term spending pressures.

Specifically, Figure 3.10 shows the estimated additional effects of raising the share of total social spending allocated to a given policy area by one p.p. of social expenditure for a given social spending increase by half a standard deviation (representing around 11 years of expenditure growth on average, based on historical trends). In addition, the figure indicates for each policy domain, to what extent changing the composition of social spending along with a GDP per capita increase by half a standard deviation is associated with lower social spending levels than the rise in GDP alone.

The poverty-reducing impact of reallocating social spending varies substantially across policy areas and poverty measures. The estimates reported in Figure 3.10 confirm that the effectiveness of social spending depends not only on the amount invested, but also on how resources are allocated across policy domains.

Expanding investment in ECEC to increase participation[15] emerges as the most effective policy option for reducing child relative income poverty. Allocating an additional one p.p. of total social expenditure to ECEC increases the poverty-reducing effectiveness of social spending by an additional 0.74 p.p. (around 50%

higher than the increase in social spending alone). This makes ECEC the strongest performer among all policy areas considered, outperforming both family cash benefits and ALMPs. For instance, allocating an additional p.p. of social expenditure to cash benefits for families as social spending increases is linked to an extra 0.41 p.p. reduction in child relative poverty compared to a proportional increase in social spending across policy areas. The finding is consistent with the important role that affordable childcare plays in supporting parental employment and increasing household incomes.

However, the effectiveness of ECEC investment differs markedly when considering deeper income poverty and severe material deprivation. Its impact on anchored child poverty depends strongly on the level of social expenditures and the maturity of ECEC systems. In countries with relatively low levels of social expenditure, increasing the share of spending devoted to ECEC is associated with a reduction in the effectiveness of social spending in reducing anchored poverty. This suggests that reallocating resources towards childcare may come at the expense of policies that provide more immediate support to families experiencing deep poverty. By contrast, in countries with more developed welfare states and extensive ECEC systems, where enrolment rates and maternal employment are higher (see Annex 1.A), additional investment in ECEC substantially increases the effectiveness of social spending in reducing anchored poverty.

A similar pattern emerges for severe child material deprivation, although in the opposite direction. In lower-spending welfare states, increasing the share of expenditure devoted to ECEC is associated with improvements in the effectiveness of social spending in reducing material deprivation, reflecting the important contribution that access to childcare can make. However, these gains diminish sharply as welfare systems mature. In countries with average or high levels of social expenditure, further expansion of ECEC becomes markedly less effective than other policy options for reducing severe material deprivation. In these contexts, the challenges faced by materially deprived families appear to relate increasingly to housing conditions, health needs and other forms of material hardship that childcare services alone cannot address.

By contrast, health services, other in-kind services and ALMPs emerge as the policy areas most consistently associated with reductions in anchored poverty and severe material deprivation. For anchored poverty, allocating a larger share of social expenditure to ALMPs generates the largest increase in spending effectiveness, followed closely by health spending and other in-kind services such as housing, incapacity-related benefits and social services. Allocating an additional one p.p. of the social spending mix to ALMPs when spending expands by half a standard deviation enhances the effectiveness of the social spending increase by an additional -0.6 p.p. (17% higher than the effect of increasing social spending proportionally across policy domains). In comparison, an additional p.p. of social expenditure directed to in-kind spending on incapacity-related, housing and other social is linked to a further reduction in child anchored poverty by 0.5 p.p. (corresponding to a 12%-increase in overall spending effectiveness).

For severe material deprivation, other in-kind services produce the strongest gains (an additional -0.6 p.p., enhancing spending effectiveness by 14%), while shifts towards ALMPs and health spending also improve spending effectiveness (by an additional -0.4 and -0.3 p.p., respectively). These findings suggest that policies addressing employment barriers, health needs and families' material living conditions are particularly important for tackling deeper and more persistent forms of disadvantage. In contrast, a greater use of family cash benefits in the policy mix as spending increases is linked to reductions in social spending effectiveness (+0.4 p.p., lowering spending effectiveness by 9%).

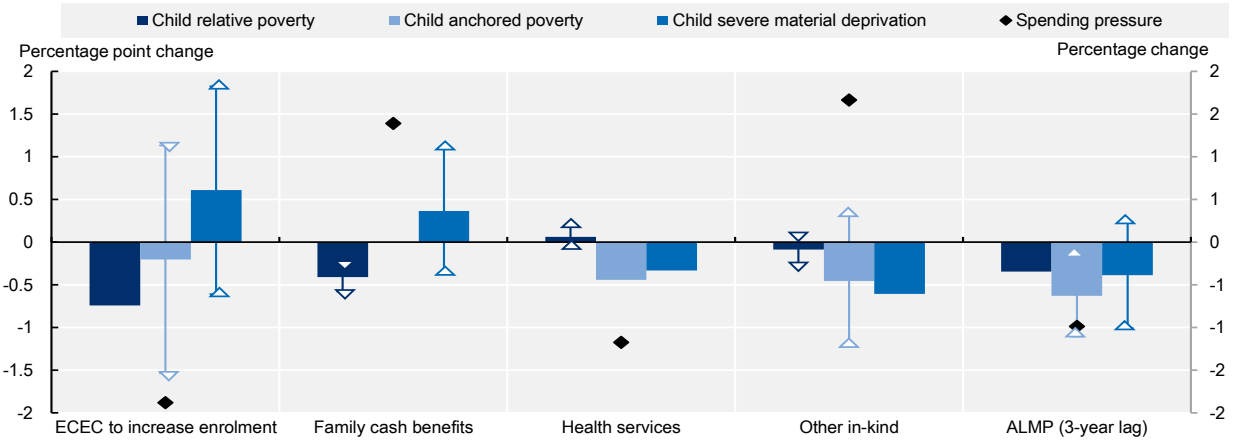
Moreover, similar patterns emerge for long-term spending sustainability. Greater investment in expanding ECEC coverage is associated with lower long-term spending pressures in more mature welfare states (1.9% lower social spending – a reduction in additional social spending by one fifth compared to the projected expenditure growth associated with an increase in GDP and no change in the allocation of social spending), where higher parental employment and stronger labour market attachment increasingly offset the costs of service provision. In less developed economies, however, expanding ECEC may initially

increase social expenditure further as systems are developed and other policy supports remain scarcer (see Annex Figure 3.E.1). Health spending and active labour market programmes (ALMPs) also help contain long-term spending growth (by an additional 1.2% and 1%, respectively), whereas allocating a larger share of social expenditure to family cash benefits and some other in-kind services is associated with higher future spending (around 1.4% and 1.7%, respectively).

Overall, the comparison across poverty measures highlights an important distinction. Investing a fixed amount of additional spending in ECEC to increase participation rates delivers the largest returns over time for reducing child relative income poverty as well as for child anchored poverty when coverage and the overall level of social expenditure are high. These gains in spending effectiveness are achieved through ECEC's effects on parental employment and earnings. However, when the objective is to reduce severe material deprivation, health, housing, other in-kind services and ALMPs offer better value for money. As welfare systems develop, the marginal contribution of additional ECEC expansion declines for combating severe material deprivation, while the relative importance of policies that directly address families' needs of in-kind services increases.

Figure 3.10. Allocations across policy areas shape spending effectiveness at reducing child poverty and social expenditure levels

Estimated effects of a one-p.p. increase in the share of social expenditure allocated to different policy domains on child poverty outcomes and total social spending levels



Note: *How to read the figure:* The bars capture the predicted p.p. difference in child poverty rates (left-hand scale) resulting from allocating an additional 1% of social expenditure to the respective policy area as the log of per capita social expenditure grows by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policy mix. In other words, it shows the incremental, long-run effect of changes to the spending allocation on the effectiveness of total social expenditure in improving child outcomes, under the assumption that per capita total social spending increases over time. Positive values indicate a decline in overall social spending effectiveness associated with greater spending in the respective policy area, but none of the results represent an absolute increase in child poverty rates. Calculations are based on a hypothetical country with initially average sample values of spending allocations and logged per capita social spending. In addition, where results are sensitive to the level of social spending, the rectangular bars indicate values of an equivalent simulation for a country with average spending allocations and low initial levels of logged per capita social spending (one standard deviation below average). Similarly, the triangles represent the predicted values for countries with initial logged per capita social spending one standard deviation above (upper triangle) and below (lower triangle) the sample average.

Equivalently, the black diamonds display the percentage change in additional projected social spending (right-hand scale) resulting from allocating an additional 1% of social expenditure to the respective policy area as the log of GDP per capita increases by half a standard deviation (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any change to the policy mix. The diamonds hence represent the per cent change in the projected growth of long-run social spending following a change in the spending allocation, under the assumption of GDP per capita growth over time. These spending pressure results are displayed only for average sample values of the initial spending allocation and logged GDP per capita, and do not show any possible dynamic effects related to economic growth. Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s. See Section 3.3 "Assessing value for money" for a full description of the methodology.

"Other in-kind benefits" groups expenditures on housing, incapacity-related and other social policy areas. The simulated increase in spending on ECEC is assumed to be invested entirely in expanding enrolment, namely to finance an expansion of pre-primary education and care (ages 3-5) by ten per cent, and a rise in enrolment at ages 0-2 with the remainder of the budget (+18 p.p.). The enrolment increases corresponding to a one-p.p. increase in the share of social spending dedicated to ECEC are estimated based on the average spending-to-enrolment ratios across countries and years in the sample. An enrolment increase of ten p.p. for children aged 3-5 represents near full enrolment (OECD average enrolment was at 89% in 2023). Example: For a simulated increase in social expenditure over time (corresponding to approximately 11 years), allocating one additional p.p. of social expenditure to health services is expected to reduce the share of children living in severe material deprivation by an additional 0.33 p.p. (to -4.5 p.p. overall) compared to the scenario where social expenditure increases but the spending allocations remain unchanged (-4.2 p.p.). Similarly, as GDP per capita increases over time (and thus, countries' capacity to finance social programmes), per capita social spending is expected to follow its historical upward trajectory. Greater relative investment in health services is associated with a 1.2% reduction in the projected growth of social spending (down to a 7.7% rise) compared to the scenario in which GDP per capita increases, but the allocation of social spending remains unchanged (a half-standard-deviation increase in logged GDP per capita, equivalent to approximately 11 years of growth, is linked to an 8.9% increase in per capita social expenditure under the average policy mix).

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Section 3.3 "Assessing value for money" for a description of the methodology and Annex 3.D for the regression coefficients used in the calculations.

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3.5. Beyond how much we spend: getting policy design right

The findings in this chapter demonstrate the value of combining employment-oriented social policies with other types of in-kind support and income transfers to reduce child poverty. These policy instruments are complementary in that they address different needs of families with children – both in preventing poverty and in supporting exits from it. Each area of support has an independent poverty-reducing effect when considered on its own, but the evidence also shows that the impact of social policy measures is often stronger when different types of support are implemented together. Specifically, the findings from this chapter are consistent with a broad body of evidence showing that a balanced policy strategy – one that combines measures to strengthen employment opportunities and market incomes with redistribution through cash transfers – is the most effective approach to reducing child poverty (Bäckman and Ferrarini, 2010[64]; Whiteford and Adema, 2007[65]; OECD, 2018[33]).

A key contribution of this chapter is to identify specific policy design features that shape effectiveness in reducing child poverty and that exert differentiated pressures on social spending. The analysis also highlights that policy effectiveness is not static, but evolves dynamically as welfare states mature and social expenditure increases. This section situates the empirical findings within the broader evidence on the impact of social policies on child poverty. It also highlights key implementation challenges for designing policy packages that can deliver the greatest value for money – that is, policies capable of enhancing poverty reduction outcomes while containing pressures on government social spending, in line with the patterns identified in the preceding analysis.

Different types of social policy address distinct dimensions of families' needs and operate over different time horizons, making their combination an important determinant of policy effectiveness. Pro-employment measures aim to secure stable earnings and address long-term risks but often take time to produce effects (Card, Kluve and Weber, 2017[57]). Cash transfers, by contrast, respond to immediate and temporary needs while also supporting households' capacity to plan and invest over the longer term. In-kind services play a dual role: they improve living conditions and access to essential services, and they can facilitate labour market participation, particularly for disadvantaged groups. Effective policy design therefore requires combining these instruments in a coherent way, rather than prioritising any single approach in isolation as illustrated in the rest of this section that distinguishes between packages of social policies.

Boosting the poverty-reducing impact of pro-employment policies

The results presented in the previous section show that pro-employment policies are particularly effective in lifting children out of the most severe forms of poverty and that stronger labour market attachment can help contain future social spending pressures. However, the analysis also shows that the relationship between different pro-employment policy levers and child poverty reduction varies. Each policy instrument faces indeed specific challenges in maximising its effectiveness as a tool for poverty reduction and there are specific barriers that could be removed:

Enhancing participation in ECEC services for children from low-income families

ECEC provision alone is not sufficient to address the most severe forms of child disadvantage. This also reflects that, in many countries, ECEC services are not primarily accessed by low-income families (see Chapter 2). Expanding **access and participation among children from low-income and materially deprived households** therefore remains an important policy challenge for strengthening the poverty-reducing potential of ECEC systems. Addressing this challenge requires overcoming a set of interrelated barriers that drive a persistent "Matthew effect", whereby advantaged families benefit first. On the supply side, limited capacity, long waiting lists, and uneven geographic provision mean that better-connected or higher-income parents who can commute, pay higher fees, or navigate application systems more effectively, are more likely to secure places (OECD, 2025[70]). Affordability also remains a major constraint,

as fee structures and poorly targeted subsidies often leave low-income families facing higher effective costs or complex administrative hurdles (OECD, 2020[71]). Demand-side factors also play a role: differences in employment patterns, access to information, language skills, social networks, and the ability to manage irregular hours can significantly reduce uptake among disadvantaged families, beyond differences in parental preferences alone (Wood, Neels and Maes, 2023[72]). Finally, policy design and sequencing matter: expansions that prioritise quality or capacity without simultaneously addressing fees, accessibility, and complementary supports tend to reinforce existing inequalities in access rather than reduce them (Van Lancker, 2023[73]). Child poverty reduction appears to be particularly strong when ALMPs are implemented alongside expanded access to early childhood education and care (ECEC) services. By helping to ease childcare constraints, ECEC enables parents to participate more sustainably in the labour market and to benefit more fully from employment support measures. This complementary effect is consistent with previous findings by Nieuwenhuis (2022[74]) who found that ALMPs are associated with reductions in women's unemployment rates, while greater availability of ECEC is linked to lower inactivity rates among women.

Designing effective tax rates to make work pay

The findings from this chapter suggest that the responsiveness of tax and transfer systems to labour supply decisions significantly shapes the effectiveness of this support, highlighting the importance of strengthening the financial returns to work not only at the point of labour market entry but also when working parents increase their labour supply. Even where clear reductions in income poverty are not observed, higher take-home pay can reduce material deprivation, which – as shown earlier in the chapter – affects many families whose incomes remain above the poverty line. Furthermore, these increases in take-home pay do not appear to add to social spending pressures, which may highlight that they are well targeted towards lower income families and that they are likely to generate a lower overall reliance on social benefits by incentivising greater labour market activity. More broadly, strengthening in-work incomes can help reduce in-work poverty while containing pressure on social spending by complementing earned income. Importantly, the available evidence that income supplements must be strictly conditioned on employment to avoid labour-supply disincentives among low-income families remains limited (Box 3.5).

Box 3.5. Reconciling work incentives and income support for low-income families: is there a trade-off?

A frequently cited concern in the design of income support for families with children is that lump-sum cash transfers may reduce parental labour supply through income effects, by lowering incentives to work or shifting time away from paid employment. In response, many countries have chosen to link part of family support to employment, through in-work tax credits or employment-conditional child allowances, with the aim of simultaneously supporting family incomes and strengthening labour-market attachment among low-income parents. In practice, evidence from OECD countries indicates that such work-conditioned instruments contribute to substantial reductions in child poverty – particularly deep child poverty – while also increasing employment among disadvantaged groups (Michelmore, 2025[75]). For example, evaluations of the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) in the United States show that these work-linked refundable credits lifted millions of children out of poverty in the early 2010s; and research indicates that incorporating the employment-boosting effect of these credits nearly doubles their measured anti-poverty impact for low-income single mothers when employment gains are taken into account (Marr et al., 2015[76]). Beyond short-term income effects, exposure to the EITC during childhood has been shown to generate lasting benefits, including reduced reliance on public assistance in adulthood and a lower probability of being in or near poverty by around 7 p.p. (McInnis et al., 2023[77]).

At the same time, recent quasi-experimental evidence suggests that removing work requirements from child-related tax benefits has very limited adverse effects on labour supply, calling into question the necessity of strict work tests to sustain employment. A 2024 study using administrative data from California finds that extending a child tax credit to non-working parents had negligible effects on maternal labour-force participation, with estimated changes statistically indistinguishable from zero and confidence intervals ruling out even moderate employment declines (Goldin et al., 2024[78]). Similarly, evaluations of the temporary 2021 expansion of the US Child Tax Credit – which substantially relaxed work conditions while increasing benefit size – find small, inconsistent, and statistically insignificant effects on parental employment, reinforcing the conclusion that unconditional or weakly conditional child benefits do not meaningfully disincentivise labour supply among low-income parents (Ananat et al., 2024[79]). Comparable results are reported for Canada, where the introduction and expansion of the work-unconditional Canada Child Benefit had little to no detectable impact on the labour supply of either single or partnered mothers (Thévenon, Clarke and Simard-Duplain, 2024[80]).

More broadly, while activation requirements can contribute to more efficient public spending and help limit long-term benefit dependency, they also entail risks. If poorly designed or overly stringent, such requirements may push vulnerable individuals into low-wage or poor-quality jobs, constrain long-term earnings prospects, and place disproportionate burdens on parents facing multiple barriers to employment (Mroczka, Pacifico and Chen, 2025[81]).

Taken together, this evidence suggests that countries seeking to strengthen support for the poorest families could consider expanding unconditional child transfers. The absence of work conditions is particularly relevant for families experiencing deep poverty, who are often weakly or insecurely attached to the labour market and have limited access to other income sources (Koebel and Stabile, 2024[82]).

Strengthening the role of active labour market policies for parents

Increases in the share of social spending devoted to ALMPs are associated with lower child income poverty rates, including its more severe forms, as well as exposure to severe material deprivation. Nevertheless, further research is needed to consolidate this finding and to identify which specific components of ALMPs are most effective in improving parents' labour market outcomes in ways that sustainably reduce children's exposure to income poverty and material hardship.[16] In addition, while ALMPs appear effective in tackling poverty, including its most severe forms, an important challenge for further strengthening their impact lies in addressing the rise in in-work poverty observed in many countries, which limits the ability of employment alone to lift families with children out of poverty.

The poverty-reducing potential of ALMPs ultimately depends indeed on the quality and accessibility of the jobs created in the labour market. Their effectiveness hinges on whether economic growth generates sufficient employment opportunities for socio-economically disadvantaged parents, with wages high enough to lift families out of poverty – conditions that are not always met. Evidence shows that job creation can be unevenly distributed, often concentrated among adults with higher levels of education and stronger attachment to the labour market. In several countries, employment growth has coincided with an expansion of low-quality, low-paid work (OECD, 2015[83]; Corluy and Vandenbroucke, 2017[84]), see Chapter 2. As a result, rising employment does not necessarily translate into significant movements of children out of poverty if in-work poverty increases, particularly among parents in low-paid occupations. For example, Bárcena-Martín (2018[85]) found that across European countries, a one-p.p. increase in the working-poor rate raises a child's odds of being income poor by 5.6%, whereas a one-p.p. increase in parental employment reduces the odds by only 2.4%. As highlighted earlier in this chapter, in the average OECD country around one in ten families with at least one working adult remains income poor, confirming that parental employment does not automatically guarantee protection from poverty.

These findings underscore the importance of strengthening ALMPs and work-family support policies so that parents have opportunities to upskill, progress in their careers, and increase their earning capacity. Ensuring that employment provides living wages, namely wages that are sufficient for families with children to live above the poverty line remains a central challenge (Balestra, Hirsch and Vaughan-Whitehead, 2023[86]). This is particularly important given the rise in in-work poverty observed in many countries. As highlighted in Chapter 2, while minimum wage policies have contributed to protect households from income poverty – including severe income poverty – income transfers to poor households have declined in several countries. Taken together, these results highlight the need to complement employment policies with well-designed income support measures that supplement earnings. Such measures can help ensure that families with children have sufficient resources to meet their needs while preserving the financial incentives associated with work.

Box 3.6. What does the evidence say about the effectiveness of active labour market policies?

The evidence base on the effectiveness of active labour market policies (ALMPs) is strongest for employment outcomes. However, impacts are not immediate: evaluations show that average employment effects are close to zero in the short term but become positive two to three years after programme completion (Card, Kluve and Weber, 2017[57]).

The effectiveness of ALMPs varies by programme type and over time. "Work-first" approaches, which emphasise rapid entry into employment through job-search support or job search monitoring tend to generate stable but relatively low impacts over time. "Human capital" approaches such as training programmes often show limited or even negative short-term effects – reflecting time spent out of work – but yield stronger positive impacts in the medium to longer term, especially when the training is aligned with labour market needs. Private sector employment programmes, including wage subsidies and employment incentives, stand out as consistently providing substantial, positive long-run employment effects. By reducing labour costs or supplementing earnings, they aim to facilitate entry into employment and increase disposable income. Public sector employment programmes, including direct job creation schemes, can provide small gains in short-term employment but they generally show negligible or negative effects on long-term employment outcomes .

Programme effectiveness also differs across population groups. Women and long-term unemployed individuals tend to benefit more from ALMPs, while impacts for youth and older workers are typically less positive. There is also evidence that matching programme types to participant characteristics matters: work-first approaches appear more effective for disadvantaged groups, whereas training programmes yield stronger results for the long-term unemployed (Card, Kluve and Weber, 2017[57]).

ALMPs also interact with other policy areas. For example, both ALMPs and early childhood education and care (ECEC) policies contribute to higher female employment, albeit through different channels – ALMPs primarily reduce unemployment, while ECEC reduces inactivity (Nieuwenhuis, 2022[74]). However, evidence suggests diminishing marginal returns when investment in one policy area is already high, indicating some degree of substitution rather than complementarity.

Country-level evidence confirms these general findings. A recent evaluation of ALMP programmes in Slovenia shows that a wide range of interventions – including classroom training, on-the-job training, and wage subsidies – significantly improve participants' employment and earnings outcomes (OECD, 2026[87]). These effects are sustained over time, with positive impacts persisting for at least four years after programme entry. Participants are also less likely to exit the labour force or emigrate, and they experience cumulative net income gains compared with similar non-participants. When broader economic effects are considered, all programme types generate net social gains within a four-year horizon. Evidence on wider social outcomes is more limited. Some programmes, particularly public works, show small positive effects on health and social outcomes for specific groups, but overall differences between participants and non-participants remain modest.

Despite strong evidence on labour market impacts, there is a notable gap in research on the effects of ALMPs on child outcomes. Existing studies are scarce and inconclusive. For example, one study of an employment programme in Madrid finds no significant reduction in material hardship compared with a life-skills intervention (Ayala and Rodríguez, 2013[88]). A small number of earlier studies from the United States suggest that employment may reduce hardship among single mothers receiving welfare (Danziger et al., 2000[89]; 2002[90]), but their descriptive nature and historical context limit the strength of these conclusions (Grant and Prickett, 2023[91]). Overall, the current evidence base remains insufficient to draw firm, causal conclusions about the impact of ALMPs on child well-being or material hardship, although the results from the correlational analysis in this chapter point in this direction.

Investing in health and housing help reduce child material deprivation

While the present analysis indicates that health spending is associated with reductions in child poverty, an important challenge for policy is to identify more precisely which components of health expenditure – beyond broad spending categories – generate the largest poverty-reducing effects. To a lesser extent, a greater policy allocation towards in-kind spending that helps households with housing costs, incapacity-related benefits and spending in other social policy areas (e.g. social assistance) is also associated with lower rates of child income poverty and material deprivation, although without the same moderating effect on overall social expenditure dynamics. This pattern is consistent with evidence showing that non-child-specific benefits – such as housing support – can, in some contexts, be particularly effective in alleviating material deprivation among children (Bárcena-Martín et al., 2017[92]). It should be noted, however, that the data used in this analysis do not capture all forms of housing support. Other instruments, notably social housing, may also play an important role in reducing child poverty and material deprivation, particularly among highly vulnerable groups such as families experiencing homelessness or severe housing insecurity.

Enhancing the effectiveness of income transfers in addressing child poverty

Income transfers through social cash benefits and tax reductions are a key policy lever for reducing child income poverty. They provide a safety net for families unable to work, complement earnings to protect against in-work poverty, and cushion temporary income shocks. By providing greater income stability, cash benefits can also help families plan expenditures and invest in children's health, education and development. Universal child benefits can provide a stable foundation for child income protection, complemented by targeted cash or in-kind support where needed (ILO, UNICEF and Learning for Well-Being Institute, 2024[93]; Waldfogel, 2025[94]; Atkinson, 2011[95]).

Evidence shows that transfers are particularly effective in reducing child poverty among households with low work intensity, multiple children and single-parent families (Chzhen, 2017[96]; Thévenon et al., 2018[8]) as well as single-parent families (Van Lancker, Ghysels and Cantillon, 2015[97]; Bäckman and Ferrarini, 2010[64]). However, living standards among low-income families declined in several OECD countries between the mid-2000s and mid-2010s, particularly among children in very low-income households (OECD, 2018[33]; Thévenon et al., 2018[8]). Chapter 2 also documented a broader weakening of redistribution towards lower-income families, reflecting changes in benefit design and a shift in social spending away from income transfers.

The regression analysis presented earlier finds that, on average, allocating a larger share of social expenditure to family cash benefits is associated with greater reductions in child relative income poverty. Their effectiveness in reducing anchored poverty, however, depends critically on targeting benefits towards lower-income households. The relationship with severe material deprivation is weaker and varies with overall spending levels: while allocating a larger share of social expenditure to family cash benefits and directing a greater share of benefits to the bottom 30% of the income distribution are both significantly associated with lower rates of severe material deprivation when total social expenditure is low (see Annex 1.A), these policies appear less effective than other measures and are linked to reduced overall spending effectiveness in countries with average or larger social budgets. This does not imply that cash support cannot alleviate material hardship: micro-level evidence consistently shows that increases in household income can reduce material deprivation, although effects vary with programme design (see Box 3.7). Moreover, some forms of family-related support, such as supplements embedded in unemployment or housing benefits, are not classified as family cash benefits and may therefore be understated in aggregate spending measures.

Overall, the findings highlight that the effectiveness of cash transfers depends not only on how much is spent, but also on how benefits are designed and targeted. The remainder of this chapter discusses core

design features of cash benefits that enhance their effectiveness in mitigating diverse child poverty risks across diverse family types.

Box 3.7. Effects of income support on material hardship and child outcomes

Recent reviews of the literature examining policy-induced variation in household monetary resources – by Page (2024[16]), Waldfogel (2025[94]), Grant and Prickett (2023[91]) and (European Commission: Directorate-General for Employment, 2026[98]) – provide robust evidence on how different forms of income support affect material hardship and child outcomes. This evidence spans a wide range of instruments, including tax credits, direct cash transfers, unemployment and disability benefits, and near-cash transfers such as food and housing assistance.

Tax credits and direct cash transfers

Tax credits, particularly refundable ones, play a central role in delivering income support to families (Moffitt, 2015[99]). Evidence from Canada shows that increases in child benefits – such as the Canada Child Tax Benefit and the National Child Benefit Supplement – improve children's mental health and educational outcomes, with stronger effects among disadvantaged families (Milligan and Stabile, 2011[100]).

In the United States, evidence on the Earned Income Tax Credit (EITC) points to generally positive, though sometimes uneven, effects on material hardship (Grant and Prickett, 2023[91]). Using variation in state-level supplements, Davison et al. (2018[101]) find that individuals in states without an EITC were more than 15% more likely to report hardship around the tax filing period ($p < .001$), with reductions observed across everyday medical, and financial hardship domains in EITC states. This is consistent with evidence that lump-sum EITC payments – typically received annually – enable households to meet larger or "lumpy" expenditures (such as medical expenses or durable goods), reduce debt, and increase savings (Barrow and McGranahan, 2000[102]; Goodman-Bacon and McGranahan, 2008[103]; Gao, Kaushal and Waldfogel, 2009[104]), thereby alleviating current hardship while also buffering against future shocks. Quasi-experimental studies further indicate that EITC expansions can reduce specific forms of hardship, particularly medical hardship (Kondratjeva et al., 2021[105]), although effects on housing or food hardship are less consistent, likely reflecting the size of transfers relative to these costs. At the same time, a randomised controlled trial of an expanded EITC for low-income workers without children finds no significant reduction in severe material hardship over three years (Miller et al., 2018[106]), despite improvements in income and employment. This suggests that impacts depend on benefit size, target population, and how hardship is measured. Overall, the literature indicates that the EITC reduces material hardship – especially among families with children – through both direct income effects and increased employment (Hoynes, 2019[107]; Hoynes and Rothstein, 2017[108]), although its effectiveness varies across hardship domains and programme design.

Beyond material hardship, increases in income associated with the EITC are also linked to improvements in children's cognitive outcomes, health at birth, and longer-term educational and labour market outcomes (Page, 2024[16]). These effects reflect both higher household resources and changes in parental labour supply, particularly among single mothers. Evidence from welfare-to-work experiments further suggests that increases in income – rather than employment alone – are key to improving child outcomes (Duncan, Morris and Rodrigues, 2011[109]). Similarly, evidence on the Child Tax Credit shows consistent reductions in material hardship, with particularly strong effects among families in poverty (Pilkauskas et al., 2022[110]; Collyer Sophie, Wimer and Harris, 2022[111]). For example, Collyer et al. (2022[111]) find that monthly CTC payments reduced the likelihood of

experiencing hardship by around 9.5%, with larger effects – up to 18% – among families living in poverty.

Across the EU-27, EU tax-benefit microsimulation model (EUROMOD) simulations show that in-cash child benefits substantially reduce child poverty and its severity, lowering the child at-risk-of-poverty rate (AROP) by an estimated 10.6 percentage points on average and the child poverty gap by 5.7 percentage points (European Commission: Directorate-General for Employment, 2026[98]). Their impact on material deprivation is smaller, reducing the share of children deprived of at least one item by around 3 percentage points on average.

Unemployment and disability benefits

Unemployment and disability benefits also play an important role in cushioning income shocks and addressing material hardship. Evidence from the expansion of unemployment insurance (UI) during the COVID-19 pandemic in the United States shows that increased benefit size helped stabilise material hardship among recipients, while hardship increased among non-recipients (Grant and Prickett, 2023[91]). Effects were particularly visible in reduced food insecurity and unmet medical needs. By contrast, evidence on disability benefits indicates that recipients often experience higher levels of hardship than non-recipients, largely reflecting underlying health conditions and greater needs rather than programme ineffectiveness (Schmidt and Danziger, 2012[112]). This highlights the importance of accounting for selection into programmes when interpreting estimated impacts.

Near-cash transfers (in-kind benefits)

Near-cash transfers, such as food and housing assistance, also contribute to reducing hardship and improving child outcomes, although typically to a lesser extent than direct cash transfers. Evidence on the Supplemental Nutrition Assistance Program (SNAP) shows that it reduces both food insecurity and non-food hardship, including housing and utility hardship (Shaefer and Gutierrez, 2013[113]; Han, 2016[114]). Studies exploiting variation in the historical rollout of the programme find that early-life exposure improves birth outcomes, long-term health, and economic self-sufficiency, with particularly strong effects when exposure occurs during early childhood (Hoynes, Schanzenbach and Almond, 2016[115]). Housing assistance can similarly reduce financial pressure by lowering rent burdens, although evidence on its effects on children's outcomes is more mixed. For example, a large housing voucher lottery in Chicago finds limited impacts on children's long-term outcomes, possibly reflecting the specific characteristics of the target population and programme design (Jacob, Kapustin and Ludwig, 2015[116]).

Other cash transfer programmes

Evidence from other cash transfer programmes, including those with weaker links to employment, confirms the importance of income effects. Historical evidence from the Mothers' Pension programme in the United States shows long-term gains in health, education, and earnings among children who received transfers (Aizer et al., 2016[117]). Evidence from negative income tax experiments conducted in the 1970s point to improvements in child health and educational outcomes, although effects on long-term outcomes appear limited when income gains are not sustained over time (Price and Song, 2018[118]). More recent evidence on Supplemental Security Income (SSI) suggests that while transfers are substantial, impacts on early child development are less clear, reflecting both small sample sizes and the complex needs of recipient families (Guldi et al., 2022[119]).

Improving the adequacy of benefits for different family types, and sustaining it over time

Programme effectiveness is contingent on the **alignment of support with families' needs and benefit adequacy**. This implies ensuring that benefit levels reflect household circumstances, including family structure and size, as children in single-parent and large families face disproportionately high risks of poverty and deprivation (see Section 3.1). It also implies maintaining support across key stages of childhood and into the transition to adulthood, when poverty risks often remain elevated, despite wide cross-country differences in the duration and design of child benefits (Box 3.8). In addition, effective alignment must take into account increasingly complex family arrangements, such as reconstituted families, where parents' financial responsibilities may extend beyond the household (Rapp and Thévenon, 2025[29]; Miho and Thévenon, 2020[120]). Families with disabilities also require additional and tailored support to compensate for higher costs and greater poverty risks related to the disability. Given the multifaceted drivers of material hardship – including low wages, insufficient social protection, and broader structural factors – combinations of programmes can be particularly effective. Several studies find that participation in multiple forms of support is associated with larger reductions in hardship (Grant and Prickett, 2023[91]; Guio et al., 2022[121]).

This chapter's regression analysis points to potential efficiency gains in the design of family cash benefits for older children specifically. The results suggest that allocating a greater share of child-related support to families with preschool children does not alter the overall social spending effectiveness for any of the three poverty measures. The allocation and distribution of family cash benefits during the early ages therefore appears broadly adequate in OECD countries. Instead, directing greater spending shares to family benefits during middle childhood and adolescence is associated with further reductions in children's exposure to relative income poverty on the one hand but with a reduced overall spending effectiveness with respect to severe material deprivation on the other hand. This could reflect that child benefits at older ages tend to be more targeted towards income-poor families thus excluding households experiencing severe material deprivation above the income poverty threshold. It might also point to greater needs for support and thus a lower relative effectiveness of cash benefits to address material deprivation among older children and adolescents, whose deprivation levels are often comparable to, or higher than, those of younger children (see Figure 3.8).

Box 3.8. Main characteristics of family benefits

Families' needs also evolve over the child life course. As a result, many countries provide additional or differentiated support depending on children's ages – for example, by targeting some benefits to families with pre-school children or offering supplementary support when children reach school age. Such age-sensitive designs aim to reflect variations in costs, caregiving demands, and labour-market constraints faced by parents at different stages. There are also important cross-country differences in the definition of resources used for means-testing. While most systems rely primarily on earned and transfer income, some countries additionally apply asset tests, reducing or withdrawing benefits once financial assets exceed specified thresholds (OECD, 2024[122]; OECD, n.d.[123]).

Eligibility criteria for child benefits and other income supports play a critical role in determining their effectiveness in reducing child poverty and material deprivation. Key design features include the age range over which benefits are paid and the conditions attached to receipt, such as means tests and/or work requirements.

In most OECD countries, at least one child or family benefit is payable up to age 17. However, in several countries continued eligibility beyond compulsory schooling is conditional on children being enrolled in education and classified as dependent on parental income (OECD, 2024[122]; OECD, n.d.[123]). In some cases, benefits are payable above age 18 only if young people reside in the parental household and remain financially dependent. While a few countries provide higher benefit amounts as children grow older, this age-profiling is the exception rather than the rule.

This design contrasts with observed poverty risks and costs over the child life course. In many European countries, child poverty rates among adolescents aged 11 and over are at least as high as, and often higher than, those for younger children (see Chapter 2). Moreover, detailed evidence on the cost of raising children shows that adolescents and dependent young adults aged 14-24 generate expenses that are at least as high as those of children under age 5 (Rapp and Thévenon, 2025[29]). In several countries – including Germany, Ireland, Spain and the Netherlands – costs increase with age in couple households, while in France this pattern is observed among single-parent families.

These findings indicate that financial pressures on families do not diminish as children grow older. Aligning benefit design more closely with observed costs and poverty risks therefore implies ensuring adequate and continuous income support for families with adolescent children, rather than concentrating support primarily in the early years.

Source: OECD (n.d.[124]), "How do countries calculate tax liabilities and social benefit entitlements?", https://www.oecd.org/en/topics/sub-issues/income-support-redistribution-and-work-incentives/how-do-countries-calculate-tax-liabilities-and-social-benefit-entitlements.html and OECD (n.d.[125]), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html.

Moreover, **maintaining benefit adequacy over time** is essential. Beyond establishing appropriate payment levels at the outset, financial supports must be periodically adjusted to account for increases in the cost of living. In many systems, child benefits are not automatically indexed to inflation, leading to a gradual erosion of their real value and weakening their capacity to protect families facing deep poverty (Box 3.9).

Box 3.9. Indexation of child and family benefits in OECD countries: practices and implications

Across OECD countries, there is no single standard approach to the indexation of social benefits, including child and family benefits. Instead, countries rely on a mix of automatic inflation indexation, discretionary uprating, and ad hoc adjustments, leading to substantial cross-country variation in how well benefit levels are protected against rising prices over time (see Annex 3.F for a comparison of selected countries).

In a first group of countries, child and family benefits are automatically indexed to inflation or a cost-of-living index, helping to preserve their real value. This is the case, for example, in Belgium, where child benefits are indexed to a price index (the "health index") through automatic mechanisms – e.g. automatic increases tied to a price index when a pivot point is reached, and in Canada, where the Canada Child Benefit is updated annually based on the Consumer Price Index. Luxembourg also operates an indexation mechanism linked to its general indexation system. Automatic indexation reduces the risk of real-term erosion and ensures predictable protection of purchasing power, but it implies higher and more responsive fiscal costs during inflationary periods (OECD, n.d.[124]; 2023[126]).

In many other OECD countries, however, indexation is partial or discretionary rather than automatic. France, for instance, typically revalues family benefits annually based on inflation forecasts through the adjustment of the *Base mensuelle de calcul des allocations familiales*, but these increases are set by decree and may lag behind actual inflation (HCFEA, 2023[127]). Germany, Austria, Italy, Spain and the United Kingdom rely largely on periodic legislative or budgetary decisions to uprate child benefits, with no strict rule tying increases mechanically to inflation. As a result, benefit levels in these countries have often lost real value over time, particularly during periods of high inflation, unless governments introduced exceptional or one-off increases (OECD, 2023[126]; n.d.[124]).

Overall, OECD evidence shows that while many countries adjust child and family benefits with reference to inflation, automatic and full indexation remains far from universal. Where indexation is discretionary, child benefits are more exposed to political and fiscal constraints, increasing the risk of a gradual erosion in their real value. This has important implications for the effectiveness of family policies in protecting living standards and reducing child poverty, particularly during periods of high inflation.

Indexation to inflation also often implies that benefits tend to grow more slowly than nominal wages, leading to a declining share of GDP over time. In France, for example, average wages per capita have increased by around 0.5 to 1 p.p. faster than consumer prices each year since 2012. As a result, price indexation has a twofold effect: first, eligibility for means-tested benefits gradually erodes as incomes rise faster than thresholds; second, benefit amounts become less dynamic than average nominal wages. While this mechanism dampens expenditure growth, it may also create fiscal space to rebalance priorities or finance policy reforms (IGAS, 2021[128]).

Beyond child benefits, the indexation of personal income tax (PIT) parameters, social security contributions (SSCs), and other social benefits also plays a critical role in determining how redistribution adjusts to changes in the cost of living (OECD, 2023[126]). In several countries, inflation-adjustment rules differ across these three policy levers. As of 2022, fewer than half of OECD countries (17) automatically indexed PIT parameters, while adjustments were discretionary in 20-one countries. Most countries indexed SSCs, and around half automatically indexed social benefits. Overall, 12 OECD countries applied automatic indexation to PIT, SSCs, and benefits alike, whereas ten relied entirely on discretionary adjustments across all three categories.

Targeting income support: Trade-offs between spending control and reducing material deprivation

There is considerable diversity in how income support systems for families are designed, with marked differences across countries in the degree of income targeting embedded in these schemes and in the size of support provided to low-income families. In some cases – such as Canada, Ireland and Poland – benefits are strongly concentrated at the bottom of the income distribution, with very high support for low-income families followed by a steep taper as income rises (Koebel and Stabile, 2023[129]; 2024[82]). In others, including Denmark, France and Germany, benefit levels for lower-income families are comparatively lower and decline more gradually with income, resulting in a broader distribution of support across the income distribution.

The findings in this chapter extend earlier evidence by highlighting the trade-offs associated with targeting income support towards low-income households. On the one hand, stronger targeting of social benefits can help contain spending pressures linked to economic development and the growing needs of ageing populations. This likely reflects the fact that higher income transfers do not typically generate feedback effects that permanently reduce future social spending needs. While transfers can alleviate poverty and material hardship, they may not substantially reduce demand for other forms of public spending, such as healthcare, education, housing support or pensions, nor do they necessarily translate into higher employment rates that would ease pressure on overall social expenditure. At the same time, increasing the share of cash benefits directed to the bottom 30% of the income distribution – regardless of the average size of the total benefits – is associated with greater effectiveness in reducing both relative child income poverty and deeper poverty, as captured by poverty rates anchored in 2005.

However, while tighter targeting of income transfers towards low-income households can be effective in reducing income poverty, it is not associated with reductions in children's exposure to severe material deprivation in all contexts. When spending levels are high, targeting income benefits appears less effective than other social policies at mitigating child severe material deprivation. This finding is not entirely surprising. As shown in the first section, material deprivation extends beyond income poverty: in many countries, a significant share of materially deprived children live in households that are not classified as income poor. Consequently, policies that focus narrowly on income-based targeting may miss some families experiencing substantial living standard constraints.

Making income support more effective in reducing child material deprivation may therefore require **considering eligibility criteria beyond income thresholds alone**. Factors that shape the risk of deprivation could be taken into account, including income levels above the relative poverty line, family composition – particularly large families and single-parent households – and, in some countries, the age of children, which can influence the risk of deprivation. Other indicators, such as housing cost overburden, lack of access to a vehicle, or absence of essential household appliances, could also help align support more closely with households' actual living conditions. However, incorporating such criteria requires significant administrative capacity and may increase administrative costs. Eligibility rules must also remain sufficiently simple and transparent to avoid discouraging take-up among the families most in need (Mroczka and Pacifico, 2025[130]) (Box 3.10).

Box 3.10. Challenges and risks associated with stronger income targeting of family benefits

Targeting income support more narrowly to low-income families is often considered a way to reduce fiscal pressures while maintaining support for those most in need. Means-tested benefits can indeed concentrate resources on poorer households and improve the progressivity of social spending. In OECD countries, means-testing typically relies on a combination of household income, assets, and family composition to determine eligibility and benefit amounts. Income tests usually include labour earnings as well as other income sources such as pensions or investment income, and benefits are often gradually withdrawn as earnings rise through taper rates. Some programmes also include asset tests (Mroczka and Pacifico, 2025[130]), which consider savings or other forms of wealth, while eligibility thresholds are frequently adjusted for household size and the number of children. In certain cases, means tests interact with housing costs, employment status, or behavioural requirements such as job-search obligations, participation in training programmes, children's school attendance, or health check-ups. While these criteria aim to improve the accuracy of targeting, they also introduce important policy and implementation challenges.

A first challenge concerns **administrative complexity and implementation costs**. Means-tested programmes require detailed and regularly updated information on income, assets and household composition, which increases administrative burdens for both governments and recipients. Complex eligibility rules and different withdrawal schedules across programmes can also create overlapping benefit tapers and sharp changes in disposable income as earnings rise. For instance, asset tests can increase administrative complexity and may discourage savings among low-income households, which is why some countries have relaxed or removed them in certain programmes (Joyce and Singh, 2025[131]).

Research on the Australian system, which is among the most targeted in the OECD, shows that stronger targeting assistance to the poor households can be achieved in two ways – first through income and means tests so that payments to better-off households are minimised, and second through very low levels of direct taxes on poor households, so that very little of the assistance directed to lower-income groups is clawed back (Whiteford, 2010[132]). Income support targeting also requires careful co-ordination of withdrawal rates to avoid excessive effective marginal tax rates on additional earnings (Whiteford and Adema, 2007[65]). asset tests can increase administrative complexity and may discourage savings among low-income households, which is why some countries have relaxed or removed them in certain programmes.

A second issue relates to **work incentives and potential "poverty traps."** When benefits are withdrawn as income increases, families may face high effective marginal tax rates that reduce the financial gains from additional work. While well-designed taper rates can mitigate this effect, the interaction between taxes and multiple benefits can still weaken labour supply incentives for some households (Immervoll and Pearson, 2009[133]).

Third, **means testing can reduce benefit take-up**, particularly among vulnerable families. Application procedures for targeted benefits are often more complex than those for universal programmes and may require detailed financial reporting. Evidence from several OECD countries shows that a significant share of eligible households does not claim means-tested benefits because of administrative barriers, lack of information, or perceived stigma (Marc et al., 2022[134]; Ko et al., 2022[135]). Lower take-up rates reduce the effectiveness of targeted programmes in alleviating poverty among children.

Fourth, targeted systems may face **political and social sustainability challenges**. Universal benefits tend to attract broader public support because they are perceived as entitlements linked to citizenship rather than assistance for a narrowly defined group. By contrast, highly targeted benefits risk losing

political backing from middle-income groups and may become more vulnerable to retrenchment over time (Korpi and Palme, 1998). This can create instability in benefit design and reduce the long-term effectiveness of child poverty strategies.

Finally, experiences with large-scale reforms illustrate the **implementation risks associated with complex targeted systems**. In the United Kingdom, the introduction of the integrated means-tested benefit Universal Credit aimed to simplify the welfare system and strengthen work incentives. While the reform streamlined several programmes into a single benefit, its rollout also highlighted operational challenges, including administrative complexity, delays in payment and difficulties for some households in navigating the new system (Brewer, Joyce, Waters and Woods, 2019). Such experiences illustrate the importance of careful policy design, strong administrative capacity and gradual implementation when introducing more targeted support.

Overall, the international evidence suggests that while income targeting can help contain spending and concentrate support on families with the greatest needs, very narrow targeting can also reduce take-up, weaken work incentives, increase administrative complexity and undermine political support for family benefits. Many OECD countries therefore rely on a mix of universal and targeted elements in family policy systems in order to balance fiscal sustainability, poverty reduction and broad social legitimacy.

The literature also points to the interplay between the volume of transfers and the degree of targeting of child benefit systems, which jointly determine the size of benefits received by families experiencing poverty or material deprivation. In systems where eligibility for child benefits is restricted to low-income households, stronger targeting is consistently associated with greater reductions in child income poverty across European countries (Van Lancker and Van Mechelen, 2015[136]). However, such “selective” systems typically operate with relatively modest redistributive budgets and therefore tend to achieve more limited overall poverty reduction. In these contexts, concentrating scarce resources on the poorest households may be the most feasible way to achieve measurable impacts.

By contrast, in universal systems the relationship between targeting and poverty reduction appears weaker and less consistent. Instead, the overall size of the redistributive budget emerges as the main driver of outcomes: larger budgets are strongly and consistently associated with greater reductions in child poverty, and universal child benefit systems typically mobilise the highest levels of spending. Some degree of targeting within universal systems (i.e. with increased amounts of child benefit for lower income families) is nonetheless associated with more generous benefit levels for low-income families, which is itself linked to stronger income poverty reduction.

Microsimulation analyses further suggest that there is no single optimal balance between universal and means-tested benefits: the most effective mix varies across countries depending on family structures, the depth of poverty, and how child poverty risks are distributed across households (González-Gallardo et al., 2024[137]).

Redesigning existing tax breaks for families with children so that they primarily benefit those experiencing income poverty and/or child material deprivation is another way to strengthen the effectiveness of income support in reducing multiple forms of child poverty. This aligns with the chapter’s findings, which show that current child-related tax breaks are only weakly associated with reductions in child poverty and may even increase spending pressures in high-spending contexts. In many countries, these measures are not designed as targeted anti-poverty instruments but take the form of non-refundable child tax credits aimed at supporting families more broadly with the costs of raising children and reducing living standard gaps between households with and without children. As a result, they tend to be ineffective in reducing child poverty, not least because low-income families often have little or no tax liability and therefore cannot fully benefit from them.

In conclusion, potential reforms should be assessed not only in terms of their impact on child income poverty but also on material deprivation, as the two are not perfectly aligned. For example, in Spain, the non-refundable child tax credit ("mínimo por descendientes") provides greater support to higher-income households, leaving around 60% of children in poverty without access to this relief (Cruces et al., 2026[138]). Two budget-neutral reform options could be considered. One is to introduce a universal (taxable) child benefit, which has stronger potential to reduce income poverty because its taxable nature redistributes more towards lower-income families. Another is to make the existing child tax credit refundable, allowing low-income families with insufficient tax liability to receive the credit as a cash transfer. In practice, this would make it function similarly to a non-taxable, non-means-tested benefit, requiring only the introduction of refundability (as already exists for maternity and large-family tax credits). While a universal child benefit may have greater potential to reduce income poverty (Cruces et al., 2026[138]), assessing its impact on material deprivation would provide a more comprehensive view of the relative merits of these two options.

Balancing cash transfers for families and in-kind support to improve policy effectiveness

The need to carefully balance unconditional cash transfers to families with other forms of support is suggested in this chapter's regression analysis by the finding that a greater policy orientation towards cash benefits for families is more consistently associated with reduced child income poverty than lower severe material deprivation among children. This may reflect the fact that additional resources directed to cash benefits are more adequate in size and coverage for families below the poverty line, and that these payments could come at the expense of other types of support that are particularly effective in addressing material hardship (see Section 3.4).

Consistent with this interpretation, previous research finds that spending on sickness and disability benefits and in-kind social transfers reduces children's risk of material deprivation more consistently than family cash benefits (Pérez-Corral and Moreno-Mínguez, 2025[139]; Guio et al., 2022[121]). Public spending on education can also mitigate deprivation by lowering households' education-related costs (Guio et al., 2022[121]). These findings suggest that while cash transfers play an important role in supporting families' purchasing power, they may not be sufficient if essential goods and services needed to meet children's material needs are not available or affordable. Effectively reducing material deprivation therefore requires a balanced policy mix that combines income support with in-kind and service-based support to ensure that the key goods and services underpinning children's well-being are accessible.

One option to balance cash transfers and service-based assistance are **near-cash supports** such as food vouchers or childcare subsidies, which are also associated with reductions in material hardship. There is suggestive evidence that targeted cash transfers (e.g. for rent or utilities) may be more effective than in-kind or provider-directed payments, as they allow households to reallocate resources according to their most pressing needs. For example, evaluations of thwinter Energy Payment in Aotearoa New Zealand found no significant reduction in reported difficulties paying utility bills among working-age beneficiaries, but did observe improvements in other dimensions of hardship, such as the ability to meet everyday expenses (Hyslop, Riggs and Maré, 2022[140]). This points to important spillover effects and highlights the value of flexibility in programme design.

Conditioning benefits payment may also strengthen the effectiveness of investments in children. For instance, linking benefit receipt to actions that improve families' living conditions – such as housing improvements, children's access to nutritious food programmes, regular health checks, participation in early childhood education and care (ECEC), or school attendance – can help ensure that income support contributes directly to reducing material deprivation. In this context, growing attention has been given to "cash-plus" approaches, which combine income transfers with complementary services such as childcare support, parenting programmes, employment assistance or educational support for children. These programmes aim to address multiple drivers of child deprivation simultaneously, including low household income, limited access to services and parental labour-market constraints. Evidence from experimental

studies suggests that combining cash transfers with complementary services is more likely to generate sustained improvements in children's well-being than providing cash or services alone, as it strengthens both short-term living conditions and longer-term opportunities (Bastagli et al., 2016[141]; Page, 2024[16]).

Improving take-up of family and social benefits: evidence and policy options

Improving take-up among disadvantaged groups remains a major challenge. The take-up rate refers to the share of eligible families who actually claim and receive a benefit. Despite being entitled to support, many families do not take up all the benefits available to them – a phenomenon known as non-take-up – which substantially weakens the poverty-reducing impact of social policies (Marc et al., 2022[134]). Lower socio-economic households are less likely to receive the benefits to which they are entitled – including child and family benefits – limiting the effectiveness of transfers in reaching those most in need (OECD, 2024[142]). To address this, many OECD countries are investing in data-driven approaches that reduce administrative and informational barriers, and support proactive outreach and personalised assistance.

In response, governments and social policymakers have increasingly focussed on interventions that **lower informational and administrative barriers** to claiming social benefits (OECD, 2024[142]). A robust finding from experimental and evaluation research is that simplifying application processes – by reducing paperwork, streamlining eligibility criteria, and clarifying forms – lowers both information costs and procedural burdens, leading to significant increases in take-up. A meta-analysis of 45 randomised controlled trials across multiple countries and benefit programmes finds that behavioural interventions increase take-up by an average of 8.1 p.p., with the largest effects observed where baseline enrolment is low. Among these interventions, simplification and personalisation are the most effective, particularly when delivered close to the moment of decision making (Daigneault et al., 2025[143]).

Automation of benefit delivery can yield even larger gains. Integrating benefit claims with existing tax or employment records to enable automatic enrolment removes the need for active application and substantially raises participation. In Malta, for example, automating access to a work-related benefit nearly quadrupled enrolment, illustrating the powerful effects of reducing administrative friction (ISSA, 2023[144]).

Uncertainty about benefit entitlements and payment adjustments can also discourage take-up. Concerns about overpayments or future clawbacks are particularly salient for low-income and liquidity-constrained households. In the United States, for instance, few recipients of the Earned Income Tax Credit opt for early payment options, partly because of fears – sometimes unfounded – of having to repay overpaid amounts (Nichols et al., 2015[145]). Similarly, back payments may arise when benefits are insufficiently responsive to changes in household income, especially in systems without automatic adjustment mechanisms (Eurofound, 2024[146]).

Beyond simplification and automation, **proactive outreach and personalised support** can further improve take-up. Field experiments show that directly contacting potentially eligible households – through targeted letters, flyers, or co-ordinated mailings – substantially increases application rates compared with purely passive systems. In a large-scale Belgian intervention, proactive outreach led to a three- to four-fold increase in take-up among contacted individuals (Van Gestel et al., 2023[147]). Complementary measures, such as face-to-face assistance or guided support from caseworkers, also prove effective by helping beneficiaries understand their entitlements and navigate application procedures; experimental evidence from France shows that such support increases take-up of income support and family benefits (Castell et al., 2025[148]). Finally, reducing geographic and procedural access barriers – by improving the local availability of services and shortening travel or processing times – can further raise participation by lowering the non-monetary costs of claiming benefits (Almeida et al., 2024[149]).

Many OECD governments are increasingly **leveraging advances in technology and data** to improve the coverage and delivery of social protection for vulnerable groups (OECD, 2024[142]; 2025[18]). These efforts include using probabilistic estimates based on (often de-identified) survey and administrative data to better

identify disadvantaged groups and regions in need, tailor communication strategies, and guide investments in new or expanded programmes. Countries are also making greater use of linked administrative data – often through unique personal identifiers or social registries – to assess benefit eligibility at the individual level. This can help identify gaps in coverage (for example, by proactively encouraging eligible households to apply) and reduce administrative burdens on beneficiaries, such as through pre-filled applications drawing on existing records.

At the same time, the use of technology and data raises important challenges and risks. Effective implementation requires strong cross-government co-ordination, robust data governance, and strict safeguards to protect individuals' privacy. Governments must also carefully manage the risk that automated systems and data-driven decision making embed or amplify discriminatory biases, which could reinforce existing inequalities or create new forms of exclusion and disadvantage (OECD, 2024[142]).

Designing benefit payment structure to enhance poverty reduction

Predictable and regular cash transfers, such as monthly or annual payments, play a crucial role in enabling families to plan and meet their needs. Regular and stable income flows that families can reasonably expect to persist over time enable families to plan expenditures, manage resources, and invest in their children's development, and thus constitute a key mechanism through which income influences child outcomes. The frequency and structure of payments matter: regular monthly transfers are more effective at easing ongoing financial pressures – such as food insecurity or difficulties paying rent –, which are especially pronounced among low-income households and those facing acute economic disadvantage. By contrast, less frequent but larger payments are more likely to finance substantial, often postponed expenditures, such as medical care, home improvements or durable goods, thereby helping households address forms of hardship associated with delayed essential consumption. However, evidence suggests that regular and predictable income transfers sustained throughout childhood have stronger and more lasting effects. By providing stable financial resources over time, they are more effective at consistently easing chronic financial stress and enabling parents to make sustained investments in their children's development, with benefits that extend into adulthood through greater expected lifetime earnings (Page, 2024[16]).

In addition**, the timeliness of payments** matters**.** Timely support is essential to ensure that assistance reaches families when it is most needed – ideally as close as possible to the moment they experience an income shock or other adverse event that constrains their ability to meet immediate expenses, such as paying bills or purchasing essential goods and services required for children's well-being. This is particularly important given that, in many countries, the share of "asset-poor" individuals – those lacking sufficient liquid financial assets to maintain a living standard above the poverty threshold for at least three months – significantly exceeds the share of those who are income-poor (Balestra and Oehler, 2023[150]).

Fragmentation and complexity in benefit systems can reduce transparency and make support difficult to navigate. **Strengthening co-ordination** – for example, through a universal base benefit complemented by predictable, needs-based top-ups – can enhance both clarity and stability. Such an approach helps ensure that support is reliable and aligned with families' circumstances, thereby improving its effectiveness in supporting children's well-being.

Designing income support involves balancing trade-offs across three key parameters: the assessment period, the payment frequency, and the duration for which benefits are fixed before reassessment (Millar et al., 2020[151]). Short assessment periods can be unrepresentative of typical earnings and may be open to manipulation, while longer periods better smooth income but may be less responsive to recent changes. Similarly, frequent payments provide more regular and stable income, whereas less frequent payments can make budgeting harder. Short award durations increase responsiveness but can lead to volatile payments, while longer durations offer stability but risk misalignment between benefits and current needs.

In practice, overly frequent reassessments of means-tested benefits can undermine this stability, creating volatility and financial stress – especially for families with fluctuating earnings. For example, a recent report on child benefits in Norway highlights that housing support is assessed using monthly income information, leading to substantial month-to-month variation in payments for families with volatile earnings (Kunnskapsdepartementet, 2024[152]). To improve predictability, the expert group recommends maintaining housing support for families with children over a fixed six-month period, even when income fluctuates, thereby strengthening income stability and supporting better financial planning.

More generally, a central trade-off emerges between responsiveness and income security. While adjusting benefits quickly to changing circumstances improves targeting, it can also create financial instability, stress, and administrative burden. Given that income and household situations for low-income families often fluctuate temporarily rather than permanently, frequent reassessments can lead to "churning" in and out of eligibility without reflecting fundamental changes in need. Balancing accuracy, simplicity, and stability is therefore key in benefit design.

As highlighted by Millar and Whiteford (2020[151]), recent reforms in Australia and the United Kingdom illustrate how design choices can inadvertently generate overpayments. In Australia, reliance on estimated annual income often led to underestimation and thus overpayments, while in the United Kingdom, retrospective income assessments failed to capture changes during the year. Advances in data matching and automation have made it easier to detect and recover overpayments, sometimes leading to problematic practices such as large-scale debt recovery.

Governments can mitigate their impact through policy choices such as income disregards, waivers, lump-sum adjustments, or extended repayment periods. By contrast, some design features – particularly in the UK's Universal Credit system – have directly increased the risk of debt. Monthly payments in arrears, initial waiting periods, and the use of repayable advance payments mean many claimants must rely on borrowing. Other features, such as paying housing support directly to claimants, can further raise the risk of arrears. Overall, while accurate reconciliation is important, many overpayments and resulting debts stem from deliberate design choices, often placing a disproportionate burden on low-income households (Millar et al., 2020[151]). Preventing such issues through better system design is preferable to relying on ex post corrections.

Comprehensive policy action to reduce child poverty also requires effective local services

Complementing individual income support and service subsidies discussed in this report with strong place-based policies is critical to addressing geographical inequalities in access to essential services for children and caregivers (OECD, 2025[153]; 2025[13]). Income support alone is unlikely to be fully effective – or even fully taken up – if adequate services are not available in the areas where disadvantaged families live. Place-based approaches are particularly important for addressing shortages in ECEC and healthcare provision in deprived regions and neighbourhoods, improving poor-quality housing, and reducing forms of material deprivation linked to inadequate local services, spatial segregation, or weak transport infrastructure limiting access to childcare, healthcare, leisure, sport, and play facilities and green spaces that are essential for children's and caregivers' well-being (OECD, 2025[153]). This is one reason why place-based policies are highlighted as an avenue to strengthening the implementation of the European Child Guarantee (European Commission, 2026[154]).

At the same time, implementing effective place-based policies raises important governance and capacity challenges. It requires identifying local needs accurately, assessing whether the local supply of services is adequate in terms of both affordability and geographical accessibility, and building the capacity of local authorities to monitor these dimensions over time. Achieving this also depends on developing shared frameworks and common standards across territories to assess needs and service provision, enabling

both local and national authorities to set priorities, allocate resources effectively, and monitor progress consistently (OECD, 2025[155]; 2025[18]).

References

Adema, W., C. Clarke and O. Thévenon (2020), "Family Policies and Family Outcomes in OECD Countries", in Nieuwenhuis, R. and W. Van Lancker (eds.), *The Palgrave Handbook of Family Policy*, Palgrave Macmillan, https://doi.org/10.1007/978-3-030-54618-2_9. [66]

Aizer, A. et al. (2016), "The Long-Run Impact of Cash Transfers to Poor Families", *American Economic Review*, Vol. 106/4, pp. 935-71, https://doi.org/10.1257/AER.20140529. [117]

Almeida, V. et al. (2024), "Geographic inequalities in accessibility of essential services", *OECD Social, Employment and Migration Working Papers*, No. 307, OECD Publishing, Paris, https://doi.org/10.1787/12bab9fb-en. [149]

Ananat, E. et al. (2024), "Effects of the expanded Child Tax Credit on employment outcomes", *Journal of Public Economics*, Vol. 238, p. 105168, https://doi.org/10.1016/J.JPUBECO.2024.105168. [79]

Atkinson, A. (2011), "The case for universal child benefit", in Walker, A., A. Sinfield and C. Walker (eds.), *Fighting Poverty, Inequality and Injustice: A Manifesto Inspired by Peter Townsend*, Bristol University Press, https://doi.org/10.46692/9781847427168.005. [95]

Ayala, L. and M. Rodríguez (2013), "Evaluating social assistance reforms under programme heterogeneity and alternative measures of success", *International Journal of Social Welfare*, Vol. 22/4, pp. 406-419, https://doi.org/10.1111/IJSW.12008. [88]

Bäckman, O. and T. Ferrarini (2010), "Combating Child Poverty? A Multilevel Assessment of Family Policy Institutions and Child Poverty in 21 Old and New Welfare States", *Journal of Social Policy*, Vol. 39/02, p. 275, https://doi.org/10.1017/S0047279409990456. [64]

Balestra, C., D. Hirsch and D. Vaughan-Whitehead (2023), "Living wages in context: A comparative analysis for OECD countries", *OECD Papers on Well-being and Inequalities*, No. 13, OECD Publishing, Paris, https://doi.org/10.1787/2e622174-en. [86]

Balestra, C. and F. Oehler (2023), "Measuring the joint distribution of household income, consumption and wealth at the micro-level", *OECD Papers on Well-being and Inequalities*, No. 11, OECD Publishing, Paris, https://doi.org/10.1787/f9d85db6-en. [150]

Bárcena-Martín, E., M. Blanco-Arana and S. Pérez-Moreno (2018), "Social Transfers and Child Poverty in European Countries: Pro-poor Targeting or Pro-child Targeting?", *Journal of Social Policy*, Vol. 47/4, pp. 739-758, https://doi.org/10.1017/S0047279418000090. [85]

Bárcena-Martín, E. et al. (2017), "Child deprivation and social benefits: Europe in cross-national perspective", *Socio-Economic Review*, Vol. 15/4, pp. 717-744, https://doi.org/10.1093/SER/MWX019. [92]

Barrow, L. and L. McGranahan (2000), "The Effects of the Earned Income Credit on the Seasonality of Household Expenditures", *National Tax Journal*, Vol. 53/4, pp. 1211-1244, https://doi.org/10.17310/NTJ.2000.4S1.08. [102]

Bastagli, F. et al. (2016), "Cash transfers: what does the evidence say? A rigorous review of programme impact and of the role of design and implementation features", https://odi.org/en/publications/cash-transfers-what-does-the-evidence-say-a-rigorous-review-of-impacts-and-the-role-of-design-and-implementation-features/ (accessed on 22 January 2021). [141]

Bouget, D. et al. (2015), *Social investment in Europe – A study of national policies 2015*, European Commission: Directorate-General for Employment, Social Affairs and Inclusion, Liser, European Social Observatory, Applica, Publications Office, https://data.europa.eu/doi/10.2767/084978 (accessed on 12 September 2025). [41]

Card, D., J. Kluve and A. Weber (2017), "What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations", *Journal of the European Economic Association*, Vol. 16/3, pp. 894-931, https://doi.org/10.1093/jeea/jvx028. [57]

Castell, L. et al. (2025), "Take-up of Social Benefits: Experimental Evidence from France", *American Economic Journal: Economic Policy*, Vol. 17/4, pp. 1-29, https://doi.org/10.1257/POL.20220786. [148]

Chetty, R. and N. Hendren (2018), "The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects*", *The Quarterly Journal of Economics*, Vol. 133/3, pp. 1107-1162, https://doi.org/10.1093/qje/qjy007. [12]

Chetty, R. et al. (2014), "Where is the land of Opportunity? The Geography of Intergenerational Mobility in the United States *", *The Quarterly Journal of Economics*, Vol. 129/4, pp. 1553-1623, https://doi.org/10.1093/qje/qju022. [11]

Chzhen, Y. (2017), "Unemployment, social protection spending and child poverty in the European Union during the Great Recession", *Journal of European Social Policy*, Vol. 27/2, pp. 123-137, https://doi.org/10.1177/0958928716676549. [96]

Clarke, C. et al. (2022), "The economic costs of childhood socio-economic disadvantage in European OECD countries", *OECD Papers on Well-being and Inequalities*, No. 9, OECD Publishing, Paris, https://doi.org/10.1787/8c0c66b9-en. [3]

Cleiss (2026), *The French Social Security System - IV - Family benefits*, Centre des liaisons européennes et internationales de sécurité sociale (Cleiss), https://www.cleiss.fr/docs/regimes/regime_france/an_4.html (accessed on 14 September 2026). [169]

Collyer Sophie, C. Wimer and D. Harris (2022), *Keeping Up with Inflation: How Policy Indexation Can Enhance Poverty Reduction*, The Century Foundation, https://tcf.org/content/report/keeping-up-with-inflation-how-policy-indexation-can-enhance-poverty-reduction/ (accessed on 15 September 2026). [111]

Cooper, K. and K. Stewart (2021), "Does Household Income Affect children's Outcomes? A Systematic Review of the Evidence", *Child Indicators Research*, Vol. 14/3, pp. 981-1005, https://doi.org/10.1007/S12187-020-09782-0/. [10]

Cooper, K. and K. Stewart (2017), "Does Money Affect Children's Outcomes? An update", *CASEpapers 203*, Centre for Analysis of Social Exclusion, https://researchonline.lse.ac.uk/id/eprint/103494. [15]

Corak, M. (2013), "Income Inequality, Equality of Opportunity, and Intergenerational Mobility", *Journal of Economic Perspectives*, Vol. 27/3, pp. 79-102, https://doi.org/10.1257/JEP.27.3.79. [4]

Corluy, V. and F. Vandenbroucke (2017), "Individual Employment, Household Employment and Risk of Poverty in the EU. A Decomposition Analysis", in Atkinson, A., A. Guio and E. Marlier (eds.), *Monitoring Social Inclusion in Europe*, Publications Office of the European Union , Luxembourg, https://papers.ssrn.com/abstract=2981712. (accessed on 17 September 2025). [84]

Cruces, H. et al. (2026), *Spain's Child Support Fails the Poor: Actionable Policy Reforms*, European Commission, Seville, https://publications.jrc.ec.europa.eu/repository/handle/JRC146328. [138]

Daigneault, P. et al. (2025), "How effective are behavioral interventions to increase the take-up of social benefits? A systematic review of field experiments", *Journal of Policy Analysis and Management*, Vol. 44/3, pp. 997-1059, https://doi.org/10.1002/PAM.70005. [143]

Daly, M. and S. Ryu (2025), "Child-related Social Policies in Europe during the COVID-19 Pandemic", *Journal of Social Policy*, Vol. 54/3, pp. 894-911, https://doi.org/10.1017/S0047279423000351. [21]

Danziger, S. et al. (2000), "Work, income, and material hardship after welfare reform", *Journal of Consumer Affairs*, Vol. 34/1, pp. 6-30, https://doi.org/10.1111/J.1745-6606.2000.TB00081.X. [89]

Danziger, S. et al. (2002), "Does It Pay to Move from Welfare to Work?", *Journal of Policy Analysis and Management*, Vol. 21/4, pp. 671-692, https://doi.org/10.1002/PAM.10080. [90]

Davison, G. et al. (2018), "The State of State EITCs: An Overview and Their Implications for Low- and Moderate-Income Households", *Center for Social Development Research*, https://doi.org/10.7936/K7WM1CZ0. [101]

De Schutter, O. et al. (2023), *The Escape from Poverty: Breaking the Vicious Cycles Perpetuating Disadvantage*, Policy Press, Bristol, https://doi.org/10.51952/9781447370611. [6]

Dely, B., R. Hyee and C. Prinz (2025), "What worked well in social protection during the COVID-19 pandemic?", *OECD Social, Employment and Migration Working Papers*, No. 325, OECD Publishing, Paris, https://doi.org/10.1787/b31ac155-en. [20]

Diris, R., F. Vandenbroucke and G. Verbist (2017), "The impact of pensions, transfers and taxes on child poverty in Europe: the role of size, pro-poorness and child orientation", *Socio-Economic Review*, Vol. 15/4, p. mww045, https://doi.org/10.1093/ser/mww045. [59]

Duncan, G., P. Morris and C. Rodrigues (2011), "Does Money Really Matter? Estimating Impacts of Family Income on Young Children's Achievement With Data From Random-Assignment Experiments", *Developmental Psychology*, Vol. 47/5, pp. 1263-1279, https://doi.org/10.1037/A0023875. [109]

Duncan, G. et al. (1998), "How much does childhood poverty affect the life chances of children?", *American sociological review*, pp. 406-423, https://doi.org/10.2307/2657556. [1]

Égert, B., J. Botev and D. Turner (2020), "The contribution of human capital and its policies to per capita income in Europe and the OECD", *European Economic Review*, Vol. 129, p. 103560, https://doi.org/10.1016/j.euroecorev.2020.103560. [56]

Esping-Andersen, Gosta (2002), "Why We Need a New Welfare State", *Why We Need a New Welfare State*, https://doi.org/10.1093/0199256438.001.0001. [39]

Eurofound (2024), *Social protection 2.0: Unemployment and minimum income benefits*, Publications Office of the European Union, Luxembourg, https://doi.org/10.2806/0704651. [146]

European Commission (2026), *Breaking the cycle of child poverty: strengthening the European Child Guarantee*, DG Employment, Social Affairs and Inclusion - Staff working document. [154]

European Commission (2026), *Commission proposes new measures to fight poverty and improve lives of persons with disabilities*, European Commission, Directorate-General for Employment, Social Affairs and Inclusion, https://employment-social-affairs.ec.europa.eu/news/commission-proposes-new-measures-fight-poverty-and-improve-lives-persons-disabilities-2026-05-06_en (accessed on 11 September 2026). [54]

European Commission (2026), *Communication on a strengthened European Child Guarantee*, https://employment-social-affairs.ec.europa.eu/document/7f60af79-936f-42b3-a6c4-a4639c6679ff_en (accessed on 14 September 2026). [51]

European Commission (2026), *Proposal for a Council recommendation on fighting housing exclusion*, https://employment-social-affairs.ec.europa.eu/document/21450169-5eaf-40e7-8a5a-4133f20510f1_en (accessed on 14 September 2026). [50]

European Commission (2024), *Employment and social developments in Europe 2024*, Directorate-General for Employment, Social Affairs and Inclusion. Publications Office of the European Union, https://data.europa.eu/doi/10.2767/91555 (accessed on 12 September 2025). [42]

European Commission (2021), *European Child Guarantee*, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021H1004&from=EN. [48]

European Commission (2013), *Recommendation on Investing in children: breaking the cycle of disadvantage*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/investing-children_en. [45]

European Commission (n.d.), *Addressing poverty and supporting social inclusion*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion_en (accessed on 14 September 2026). [44]

European Commission (n.d.), *Communication "Enhancing the strategy for the rights of persons with disabilities up to 2030"*, https://commission.europa.eu/document/ab0bcea9-6b3a-48c1-875c-1cc687fba6d0_en. [53]

European Commission (n.d.), *EU Anti-Poverty Strategy*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/eu-anti-poverty-strategy_en (accessed on 14 September 2026). [49]

European Commission (n.d.), *European Child Guarantee*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/investing-children/european-child-guarantee_en (accessed on 14 September 2026). [52]

European Commission (n.d.), *European Pillar of Social Rights*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/european-pillar-social-rights-building-fairer-and-more-inclusive-european-union_en (accessed on 14 September 2026). [46]

European Commission (n.d.), *European Pillar of Social Rights Action Plan*, https://employment-social-affairs.ec.europa.eu/policies-and-activities/european-pillar-social-rights-building-fairer-and-more-inclusive-european-union/european-pillar-social-rights-action-plan_en (accessed on 14 September 2026). [47]

European Commission: Directorate-General for Employment, S. (2026), *Report on the effectiveness of child benefits in the EU – Final report*, Publications Office of the European Union, Paris, https://data.europa.eu/doi/10.2767/1749160 (accessed on 16 September 2026). [98]

Eurostat (2026), *Glossary: Material deprivation*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Material_deprivation. [156]

Eurostat (2023), *Investing in Children*, https://ec.europa.eu/eurostat/web/employment-and-social-inclusion-indicators/social-protection-and-inclusion/investing-children. [27]

Eurostat (n.d.), *European Union Statistics on Income and Living Conditions (EU-SILC) survey*, https://ec.europa.eu/eurostat/web/microdata/collections-research/european-union-statistics-on-income-and-living-conditions. [25]

Eurostat (n.d.), *Glossary: Child deprivation*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Child_deprivation (accessed on 11 September 2026). [28]

Eurostat (n.d.), *Population and social conditions*, https://ec.europa.eu/eurostat/databrowser/product/page/ILC_MDDD11 (accessed on 14 September 2026). [157]

Eurostat (n.d.), *Statistics Explained - Your guide to European statistics*, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Main_Page (accessed on 14 September 2026). [173]

Gao, Q., N. Kaushal and J. Waldfogel (2009), "How have expansions in the EITC affected family expenditures?", in Ziliak, J. (ed.), *Welfare Reform and Its Long-Term Consequences for America's Poor*, Cambridge University Press, Cambridge, UK. [104]

Global coalition to end child poverty (2025), *Countries commitment to end child poverty: A review of the Voluntary National Reviews submitted from 2017 to 2024*, Global coalition to end child poverty, https://www.endchildhoodpoverty.org/publications-feed/vnranalysis (accessed on 12 September 2025). [32]

Goldin, J. et al. (2024), "Work Requirements and Child Tax Benefits", https://doi.org/10.3386/W32343. [78]

Gonzales, F. (2025), "Canada adjusts child benefit as inflation indexation takes effect", *Benefits and Pensions Monitor*, https://www.benefitsandpensionsmonitor.com/news/industry-news/canada-adjusts-child-benefit-as-inflation-indexation-takes-effect/392251 (accessed on 14 September 2026). [168]

González-Gallardo, S. et al. (2024), "Social transfer policies and child poverty in European countries: Evaluating policy alternatives through a multiobjective programming model", *Socio-Economic Planning Sciences*, Vol. 93, p. 101892, https://doi.org/10.1016/J.SEPS.2024.101892. [137]

Goodman-Bacon, A. and L. McGranahan (2008), "How do EITC recipients spend their refunds?", *Economic Perspectives*, Vol. 32/Q II, pp. 17-32, https://ideas.repec.org/a/fip/fedhep/y2008iqiip17-32nv.32no.2.html (accessed on 15 September 2026). [103]

Government of Canada (2018), *Opportunity for All - Canada's First Poverty Reduction Strategy*, Employment and Social Development Canada, https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/reports/strategy.html (accessed on 24 March 2026). [35]

Government of New Zealand (2025), *Putting the Strategy into action - Taking a social investment approach*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/child-wellbeing-and-poverty-reduction/child-youth-strategy/putting-the-strategy-into-action.html (accessed on 12 September 2025). [37]

Government of New Zealand (2024), *The Child and Youth Strategy 2024-27*, Ministry of Social Development, https://www.msd.govt.nz/about-msd-and-our-work/child-wellbeing-and-poverty-reduction/child-youth-strategy/index.html. [36]

Grant, M. and K. Prickett (2023), *Research evidence on policy supports and the effect on material hardship*, Department of Prime Minister and Cabinet, Wellington, New Zealand. [91]

Guio, A. et al. (2018), "Towards an EU measure of child deprivation", *Child Indicators Research*, Vol. 11/3, pp. 835-860, https://doi.org/10.1007/s12187-017-9491-6. [26]

Guio, A. et al. (2022), "Differences in Child Deprivation Across Europe: The Role of In-Cash and In-Kind Transfers", *Child Indicators Research 2022 15:6*, Vol. 15/6, pp. 2363-2388, https://doi.org/10.1007/s12187-022-09948-y. [121]

Guldi, M. et al. (2022), "Supplemental Security Income for Children, Maternal Labor Supply, and Family Well-Being: Evidence from Birth Weight Eligibility Cutoffs", *Journal of Human Resources*, Vol. 59/4, pp. 975-1010, https://doi.org/10.3368/JHR.0818-9654R2. [119]

Han, J. (2016), "The impact of SNAP on material hardships: Evidence from broad-based categorical eligibility expansions", *Southern Economic Journal*, Vol. 83/2, pp. 464-486, https://doi.org/10.1002/SOEJ.12171;WGROUP:STRING:PUBLICATION. [114]

HCFEA (2023), *Le pouvoir d'achat des familles face au choc d'inflation*, Haut Conseil à la Famille, l'Enfance and l'Âge, https://www.strategie-plan.gouv.fr/publications/hcfea-pouvoir-dachat-familles-face-choc-dinflation (accessed on 6 January 2026). [127]

Hemerijck, A., S. Ronchi and I. Plavgo (2023), "Social investment as a conceptual framework for analysing well-being returns and reforms in 21st century welfare states", *Socio-Economic Review*, Vol. 21/1, pp. 479-500, https://doi.org/10.1093/SER/MWAC035. [67]

Hiilamo, A. and T. Lallukka (2023), "Child poverty is exacerbated by the current war-induced cost-of-living crisis: need for new European-wide measures", *European Journal of Public Health*, Vol. 33/3, pp. 353-353, https://doi.org/10.1093/EURPUB/CKAD021. [23]

HM Government (2025), *Our Children, Our Future: Tackling Child Poverty*, Department of Work and Pension, London, http://www.gov.uk/official-documents (accessed on 19 February 2026). [38]

Hobcraft, J. and K. Kiernan (2001), "Childhood poverty, early motherhood and adult social exclusion", *The British Journal of Sociology*, Vol. 52/3, pp. 495-517, https://doi.org/10.1080/00071310120071151. [61]

Hoynes, H. (2019), "The Earned Income Tax Credit", *Annals of the American Academy of Political and Social Science*, Vol. 686/1, pp. 180-203, https://doi.org/10.1177/0002716219881621;SUBPAGE:STRING:FULL. [107]

Hoynes, H. and J. Rothstein (2017), "Tax Policy toward Low-Income Families", in Auerbach, A. and K. Smetters (eds.), *The Economics of Tax Policy*, The Economics of Tax Policy, Oxford University Press. [108]

Hoynes, H., D. Schanzenbach and D. Almond (2016), "Long-Run Impacts of Childhood Access to the Safety Net", *American Economic Review*, Vol. 106/4, pp. 903-934, https://doi.org/10.1257/aer.20130375. [115]

Hyslop, D., L. Riggs and D. Maré (2022), "The impact of the 2018 Families Package Winter Energy Payment policy", https://www.stats.govt.nz/integrated-data/. (accessed on 6 May 2026). [140]

IGAS (2021), *Revue des dépenses socio-fiscales en faveur de la politique familiale*, Inspection Générale des Affaires Sociales, Paris, https://www.igf.finances.gouv.fr/igf/accueil/nos-activites/rapports-de-missions/liste-de-tous-les-rapports-de-mi/revue-des-depenses-socio-fiscale.html (accessed on 6 January 2026). [128]

ILO, UNICEF and Learning for Well-Being Institute (2024), "The promise of universal child benefits: The foundational policy for economic and social development", *Policy brief*, https://doi.org/10.54394/YSAT8221. [93]

Immervoll, H. and M. Pearson (2009), "A Good Time for Making Work Pay? Taking Stock of In-Work Benefits and Related Measures across the OECD", *OECD Social, Employment and Migration Working Papers*, No. 81, OECD Publishing, Paris, https://doi.org/10.1787/225442803245. [133]

ISSA (2023), *Sécurité sociale et droits humains, accès aux droits et lutte contre le non-recours*, https://www.issa.int/fr/analysis/social-security-and-human-rights-ensuring-access-and-combatting-non-take-social-benefits (accessed on 6 January 2026). [144]

Jacob, B., M. Kapustin and J. Ludwig (2015), "The Impact of Housing Assistance on Child Outcomes: Evidence from a Randomized Housing Lottery", *The Quarterly Journal of Economics*, Vol. 130/1, pp. 465-506, https://doi.org/10.1093/QJE/QJU030. [116]

Joyce, M. and A. Singh (2025), "Income uncertainty, precautionary wealth, and social insurance", *European Economic Review*, Vol. 175/1, p. 105003, https://doi.org/10.1016/j.euroecorev.2025.105003. [131]

Koebel, K. and M. Stabile (2024), *Child benefits in an international comparative context*, VOXEU Column, https://cepr.org/voxeu/columns/child-benefits-international-comparative-context (accessed on 9 January 2026). [82]

Koebel, K. and M. Stabile (2023), "Evaluating the Effects of the 2021 Expansion of the Child Tax Credit: The International Comparative Context", *Annals of the American Academy of Political and Social Science*, Vol. 710/1, pp. 36-56, https://doi.org/10.1177/00027162241258883. [129]

Kondratjeva, O. et al. (2021), "The impact of state earned income tax credit increases on material and medical hardship", *Journal of Consumer Affairs*, Vol. 55/3, pp. 872-910, https://doi.org/10.1111/JOCA.12382. [105]

Ko, W. et al. (2022), "Take-up of social benefits", *NBER Working Papers Series*, No. 30148, https://doi.org/10.3386/w30148. [135]

Kropko, J. et al. (2014), "Multiple Imputation for Continuous and Categorical Data: Comparing Joint Multivariate Normal and Conditional Approaches", *Political Analysis*, Vol. 22/4, pp. 497-519, https://doi.org/10.1093/PAN/MPU007. [166]

Kunnskapsdepartementet (2024), *Et jevnere utdanningsløp*, https://www.regjeringen.no/no/dokumenter/et-jevnere-utdanningslop/id3025513/ (accessed on 9 January 2026). [152]

LIS Cross-National Data Centre (n.d.), *Luxembourg Income Study*, https://www.lisdatacenter.org/our-data/lis-database/. [31]

Lorenzoni, L. et al. (2018), "Which policies increase value for money in health care?", *OECD Health Working Papers*, No. 104, OECD Publishing, Paris, https://doi.org/10.1787/a46c5b1f-en. [55]

Maldonado, L. and R. Nieuwenhuis (2015), "Family policies and single parent poverty in 18 OECD countries, 1978–2008", *Community, Work & Family*, Vol. 18/4, pp. 395-415, https://doi.org/10.1080/13668803.2015.1080661. [62]

Marc, C. et al. (2022), *Non-take-up of minimum social benefits: quantification in Europe A salient phenomenon still not making public policy headlines*. [134]

Marr, C. et al. (2015), "EITC and Child Tax Credit Promote Work, Reduce Poverty, and Support Children's Development", Center on Budget and Policy Priorities, https://www.cbpp.org/research/federal-tax/eitc-and-child-tax-credit-promote-work-reduce-poverty-and-support-childrens (accessed on 9 January 2026). [76]

Masarik, A. and R. Conger (2017), "Stress and child development: a review of the Family Stress Model", *Current Opinion in Psychology*, Vol. 13, pp. 85-90, https://doi.org/10.1016/J.COPSYC.2016.05.008. [14]

McInnis, N. et al. (2023), "The Intergenerational Transmission of Poverty and Public Assistance: Evidence from the Earned Income Tax Credit", https://doi.org/10.3386/W31429. [77]

Michelmore, K. (2025), "Tax Credits and Child Outcomes: Lessons from the U.S., U.K., and Canada", https://doi.org/10.3386/W33822. [75]

Miho, A. and O. Thévenon (2020), "Treating all children equally?: Why policies should adapt to evolving family living arrangements", *OECD Social, Employment and Migration Working Papers*, No. 240, OECD Publishing, Paris, https://doi.org/10.1787/83307d97-en. [120]

Millar, J. et al. (2020), "Timing it right or timing it wrong: how should income-tested benefits deal with changes in circumstances?:", *Journal of Poverty and Social Justice*, Vol. 28/1, pp. 3-20, https://doi.org/10.1332/175982719X15723525915871. [151]

Miller, C. et al. (2018), "Boosting The Earned Income Tax Credit For Singles: Final Impact Findings from the Paycheck Plus Demonstration in New York City". [106]

Milligan, K. and M. Stabile (2011), "Do Child Tax Benefits Affect the Well-Being of Children? Evidence from Canadian Child Benefit Expansions", *American Economic Journal: Economic Policy*, Vol. 3/3, pp. 175-205, https://doi.org/10.1257/POL.3.3.175. [100]

Moffitt, R. (2015), "The Deserving Poor, the Family, and the U.S. Welfare System", *Demography*, Vol. 52/3, pp. 729-749, https://doi.org/10.1007/s13524-015-0395-0. [99]

Moritz, S. and T. Bartz-Beielstein (2017), "imputeTS: Time Series Missing Value Imputation in R", *The R Journal*, Vol. 9/1, p. 207, https://doi.org/10.32614/rj-2017-009. [164]

Mroczka, J. and D. Pacifico (2025), "Comparative Assessment of Asset Requirements for Minimum Income Benefit Recipients", *OECD Social, Employment and Migration Working Papers*, No. 328, OECD Publishing, Paris, https://doi.org/10.1787/73fbcd99-en. [130]

Mroczka, J., D. Pacifico and E. Chen (2025), "Comparative assessment of activation requirements for unemployment and minimum income benefit recipients", *OECD Social, Employment and Migration Working Papers*, No. 329, OECD Publishing, Paris, https://doi.org/10.1787/86ec18af-en. [81]

National Academies of Sciences, Engineering and Medicine (2019), *A Roadmap to Reducing Child Poverty*, The National Academies Press, Washington, https://doi.org/10.17226/25246. [2]

Nichols, A. et al. (2015), "The Earned Income Tax Credit (EITC)", http://www.nber.org/papers/w21211 (accessed on 6 January 2026). [145]

Nieuwenhuis, R. (2022), "No activation without reconciliation? The interplay between ALMP and ECEC in relation to women's employment, unemployment and inactivity in 30 OECD countries, 1985–2018", *Social Policy and Administration*, Vol. 56/5, pp. 808-826, https://doi.org/10.1111/SPOL.12806. [74]

OECD (2026), "The wide-ranging effects of active labour market policies in Slovenia: Lessons learnt and implications for other countries", https://www.oecd.org/content/dam/oecd/en/about/projects/technical-reports-and-presentations-dg- (accessed on 22 April 2026). [87]

OECD (2025), *Building brighter futures − Implementing the European Child Guarantee in Portugal*, OECD Publishing, Paris, https://doi.org/10.1787/bbc928ea-en. [155]

OECD (2025), "Building child-friendly neighbourhoods: Empowering communities with data-driven action", *OECD Papers on Well-being and Inequalities*, No. 33, OECD Publishing, Paris, https://doi.org/10.1787/4f46a260-en. [153]

OECD (2025), *How to monitor and evaluate policies to address child poverty and disadvantage in Ireland*, OECD Publishing, Paris, https://doi.org/10.1787/6f71f7bb-en. [18]

OECD (2025), *Pensions at a Glance 2025: OECD and G20 Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/e40274c1-en. [172]

OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, https://doi.org/10.1787/b78f8b25-en. [70]

OECD (2025), *The cost of raising children across evolving family structures: New estimates and policy challenges*, OECD, Paris, https://doi.org/10.1787/6550982c-en. [30]

OECD (2025), *The Economic Benefit of Promoting Healthy Ageing and Community Care*, OECD Health Policy Studies, OECD Publishing, Paris, https://doi.org/10.1787/0f7bc62b-en. [63]

OECD (2025), "The importance of monitoring neighbourhood conditions for children's well-being and development", *OECD Papers on Well-being and Inequalities*, No. 34, OECD Publishing, Paris, https://doi.org/10.1787/143ae959-en. [13]

OECD (2024), *Modernising Access to Social Protection: Strategies, Technologies and Data Advances in OECD Countries*, OECD Publishing, Paris, https://doi.org/10.1787/af31746d-en. [142]

OECD (2024), *OECD Tax Ben, Comparative policy tables*, https://webfs.oecd.org/Els-com/TaxBen/Comparative policy tables/OECD-Policy-tables-2024.xlsx. [122]

OECD (2024), *Tax and benefit policy descriptions for Austria 2024*, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/incomes-support-redistribution-and-work-incentives/TaxBEN-Austria-latest.pdf. [170]

OECD (2024), *Tax and benefit policy descriptions for Belgium 2024*, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/incomes-support-redistribution-and-work-incentives/TaxBEN-Belgium-latest.pdf (accessed on 14 September 2026). [167]

OECD (2024), *TaxBEN: The OECD tax-benefit simulation model. Methodology, user guide and policy applications*, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/income-support-redistribution-and-work-incentives/OECD-TaxBEN-methodology-and-manual.pdf. [161]

OECD (2023), *Taxing Wages 2023: Indexation of Labour Taxation and Benefits in OECD Countries*, OECD Publishing, Paris, https://doi.org/10.1787/8c99fa4d-en. [126]

OECD (2020), *Is Childcare affordable?*, OECD, Paris, http://oe.cd/childcare-brief-2020 (accessed on 6 January 2021). [71]

OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris, https://doi.org/10.1787/9789264301085-en. [5]

OECD (2018), *Poor children in rich countries: why we need policy action*, OECD, http://www.oecd.org/social/family/Poor-children-in-rich-countries-Policy-brief-2018.pdf. [33]

OECD (2015), "The quality of working lives: Earnings mobility, labour market risk and long-term inequality", in *OECD Employment Outlook*, OECD Publishing, Paris, https://doi.org/10.1787/empl_outlook-2015-en (accessed on 16 September 2025). [83]

OECD (2014), *Tax and benefit policy descriptions for Luxembourg 2024*, https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/incomes-support-redistribution-and-work-incentives/TaxBEN-Luxembourg-latest.pdf. [171]

OECD (2011), *Doing Better for Families*, OECD Publishing, Paris, https://doi.org/10.1787/9789264098732-en. [7]

OECD (n.d.), *How do countries calculate tax liabilities and social benefit entitlements?*, https://www.oecd.org/en/topics/sub-issues/income-support-redistribution-and-work-incentives/how-do-countries-calculate-tax-liabilities-and-social-benefit-entitlements.html. [124]

OECD (n.d.), *Income distribution database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html. [19]

OECD (n.d.), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 11 September 2026). [125]

OECD (n.d.), *OECD Health Statistics*, https://data-explorer.oecd.org/s/5d4. [162]

OECD (n.d.), *OECD Historial population data*, https://data-explorer.oecd.org/s/5d5. [163]

OECD (n.d.), *OECD National Accounts*, https://data-explorer.oecd.org/s/5d3. [160]

OECD (n.d.), *OECD National Accounts at a Glance (database)*, https://data-explorer.oecd.org/s/5c4 (accessed on 11 September 2026). [24]

OECD (n.d.), *OECD Tax Benefit Model*, https://data-explorer.oecd.org/s/5d2. [159]

OECD (n.d.), "PF1.3 Family cash benefits", *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 14 September 2026). [123]

OECD (n.d.), *Public and private social expenditure*, https://data-explorer.oecd.org/s/5d1. [158]

Page, M. (2024), "New advances on an old question: Does money matter for children's outcomes?", *Journal of Economic Literature*, Vol. 62/3, pp. 891-947, https://doi.org/10.1257/jel.20231553. [16]

Pérez-Corral, A. and A. Moreno-Mínguez (2025), "Social spending, child deprivation and family structure: a multilevel study in 31 European countries", *International Review of Economics 2025 72:1*, Vol. 72/1, pp. 8-, https://doi.org/10.1007/s12232-025-00483-0. [139]

Perry, B. (2021), *Child Poverty in New Zealand: The demographics of child poverty, survey-based descriptions of life 'below the line' including the use of child-specific indicators, and international comparisons*, Ministry of Social Develpment, Wellington. [17]

Petmesidou, M. et al. (2016), "Child poverty, youth (un)employment, and social inclusion", p. 311, https://cup.columbia.edu/book/child-poverty-youth-unemployment-and-social-inclusion/9783838210025/ (accessed on 5 August 2025). [58]

Pilkauskas, N. et al. (2022), "The Effects of Income on the Economic Wellbeing of Families with Low Incomes: Evidence from the 2021 Expanded Child Tax Credit", *Working paper*, No. 30533, N.B.E.R., http://www.nber.org/papers/w30533 (accessed on 15 September 2026). [110]

Price, D. and J. Song (2018), "The Long-Term Effects of Cash Assistance", *IRS Working Papers*, No. 621, Princeton University, Princeton, https://dataspace.princeton.edu/handle/88435/dsp01ng451m210 (accessed on 15 September 2026). [118]

Rapp, S. and O. Thévenon (2025), "Parenting on a budget: The cost of raising children in changing family configurations and its policy implications", *OECD Papers on Well-being and Inequalities*, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/bd0b594e-en. [29]

Schenck-Fontaine, A. and L. Panico (2019), "Many Kinds of Poverty: Three Dimensions of Economic Hardship, Their Combinations, and Children's Behavior Problems", *Demography*, https://doi.org/10.1007/s13524-019-00833-y. [9]

Schmidt, L. and S. Danziger (2012), "Filling holes in the safety net? Material hardship and subjective well-being among disability benefit applicants and recipients after the 1996 welfare reform", *Social Science Research*, Vol. 41/6, pp. 1581-1597, https://doi.org/10.1016/J.SSRESEARCH.2012.06.001. [112]

Schulkind, L. and D. Sandler (2019), "The Timing of Teenage Births: Estimating the Effect on High School Graduation and Later-Life Outcomes", *Demography*, Vol. 56/1, pp. 345-365, https://doi.org/10.1007/S13524-018-0748-6. [60]

Shaefer, H. and I. Gutierrez (2013), "The Supplemental Nutrition Assistance Program and material hardships among low-income households with children", *Social Service Review*, Vol. 87/4, pp. 753-779, https://doi.org/10.1086/673999;REQUESTEDJOURNAL:JOURNAL:SSR;JOURNAL:JOURNAL:SSR;ISSUE:ISSUE:DOI. [113]

Thévenon, O. (2018), "Tackling child poverty in Canada", *OECD Social, Employment and Migration Working Papers*, No. 220, OECD Publishing, Paris, https://doi.org/10.1787/dd4dcfa6-en. [34]

Thévenon, O. (2004), "Les enjeux pour l'emploi féminin de la Stratégie européenne pour l'emploi", *Revue de l'OFCE*, Vol. 90/3, pp. 379-417, https://doi.org/10.3917/REOF.090.0379. [43]

Thévenon, O., C. Clarke and G. Simard-Duplain (2024), "The economic cost of childhood socio-economic disadvantage in Canada", *OECD Papers on Well-being and Inequalities*, No. 25, OECD Publishing, Paris, https://doi.org/10.1787/7abf1837-en. [80]

Thévenon, O. et al. (2009), *The costs of raising children and the effectiveness of supporting parenthood policies in European countries: A Literature Review." Report for the European Commission.*, INED, https://www.researchgate.net/publication/32221161_The_costs_of_raising_children_and_the_effectiveness_of_supporting_parenthood_policies_in_European_countries_A_Literature_Review (accessed on 7 September 2020). [69]

Thévenon, O. et al. (2018), "Child poverty in the OECD: Trends, determinants and policies to tackle it", *OECD Social, Employment and Migration Working Papers*, No. 218, OECD Publishing, Paris, https://doi.org/10.1787/c69de229-en. [8]

UNICEF Innocenti (2023), *Children and the Cost-of-living Crisis: How food and energy inflation has increased poverty in households with children in the European Union*, UNICEF Innocenti Global Office of Research and Foresight, https://www.unicef.org/innocenti/reports/children-and-cost-living-crisis. [22]

van Buuren, S. (2018), *Flexible Imputation of Missing Data, Second Edition*, Chapman and Hall/CRC, https://stefvanbuuren.name/fimd/. [165]

Van Gestel, R. et al. (2023), "Improving Take-Up by Reaching Out to Potential Beneficiaries. Insights from a Large-Scale Field Experiment in Belgium", *Journal of Social Policy*, Vol. 52/4, pp. 740-760, https://doi.org/10.1017/S004727942100088X. [147]

Van Lancker, W. (2023), "The Matthew Effect in Early Childhood Education and Care: How family policies may amplify inequalities", *The Oxford Handbook of Family Policy Over The Life Course*, Oxford Academic, https://doi.org/10.1093/oxfordhb/9780197518151.013.36 (accessed on 26 November 2025). [73]

Van Lancker, W., J. Ghysels and B. Cantillon (2015), "The impact of child benefits on single mother poverty: Exploring the role of targeting in 15 European countries", *International Journal of Social Welfare*, Vol. 24/3, pp. 210-222, https://doi.org/10.1111/IJSW.12140. [97]

Van Lancker, W. and N. Van Mechelen (2015), "Universalism under siege? Exploring the association between targeting, child benefits and child poverty across 26 countries", *Social Science Research*, Vol. 50, pp. 60-75, https://doi.org/10.1016/J.SSRESEARCH.2014.11.012. [136]

Vandenbroucke, F., A. Hemerijck and B. Palier (2011), *The EU Needs a Social Investment Pact*, https://papers.ssrn.com/abstract=2991018 (accessed on 12 September 2025). [40]

Verbist, G. and W. Van Lancker (2016), "Horizontal and Vertical Equity Objectives of Child Benefit Systems: An Empirical Assessment for European Countries", *Social Indicators Research*, Vol. 128/3, pp. 1299-1318, https://doi.org/10.1007/S11205-015-1080-9. [68]

Waldfogel, J. (2025), *Child Benefits: A Smart Investment for America's Future*, Russell Sage Foundation, https://doi.org/10.7758/LIWL3023. [94]

Whiteford, P. (2010), "The Australian Tax-Transfer System: Architecture and Outcomes", *Economic Record*, Vol. 86/275, pp. 528-544, https://doi.org/10.1111/j.1475-4932.2010.00634.x. [132]

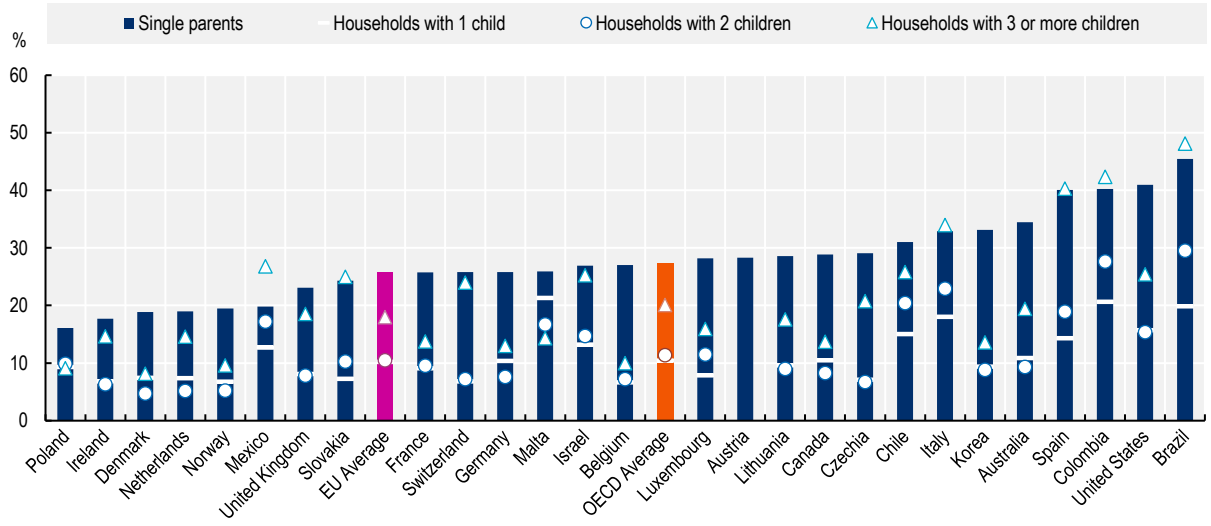
Whiteford, P. and W. Adema (2007), "What Works Best in Reducing Child Poverty: A Benefit or Work Strategy?", *OECD Social, Employment and Migration Working Papers*, No. 51, OECD Publishing, Paris, https://doi.org/10.1787/233310267230. [65]

Wood, J., K. Neels and J. Maes (2023), "A closer look at demand-side explanations for the Matthew effect in formal childcare uptake in Europe and Australia", *Journal of European Social Policy*, Vol. 33/4, pp. 451-468, https://doi.org/10.1177/09589287231186068. [72]

Annex 3.A. Child poverty rates by country

Annex Figure 3.A.1. Children in single-parent and large families are most at risk of income poverty

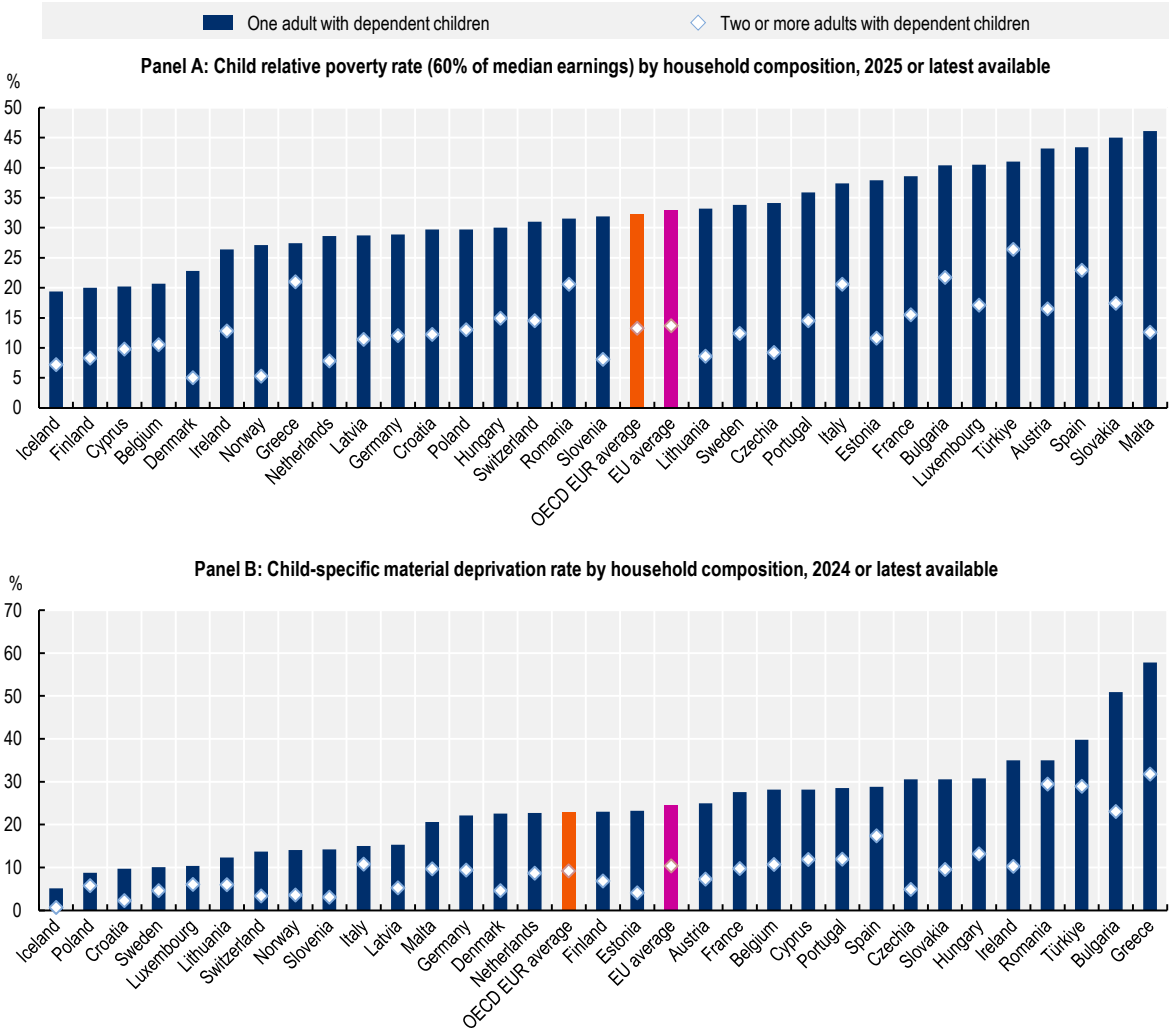
Child relative income poverty (50% of median earnings) by household composition, 2023 or latest available



Note: Income poverty is defined as children living in households with an equivalised disposable income (i.e. income after taxes and transfers, adjusted for household size) below the poverty threshold (50% of the annual median disposable income). Data refer to years between 2016 and 2023.

Source: LIS Cross-National Data Center (n.d.[31]), *Luxembourg Income Study (LIS) Database*, https://www.lisdatacenter.org/our-data/lis-database/.

Annex Figure 3.A.2. Children in single-parent families are at higher risk of poverty



Note: Panel A: The child relative poverty rate captures the share of children living in households with equivalised disposable incomes that are below 60% of the national median equivalised disposable income. Data for Switzerland are from 2024 and for Iceland from 2020.
Panel B: The child-specific deprivation rate is the percentage of children aged below 16 years who suffer from the enforced lack (and not by choice or due to any other reasons) of at least three items out of the following 17 (unweighted) items: Twelve child-specific material deprivation items: 1. Some new (not second-hand) clothes; 2. Two pairs of properly fitting shoes (including a pair of all-weather shoes); 3. Fruits and vegetables once a day; 4. One meal with meat, chicken or fish (or vegetarian equivalent) at least once a day; 5. Books at home suitable for their age; 6. Outdoor leisure equipment; 7. Indoor games; 8. Regular leisure activities; 9. Celebrations on special occasions; 10. Invite friends round to play or eat from time to time; 11. Participate in school trips and school events that cost money; 12. Go on holiday away from home at least one week per year. Four household variables: 13. Replacing worn-out furniture; 14. Capacity to being confronted with payment arrears (on mortgage or rental payments, utility bills, hire purchase instalments or other loan payments); 15. Ability to keep home adequately warm; 16. Have access to a car/van for personal use. One material deprivation variable collected at individual level for adults in the household: 17. Having internet connection (if at least half of the adults in the household are deprived of this item, the child is considered deprived of the item). Data for Iceland and Türkiye are from 2021.
Source: Eurostat (n.d.[25]), *European Union Statistics on Income and Living Conditions (EU-SILC)*, indicators https://doi.org/10.2908/ILC_LI03 and https://doi.org/10.2908/ILC_CHMD02.

Annex 3.B. Sample description

The sample is based on available data for 32 OECD countries from 1997 to 2021, excluding Australia, Chile, Colombia, Costa Rica, Japan and Mexico due to extensive missing data across variables and over time. Detailed information on the indicator construction is provided in Annex Table 3.B.1 and summary statistics are presented in Annex Table 3.B.2. For variables that include imputed values, the statistics represent average values across the five datasets that result from the imputation process. For further information on the imputations, see Annex 3.C. The regression analyses are restricted to the period 2002-2021. Data for the earlier years (1997 to 2001) serve to incorporate time lags.

Annex Table 3.B.1. Description of variables used in the value for money analysis of child poverty and material deprivation

Indicator	Definition	Data source
Outcome variables		
Child relative poverty rate	The share of children living in households with equivalised disposable incomes that are below 50% of the national median equivalised disposable income, denoted in nominal terms (current prices)	*OECD Income Distribution Database* (OECD, n.d.[19]),
Child anchored child poverty rate	The share of children living in households with equivalised disposable incomes that are below 50% of the national median equivalised disposable income in 2005, adjusted for inflation, i.e. denoted in real terms (constant prices)	*OECD Income Distribution Database* (OECD, n.d.[19]),
Severe material deprivation rate, ages 0-17	The share of children living in households that experience severe material deprivation. As defined by Eurostat (2026[156]), material deprivation refers to a state of economic strain and durables. The severe material deprivation rate is defined as the enforced inability (rather than the *choice* not to do so) to afford at least four of the following items considered by most people to be desirable or even necessary to lead an adequate life: 1) to pay their rent, mortgage or utility bills; 2) to keep their home adequately warm; 3) to face unexpected expenses; 4) to eat meat or proteins regularly; 5) to go on holiday; 6) a television set; 7) a washing machine; 8) a car; 9) a telephone	*Eurostat Population and social conditions* (Eurostat, n.d.[157])
Policy variables		
Spending on ALMP	The variable refers to the share of public and mandatory private and voluntary private expenditures on active labour market programmes in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[158])
ECEC enrolment 0-2	The per cent of children aged 0 to 2 enrolled in formal care institutions. Some values have been imputed.	*OECD Family Database* – Indicator PF3.2 (OECD, n.d.[125])
ECEC enrolment 3-5	The per cent of children aged 3 to 5 enrolled in early childhood education and care services. Some values have been imputed.	*OECD Family Database* – Indicator PF3.2 (OECD, n.d.[125])

Indicator	Definition	Data source
Spending on ECEC	The variable refers to the share of public and mandatory private and voluntary private expenditures on ECEC services in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[158])
Spending on health services	The variable refers to the share of public and mandatory private and voluntary private expenditures on health in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices	*OECD Social Expenditure Database* (OECD, n.d.[158])
Other social spending in kind	The indicator comprises the public and mandatory private and voluntary private expenditures paid in kind for incapacity-related, housing and other social policy areas as a share of total social expenditure (cash and in-kind in the areas of families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices. The indicator excludes from the numerator spending on active labour market programmes, families and health (they enter as separate policy variables), unemployment (countries do not report in-kind benefits in this area), survivors (they mainly cover in-kind benefits related to the funeral and are thus less relevant to child outcomes) and old-age benefits (outside the scope).	*OECD Social Expenditure Database* (OECD, n.d.[158])
Effective tax rates on taking up work – single-parent family	This indicator measures the financial disincentives to participate in the labour market. It calculates the proportion of earnings in the new job that are lost to either higher taxes and social contributions, or lower benefit entitlements when a jobless parent with two children aged 4 and 6 takes up full-time employment at 67% of the average national wage after five years of claiming unemployment benefits. Some values have been imputed.	*OECD Tax-Benefit Model* (OECD, n.d.[159])
Effective tax rates on increasing working hours – single-parent family	This indicator measures the percentage of additional earnings that is lost to either higher taxes and social contributions, or lower benefits when a single parent with two children aged 4 and 6 who earns 67% of the average national wage increases their working hours from 50% to 100%. Some values have been imputed.	*OECD Tax-Benefit Model* (OECD, n.d.[159])
Effective tax rates on taking up work – two-parent family	This indicator measures the financial disincentives to participate in the labour market. It calculates the proportion of earnings in the new job that are lost to either higher taxes or lower benefit entitlements when the second earner in a couple family with two children aged 4 and 6 takes up full-time employment at 50% of the average national wage after five years of claiming unemployment benefits. The other parent is always assumed to work full-time at 50% of the average national wage. Some values have been imputed.	*OECD Tax-Benefit Model* (OECD, n.d.[159])
Effective tax rates on increasing working hours – two-parent family	This indicator measures the percentage of additional earnings that is lost to either higher taxes or lower benefits when the second earner in a couple family with two children aged 4 and 6 who earns 50% of the average national wage increases their working hours from 50% to 100%. The other parent is always assumed to work full-time at 50% of the average national wage. Some values have been imputed.	*OECD Tax-Benefit Model* (OECD, n.d.[159])
Volume of redistribution	This indicator is calculated as the average amount per equivalent household member of public transfers received (public social security, excluding employment-related social insurance transfers and private transfers received) minus taxes on income and wealth paid and of contributions paid to public social security schemes by working-age individuals, expressed as a percentage of GDP per capita. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]) and *OECD National Accounts* (OECD, n.d.[160])
Average size of taxes	The average taxes per equivalent household member paid by working-age individuals, as a share of average disposable income per equivalent household member of working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),
Average size of benefits	The average public transfers (public social security) per equivalent household member received by working-age individuals, as a share of average disposable income per equivalent household member of working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),
Share of taxes paid by the bottom 30%	The taxes per equivalent household member paid by working-age individuals in the bottom 30% of post-transfer, equivalised household income, as a share of taxes per equivalent household member paid by all working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),
Share of benefits received by the bottom 30%	The public transfers (public social security) per equivalent household member received by working-age individuals in the bottom 30% of pre-transfer income, as a share of public transfers per equivalent household member received by all working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),

Indicator	Definition	Data source
Cash transfers to families	The variable refers to the share of public and mandatory private and voluntary private expenditures allocated to families in cash in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices	*OECD Social Expenditure Database* (OECD, n.d.[158])
Cash transfers to families during early childhood (ages 0-5)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 0-5 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 0-5 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[158]) and *OECD Family Database* – Indicator PF1.6 (OECD, n.d.[125])
Cash transfers to families during middle childhood (ages 6-11)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 6-11 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 6-11 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[158]) and *OECD Family Database* – Indicator PF1.6 (OECD, n.d.[125])
Cash transfers to families during adolescence (ages 12-17)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 12-17 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 12-17 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[158]) and *OECD Family Database* – Indicator PF1.6 (OECD, n.d.[125])
RED index	The RED index measures the progressivity of taxes and benefits weighted by the volume of redistribution for a hypothetical set of households, following the methodology outlined in the OECD tax-benefit simulation model (2024[161]). For every pair of country i and time t, the formula is $$RED\ index_{it} = I_{it} * K_{it}$$ where $I_t = t_{it}/(1 - t_{it})$ measures the size of redistribution, or the incidence, and $t_{it} = \sum_j (taxes_{itj} - benefits_{itj})\ / \sum_j gross\ income_{itj}$ is the total of net taxes paid as a share of total gross income of across households J. $K_{it} = Concentration\ index_{it}\ (taxes_{itj} - benefits_{itj}) - Gini\ index_{it}\ (gross\ income_{itj})$ is the Kakwani index and the formula for the concentration index takes the form $Concentration\ index_{it} = 2 * \sum_j ((taxes_{itj} - benefits_{itj}) * R_j) / \sum_j (taxes_{itj} - benefits_{itj}) - 1$ with the rank of household j being calculated as $R_{itj} = (j * 0.5)/J$ where J represents the total number of households. The RED index yields values between -1 and 1, with higher values indicating a more progressive tax schedule. A tax schedule that is exactly proportional to gross income has a RED index of 0 as the concentration of net tax liabilities would be exactly the same as the distribution of gross income, which results in a Kakwani index of 0. A tax schedule that generates larger tax liabilities as a percentage of gross income for higher-income groups will result in a positive RED index. The incidence – or size – weighs the redistributive effect by the volume of redistribution; as a consequence, highly progressive benefits will not change the RED index by a lot if the benefit size is small. The notation of taxes is simplified and includes income reductions due to both taxes and social contributions. The set of hypothetical households is comprised of observations across 7 types of families, each with 0-3 children (28 household types in total). The seven family types are: 1) a single earner working full-time,	*OECD Tax-Benefit Model* (OECD, n.d.[159])

Indicator	Definition	Data source
	2) a single earner working part time (50%), 3) a single earner who is unemployed, 4) a couple where the first earner works full-time and the second earner is employed full-time at 67% of the average wage, 5) a couple where the first earner works full-time and the second earner is employed part-time (50%) at 67% of the average wage, 6) a couple where the first earner works full-time and the second earner does not work, and 7) a couple where both are unemployed The earnings of the first earner, where they are employed, range from the national minimum wage (or the equivalent of the OECD average where there is none) to 1.5 times the national median equivalent disposable income. Every percentile of the national average wage within that range represents one observation of a hypothetical household. In addition, observations for the two household types where all adults are unemployed are replicated to represent 10% of the other five family types.	
Income transfers for 1-3 children	This set of three indicators measures the additional benefits (net of taxes and social contributions paid) that a hypothetical set of low- to middle-income families with 1 child (or 2 or 3 children, respectively) receive compared to the same set of families without any children, as a share of their gross income. Mathematically, for every country i and time t, the indicator for families with the number of children $a \in \{1, 2, 3\}$ is $\sum_{j,c=a}(benefits_{itjc} - taxes_{itjc}) - \sum_{j,c=0}(benefits_{itjc} - taxes_{itjc}))/\sum_j gross\ income_{itj}$ where c is the number of children of household j. The sample of hypothetical households contains 7 types of families, each with 0-3 children (28 household types in total). The seven household types are: a single earner working full-time, a single earner working part time (50%), a single earner who is unemployed, a couple where the first earner works full-time and the second earner is employed full-time at 67% of the average wage, a couple where the first earner works full-time and the second earner is employed part-time (50%) at 67% of the average wage, a couple where the first earner works full-time and the second earner does not work, and a couple where both are unemployed The earnings of the first earner, where they are employed, range from the national minimum wage (or the equivalent of the OECD average where there is none) to 1.5 times the national median equivalent disposable income. Every percentile of the national average wage within that range represents one observation of a hypothetical household. Households where all parents are unemployed are represented with one observation.	*OECD Tax-Benefit Model* (OECD, n.d.[159])
Tax breaks for families	The indicator captures the volume of tax breaks for families in per cent of GDP, divided by the share of the population under age 20. Tax exemptions for families include income from child benefits that is not included in the tax base, child tax allowances (amounts for children that are deducted from gross income and are not included in taxable income), and child tax credits (amounts that are deducted from the tax liability).	*OECD Family Database* – Indicator PF1.1 (OECD, n.d.[125])
Child poverty drivers		
Total social expenditure (TS)	Total social spending refers to countries' public, private mandatory and private voluntary expenditures in-cash and in-kind in eight different policy areas: health, incapacity-related benefits, unemployment, active labour market programmes, family, housing, survivors, and other social policy areas (e.g. social assistance). It excludes spending on old age. It is denoted in constant USD PPP (base 2015 = 100) and in logarithmic form.	*OECD Social Expenditure Database,* (OECD, n.d.[158])
Adolescent fertility rate	The number of births per 1 000 women aged 15-19 at childbirth	*OECD Family Database* – Indicator SF2.3 (OECD, n.d.[125])
Share of single-parent families	The percentage share of households with children that are headed by a single parent among all households with children. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),
Average number of children per household	The number of children divided by the number of households in a country. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),

Indicator	Definition	Data source
Mean poverty gap before taxes and transfers	The mean poverty gap before taxes and transfers in per cent, i.e. the difference between the average equivalised pre-tax income of individuals living in a working-age household below the relative poverty line and the relative poverty line as a share of the relative poverty line. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[19]),
Total social spending drivers		
GDP per capita	GDP per capita net of total social spending per capita (as defined in "total social expenditure" above), denoted in USD PPP in constant prices and in logarithmic form.	*OECD National Accounts* (OECD, n.d.[160])
Life expectancy	Years of life expectancy at birth, denoted in logarithmic form.	*OECD Health Statistics* (OECD, n.d.[162])
Dependency ratio	The population aged less than 20 years or 65 years or over as a ratio of the population aged 20-64.	*OECD Historical population data* (OECD, n.d.[163])

Annex Table 3.B.2. Summary statistics

Variable	Unit	Standard deviation	Mean	Minimum	Maximum
Child relative poverty rate	Percentage of children	5.16	12.18	2.10	27.46
Child anchored poverty rate	Percentage of children	6.77	9.78	0.42	41.23
Severe material deprivation rate among children	Percentage of children	10.48	9.26	0.20	66.70
ALMP	Percentage of social expenditure (excl. old age spending)	2.33	3.33	0.00	19.52
ECEC enrolment, ages 0-2	Percentage of children	18.12	30.35	0.19	76.20
ECEC enrolment, ages 3-5	Percentage of children	17.74	80.69	31.71	100.10
Spending on ECEC	Percentage of social expenditure (excl. old age spending)	2.26	3.96	0.00	10.66
Effective tax rates on increasing working hours – two-parent family	Percentage of additional earnings	20.13	39.14	6.32	119.93
Effective tax rates on increasing working hours – single-parent family	Percentage of additional earnings	21.23	51.88	8.00	100.00
Effective tax rates on taking up work – two-parent family	Percentage of additional earnings	20.90	44.87	6.30	105.80
Effective tax rates on taking up work – single-parent family	Percentage of additional earnings	20.03	57.12	-0.20	100.00
Health services	Percentage of social expenditure (excl. old age spending)	9.37	44.67	23.33	81.03
Other in-kind spending	Percentage of social expenditure (excl. old age spending)	3.49	5.44	0.19	17.97
Tax breaks for families	Percentage of GDP per population share under age 20	1.16	0.92	0.00	5.02
Volume of redistribution	Percentage of GDP	0.05	-0.05	-0.18	0.08
Average size of taxes	Percentage of average disposable income	10.80	28.42	0.02	56.55
Average size of benefits	Percentage of average disposable income	6.18	16.47	3.18	34.82
Taxes paid by bottom 30%	Percentage of total taxes paid	3.52	9.34	1.33	26.77
Benefits received by bottom 30%	Percentage of total benefits received	10.49	33.70	12.00	58.00
Income transfers for 1 child	Index	4.13	8.95	-0.54	20.61
Income transfers for 2 children	Index	6.56	16.30	0.04	40.67
Income transfers for 3 children	Index	11.84	26.22	0.06	73.48
RED index	Index	0.04	0.12	0.01	0.21
Cash transfers to families	Percentage of social expenditure (excl. old age spending)	4.46	8.72	0.25	25.01
Cash transfers to families during early childhood (ages 0-5)	Percentage of social expenditure (excl. old age spending)	2.66	4.21	0.11	18.78

Variable	Unit	Standard deviation	Mean	Minimum	Maximum
Cash transfers to families during middle childhood (ages 6-11)	Percentage of social expenditure (excl. old age spending)	1.23	2.19	0.11	6.19
Cash transfers to families during adolescence (ages 12-17)	Percentage of social expenditure (excl. old age spending)	1.26	2.12	0.10	6.19
Social expenditure	USD PPP (base year = 2015)	3 448.01	6 293.26	626.84	18 794.87
Social expenditure, logged	Log of USD PPP (base year = 2015)	0.65	8.57	6.44	9.84
Adolescent fertility rate, per 1 000	Ratio	8.71	12.85	0.40	51.30
Share of single-parent families among all families	Percentage of households	3.88	7.58	1.31	18.91
Average number of children per household	Ratio	0.19	0.54	0.30	1.67
Mean poverty gap before taxes and transfers	Percentage of the relative poverty line (50% of equivalised median disposable income)	8.39	61.11	35.57	80.62
GDP per capita	USD PPP (base year = 2020)	15 585.90	39 239.12	10 923.12	11 0 467.82
GDP per capita, logged	Log of USD PPP (base year = 2020)	0.38	10.51	9.30	11.61
Life expectancy at birth	Years	3.13	79.07	69.70	84.20
Life expectancy at birth, logged	Log of years	0.04	4.37	4.24	4.43
Dependency ratio	Ratio	7.13	66.03	48.15	92.67

Note: These summary statistics are based on available data for 32 OECD countries excluding Australia, Chile, Columbia, Costa Rica, Japan and Mexico from 1997 to 2021. For variables that include imputed values, the statistics represent average values across the five datasets that result from the imputation process. For further information on the imputations, see Annex 3.C.

Annex 3.C. Imputation of missing observations

Many indicators don't show a complete set of values and missing values are not at random. To address these issues, missing data are imputed with two methods. First, Stineman interpolation is used between observed values for indicators that are unlikely to change substantially over time and where only few observations are missing. These are: tax breaks for families, cash transfers to families at different ages (ages 0-5, 6-11 and 12-17), and the average number of children per household. Imputations were implemented via the R package *imputeTS* (Moritz and Bartz-Beielstein, 2017[164]).

In addition, a multiple imputation approach (e.g. van Buuren (2018[165])) is used for the following variables: ECEC enrolment at ages 0-2 and 3-5, effective tax rates on increasing working hours and on taking up work, the volume of redistribution, taxes paid by the bottom 30%, average size of taxes, benefits received by the bottom 30%, average size of benefits, the mean poverty gap before taxes and transfers, the share of single parent families, tax breaks for families and the average number of children per household. This non-parametric approach uses the distribution of the observed variables to estimate multiple possible values for the missing observation, therefore allowing to account for the uncertainty around the true value for which data is missing. With this approach, the available statistical information and the number of observations that enter the analysis are maximised, which is especially important in this small-sample cross-country setting. The resulting estimates are consistent, asymptotically normal and close to being asymptotically efficient (Kropko et al., 2014[166]).

In practice, the multiple imputation model replaces the missing observations using predictive mean matching. As a first step, this process estimates a predicted value for the missing observation using the information in the remaining dataset and selects a set of 5 complete observations with predicted values that are closest in absolute distance to the predicted value for the missing observation. Assuming that the missing observation is based on the same distribution as these 5 observations, one of these observations is drawn at random to replace the missing observation in the dataset. This process is repeated 5 times, forming 5 separate datasets with imputed data for the missing observation on which the statistical analyses are performed. The resulting coefficients are then pooled, while adjusting the standard errors for the uncertainty that is produced by the imputation method (van Buuren, 2018[165]).

Annex 3.D. Regression results

In the regression estimations presented below, policy variables and the two main drivers – the log of total social expenditure per capita and the log of GDP per capita – are standardised using all available observations, including imputed values for variables where applicable, for the 32-country sample over the period 1997-2021. First differenced and lagged variables are constructed after standardisation, and the regression analysis is restricted to the period 2002-2021. For specifications in which the dependent variable is available for a shorter period, the estimation sample is reduced correspondingly.

Annex Table 3.D.1. Child relative poverty rate equations, DOLS – Table 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Spending on ALMP (lagged 3 years)	**-0.806****	-0.886*	-0.841**	-0.703*	-0.978***	-0.678**	-0.588*
x TS (lagged 3 years)	**-0.308**	-0.309	-0.317	-0.311	-0.181	-0.153	-0.431
ECEC enrolment 0-2	**-0.897**		-0.994	-0.784	-0.85	-0.705	-0.912
x TS	**-0.504**		-0.74	-0.736*	-0.355	-0.594	-0.409
ECEC enrolment 3-5	**-1.52*****		-1.865***	-1.453***	-1.226***	-1.448***	-1.317***
x TS	**0.004**		0.031	0.163	0.297	-0.205	-0.143
Spending on ECEC		**0.233**	0.931**				
x TS		**0.046**	0.137				
ECEC enrolment 0-2 x spending on ECEC			0.191				
ECEC enrolment 3-5 x spending on ECEC			-0.407*				
Lower ETR single: new job				**0.83*****			
x TS				**0.017**			
Lower ETR single: additional hours				**-0.238**			
x TS				**0.229**			
Lower ETR couple: new job					**0.706****		
x TS					**-0.281**		
Lower ETR couple: additional hours					**-0.035**		
x TS					**0.836*****		
Spending on health services						**0.166**	
x TS						**1.148*****	
Other social spending in kind	**-0.238**	-0.188	-0.181	-0.086	0.218	-0.531	-0.426
x TS	**-0.62***	-1.038***	-0.5	-0.668*	-0.604	0.04	-0.352
Tax breaks for families							**-0.274**
x TS							**0.429***
Volume of redistribution	**-0.112**	0.11	0.007	-0.049	-0.432	-0.073	-0.22
x TS	**-0.419**	-0.388	-0.688**	-0.494	-0.376	-0.471	-0.414
Share of taxes paid by the bottom 30%	**0.192**	-0.238	0.024	0.266	0.581	0.285	0.05
x TS	**-0.11**	-0.356	-0.265	-0.047	0.515	-0.171	-0.174
Share of benefits received by the bottom 30%	**-0.685**	-1.348	-0.869	-0.708	-0.885	-0.475	-0.818
x TS	**0.48**	0.985**	0.295	0.497	0.705	0.048	0.368
In-cash spending on families	**-1.461*****	-1.187**	-1.394***	-1.371***	-1.4***	-1.597***	-1.453***
x TS	**-0.741***	-0.398	-0.726	-1.028**	-1.121**	-0.676*	-0.724
Total social expenditure per capita (logged)	-2.94***	-2.656**	-2.589***	-3.452***	-3.585***	-3.097***	-3.216***
Adolescent fertility rate (per 1 000)	0.113***	0.152***	0.09**	0.091**	0.097**	0.133***	0.124***
Share of single-parent families	0.281	0.318	0.269	0.232	0.285*	0.402*	0.264

Average number of children per household	1.099	-1.876	-0.363	5.443	3.965	3.891	-2.566
Mean poverty gap	0.018	-0.014	-0.015	0.069	0.024	0.02	0.011
Adjusted R^2	0.409	0.358	0.441	0.443	0.469	0.433	0.415
Number of observations	478	478	478	478	461	478	478
Number of countries	32	32	32	32	32	32	32
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.2. Child relative poverty rate equations, DOLS – Table 2

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Spending on ALMP (lagged 3 years)	-0.908**	-0.968**	-1.066***	-1.379***	-1.304***	-1.196***	-0.789*	-1.051**	-0.967**
x TS (lagged 3 years)	-0.205	-0.228	-0.111	-0.128	-0.153	-0.004	0.297	0.324	0.367
ECEC enrolment 0-2	-0.708	-0.879	-0.993	-0.783	-0.736	-0.489	-0.914	-0.987	-1.042*
x TS	-0.293	-0.538	-0.013	-0.067	-0.131	0.107	-0.326	-0.476	-0.343
ECEC enrolment 3-5	-1.342***	-1.515***	-1.544***	-1.15***	-1.033**	-1.05***	-1.618***	-1.519***	-1.346***
x TS	0.002	0.085	0.002	-0.104	-0.126	0.158	0.025	-0.28	-0.192
Other social spending in kind	-0.378	-0.626	0.264	0.376	0.269	-0.182	-0.809	-1.158*	-1.061
x TS	-0.637*	-0.278	-0.611*	-0.688*	-0.749**	-0.42	-0.27	0.247	0.092
Volume of redistribution			-0.228	-0.302	-0.17		0.404	0.498	0.507
x TS			-0.322	-0.373	-0.392		-0.532	-0.69	-0.781
Size of benefits	-1.248**	-0.136							
Size of taxes	-0.334	-0.241							
Share of taxes paid by the bottom 30%	-0.134		0.301	0.335	0.273		-0.071	0.46	0.396
x TS			-0.042	0.05	0.071		-0.38	-0.412	-0.354
Share of benefits received by the bottom 30%	-1.36		-1.062	-0.938	-0.881		-0.29	0.318	0.179
x TS			0.737	0.489	0.548		0.617	0.053	0.112
Size of benefits x share of benefits received by the bottom 30%	-1.12***								
Size of taxes x share of taxes received by the bottom 30%	-0.233*								
Income transfers for 1 child			**-0.733****						
x TS			**-1.258*****						
Income transfers for 2 children				**-1.142*****					
x TS				**-0.803*****					
Income transfer for 3 children					**-1.292*****				
x TS					**-0.995*****				
RED index						**-1.37*****			
x TS						**-1.128*****			
In-cash spending on families	-1.384***	-1.634***				-1.212***			
x TS	-0.754*	-0.989**				-0.57			
In-cash spending on families, ages 0-5							**-1.127**		
x TS							**-1.059**		

In-cash spending on families, ages 6-11								**-1.582*** **	
x TS								**0.113**	
In-cash spending on families, ages 12-17									**-1.304*** **
x TS									**0.207**
Total social expenditure per capita (logged)	-2.926***	-3.719***	-3.032***	-2.843***	-2.757***	-2.982***	-3.068*	-3.028*	-2.73*
Adolescent fertility rate (per 1 000)	0.104***	0.124***	0.162***	0.145***	0.135***	0.147***	0.132***	0.12***	0.14***
Share of single-parent families	0.276	0.248	0.341*	0.388*	0.367*	0.31*	-0.114	0.062	0.063
Average number of children per household	1.723	0.054	-0.95	-1.475	0.755	5.002	5.58	6.021	5.246
Mean poverty gap	0.094	0.049	0.034	0.049	0.053	0.027	0.059	0.09	0.1*
Adjusted R^2	0.469	0.391	0.456	0.463	0.461	0.464	0.42	0.445	0.436
Number of observations	478	478	465	465	465	465	333	333	333
Number of countries	32	32	32	32	32	32	28	28	28
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.3. Child anchored poverty rate regressions, DOLS – Table 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Spending on ALMP (lagged 3 years)	**-2.021*** **	-2.109**	-1.665**	-2.042***	-2.567***	-2.05***	-1.738**
x TS (lagged 3 years)	**1.115** **	1.377***	0.765	1.05**	0.977	1.024**	0.835
ECEC enrolment 0-2	**-1.786***		-1.813	-1.703	-1.819*	-2.047*	-1.718*
x TS	**-0.892**		-1.349***	-1.186**	-0.947	-1.056**	-0.966*
ECEC enrolment 3-5	**0.744**		-0.858	0.709	1.46**	1.126**	0.974*
x TS	**0.401**		0.524	-0.004	0.548	0.25	0.156
Spending on ECEC		**0.798**	2.019*				
x TS		**-0.257**	0.44				
ECEC enrolment 0-2 x spending on ECEC			0.28				
ECEC enrolment 3-5 x spending on ECEC			-1.717**				
Lower ETR single: new job				**-1.126*** **			
x TS				**-0.143**			
Lower ETR single: additional hours				**0.131**			
x TS				**-0.42**			
Lower ETR couple: new job					**-0.385**		
x TS					**-0.467**		
Lower ETR couple: additional hours					**1.293** **		
x TS					**0.709***		
Spending on health services						**-4.146*** **	
x TS						**0.267**	
Other social spending in kind	**-2.922** **	-3.463***	-2.629**	-2.635**	-2.666**	-4.588***	-3.485**
x TS	**2.679** **	2.845**	2.468**	2.408**	3.152***	3.256***	3.429**
Tax breaks for families							**-0.229**
x TS							**0.81***
Volume of redistribution	**-0.125**	-0.457	0.085	-0.513	-0.521	0.307	-0.267
x TS	**0.103**	0.094	-0.593	-0.284	0.097	-0.726	0.188
Share of taxes paid by the bottom 30%	**1.692***	1.941**	1.106	1.923**	2.628***	1.763**	1.416
x TS	**-0.066**	-0.44	-0.426	-0.284	0.603	-0.089	-0.226

Share of benefits received by the bottom 30%	**-3.048****	-3.328**	-2.862**	-2.89***	-3.737**	-1.117	-3.022**
x TS	**1.559**	1.706	1.018	1.71*	1.734	0.809	1.392
In-cash spending on families	**-0.152**	-0.143	0.008	-0.06	-0.342	-1.113	-0.246
x TS	**-0.113**	-0.266	-0.04	-0.002	-0.23	0.687	-0.035
Total social expenditure per capita (logged)	-7.304***	-6.042***	-5.778***	-7.297***	-6.745***	-8.825***	-7.584***
Adolescent fertility rate (per 1 000)	0.12	0.058	0.019	0.093	0.092	0.134	0.123
Share of single-parent families	0.816**	0.924**	0.865**	0.778**	0.965***	0.708**	0.802**
Average number of children per household	15.809	14.148	16.222	15.189	6.941	23.727**	12.457
Mean poverty gap	0.727***	0.655***	0.588***	0.694***	0.634***	0.602***	0.702***
Adjusted R^2	0.675	0.667	0.709	0.689	0.688	0.71	0.678
Number of observations	411	411	411	411	399	411	411
Number of countries	30	30	30	30	30	30	30
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.4. Child anchored poverty rate equations, DOLS – Table 2

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Spending on ALMP (lagged 3 years)	-1.379**	-1.071**	-2.501***	-2.569***	-2.344***	-1.788**	-2.93***	-2.184**	-2.212**
x TS (lagged 3 years)	0.854	0.68	1.349**	1.199**	1.039*	0.565	2.281***	1.55**	1.508**
ECEC enrolment 0-2	-0.786	-1.712	-2.017*	-2.177**	-2.431*	-2.633*	-2.109*	-2.473**	-2.555**
x TS	-0.872**	-1.395***	-0.637	-0.761	-0.677	-0.926**	-0.773	-0.175	-0.227
ECEC enrolment 3-5	0.504	0.526	0.771	0.963*	0.84	0.479	0.98	0.689	0.523
x TS	0.594	0.744	-0.135	0.006	0.187	0.784	-1.165*	-0.705	-0.756
Other social spending in kind	-3.169***	-4.2***	-2.69***	-2.57**	-2.345**	-3.506***	-3.461**	-1.725	-1.947
x TS	2.333**	3.394***	2.953***	2.79***	2.636**	2.763***	2.581*	1.219	1.423
Volume of redistribution			-0.561	-0.326	-0.353		1.47	1.034	0.947
x TS			0.368	0.262	0.296		-0.108	-0.393	-0.315
Size of benefits	1.524**	3.528***							
Size of taxes	-0.409	0.512							
Share of taxes paid by the bottom 30%	0.883		2.221**	2.538***	2.69***		2.422***	2.386***	2.447***
x TS			-0.255	0.101	0.261		-0.617	-0.768	-0.803
Share of benefits received by the bottom 30%	-1.375		-4.036***	-3.278**	-3.271**		-4.265**	-4.454**	-4.232*
x TS			1.795	1.578	1.652		2.465**	2.212**	2.072*
Size of benefits x share of benefits received by the bottom 30%	-2.526***								
Size of taxes x share of taxes received by the bottom 30%	-0.185								
Income transfers for 1 child			**-0.815**						
x TS			**-0.171**						
Income transfers for 2 children				**-0.42**					
x TS				**0.144**					
Income transfer for 3 children					**0.141**				
x TS					**-0.006**				
RED index						**-0.12**			
x TS						**0.189**			
In-cash spending on families	-0.491	-0.988				0.127			
x TS	-0.196	-0.333				0.152			
In-cash spending on families, ages 0-5							**-1.669**		
x TS							**-0.507**		

In-cash spending on families, ages 6-11								**0.867**	
x TS								**-0.34**	
In-cash spending on families, ages 12-17									**0.526**
x TS									**-0.359**
Total social expenditure per capita (logged)	-7.007***	-9.146***	-5.778***	-6.339***	-6.717***	-7.489***	-12.238***	-12.051***	-12.34***
Adolescent fertility rate (per 1 000)	0.268***	0.283***	0.144	0.106	0.083	0.1	0.314**	0.237*	0.218*
Share of single-parent families	0.598*	0.514	0.922***	0.942***	0.934***	0.521	0.056	0.165	0.19
Average number of children per household	5.912	8.029	2.94	8.3	11.287	22.669*	13.061	7.04	8.752
Mean poverty gap	0.417***	0.38***	0.766***	0.734***	0.713***	0.752***	0.83***	0.821***	0.816***
Adjusted R^2	0.771	0.696	0.681	0.68	0.679	0.642	0.727	0.727	0.727
Number of observations	411	411	402	402	402	402	292	292	292
Number of countries	30	30	30	30	30	30	26	26	26
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.5. Child severe material deprivation rate equations, DOLS – Table 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Spending on ALMP (lagged 3 years)	**-1.628***	-2.399**	-1.829*	-1.966**	-2.05*	-1.846*	-1.522
x TS (lagged 3 years)	**1.451***	1.733**	1.382	1.491**	2.077**	1.051	1.242
ECEC enrolment 0-2	**-0.342**		-0.928	-0.176	-0.653	-0.351	-0.48
x TS	**0.115**		-0.191	0.101	0.143	-0.265	0.158
ECEC enrolment 3-5	**-0.256**		-0.613	-0.841	0.029	0.326	0.002
x TS	**2.036*****		2.16***	2.356***	1.97**	2.289***	1.802**
Spending on ECEC		**0.623**	1.062				
x TS		**0.363**	0.25				
ECEC enrolment 0-2 x spending on ECEC			0.136				
ECEC enrolment 3-5 x spending on ECEC			-0.36				
Lower ETR single: new job				**-0.505**			
x TS				**-0.275**			
Lower ETR single: additional hours				**-1.342****			
x TS				**0.577**			
Lower ETR couple: new job					**-1.552*****		
x TS					**0.813****		
Lower ETR couple: additional hours					**0.298**		
x TS					**-0.087**		
Spending on health services						**-3.131****	
x TS						**-1.856**	
Other social spending in kind	**-2.116***	-2.224*	-2.11	-2.59**	-3.202***	-2.093	-2.365*
x TS	**0.16**	0.617	0.343	0.774	0.848	-0.88	0.542
Tax breaks for families							**-0.211**
x TS							**0.789**
Volume of redistribution	**0.296**	0.215	0.434	-0.149	0.419	0.949	0.251
x TS	**-1.139**	-1.512*	-1.432*	-0.829	-1.061	-1.615**	-1.159
Share of taxes paid by the bottom 30%	**-0.056**	0.11	-0.127	-0.034	0.416	-0.335	-0.111
x TS	**-0.569**	-0.665	-0.675*	-0.489	-0.973	-0.587**	-0.597
Share of benefits received by the bottom 30%	**-1.707**	-2.414	-1.537	-2.197	-0.969	-0.851	-1.787

x TS	**3.43*** **	3.811***	3.129**	3.474***	2.857**	4.117***	3.209***
In-cash spending on families	**0.834**	-0.022	0.91	1.332	0.075	0.727	0.845
x TS	**3.258*** **	3.495***	3.21***	3.055**	2.527**	3.715***	3.335***
Total social expenditure per capita (logged)	-8.404***	-9.092***	-7.923***	-7.677***	-8.759***	-10.021***	-8.724***
Adolescent fertility rate (per 1 000)	0.052	-0.02	0.037	0.045	-0.016	0.046	0.084
Share of single-parent families	-0.24	-0.268	-0.165	-0.302	-0.015	-0.393	-0.248
Average number of children per household	6.902	6.264	7.208	6.378	12.31	10.793	0.337
Mean poverty gap	0.536***	0.469***	0.497***	0.522***	0.549***	0.45***	0.531***
Adjusted R^2	0.673	0.664	0.677	0.695	0.695	0.697	0.675
Number of observations	448	448	448	448	431	448	448
Number of countries	27	27	27	27	27	27	27
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.6. Child severe material deprivation rate regressions, DOLS – Table 2

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Spending on ALMP (lagged 3 years)	-1.329	-1.556	-1.442	-1.403	-1.316	-2.342***	-2.268**	-1.862**	-1.951**
x TS (lagged 3 years)	0.699	1.045	1.04	1.051	1.013	1.283*	1.458***	1.135**	1.289**
ECEC enrolment 0-2	-0.86	-0.664	-1.739	-1.269	-1.565	-3.165**	-2.715**	-2.83***	-2.529***
x TS	0.219	0.036	-0.517	-0.536	-0.343	0.66	0.234	0.46	0.353
ECEC enrolment 3-5	-1.093	-0.299	-0.146	-0.56	-0.651	0.032	-1.382**	-1.263*	-1.094
x TS	2.216***	2.557***	1.926**	2.269**	2.463***	1.16	1.64**	2.009***	2.001***
Other social spending in kind	-3.073**	-2.565**	-2.806***	-2.22**	-1.742	-4.971***	-1.408	0.1	0.042
x TS	1.882**	1.558	0.497	0.16	-0.339	3.353***	0.493	-0.86	-0.817
Volume of redistribution			0.986	0.512	0.225		-0.471	-0.689	-0.578
x TS			-1.221	-1.083	-1.306		0.01	-0.098	-0.084
Size of benefits	3.393***	3.812***							
Size of taxes	0.611	-0.276							
Share of taxes paid by the bottom 30%	-0.218		-0.079	-0.095	-0.018		1.209	0.883	0.926
x TS			-1.112	-1.233	-1.082		-0.754	-0.874	-0.924
Share of benefits received by the bottom 30%	1.733		-1.578	-2.115	-2.277		-1.579	-2.243	-2.36
x TS			3.766***	4.024***	4.072***		2.464***	2.902***	3.069***
Size of benefits x share of benefits received by the bottom 30%	-0.669								
Size of taxes x share of taxes received by the bottom 30%	-0.823***								
Income transfers for 1 child			**2.184*** **						
x TS			**-1.939*** **						
Income transfers for 2 children				**1.752** **					
x TS				**-1.31** **					
Income transfer for 3 children					**2.302*** **				
x TS					**-0.889**				
RED index						**3.757*** **			
x TS						**-1.595*** **			
In-cash spending on families	-0.695	-0.648				-1.723*			
x TS	2.933***	2.957***				2.4**			
In-cash spending on families, ages 0-5							**-0.329**		
x TS							**0.285**		

In-cash spending on families, ages 6-11								**1.737*** **	
x TS								**-0.817**	
In-cash spending on families, ages 12-17									**2.034*** **
x TS									**-0.856**
Total social expenditure per capita (logged)	-9.529***	-9.875***	-10.172***	-9.887***	-11.179***	-12.798***	-11.123***	-11.358***	-11.002***
Adolescent fertility rate (per 1 000)	0.2	0.237	0.056	-0.002	0.026	0.21	-0.184	-0.191	-0.169
Share of single-parent families	-0.298	-0.223	-0.29	-0.107	0.015	-0.415	-0.152	-0.21	-0.238
Average number of children per household	-2.832	-2.577	36.764*	35.446*	33.643*	9.915	-11.364	-13.526	-14.276
Mean poverty gap	0.173	0.205*	0.478***	0.519***	0.484***	0.457***	0.475***	0.476***	0.472***
Adjusted R^2	0.678	0.651	0.676	0.66	0.672	0.674	0.711	0.722	0.724
Number of observations	448	448	438	438	438	438	322	322	322
Number of countries	27	27	27	27	27	27	24	24	24
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 3.D.7. Per capita social expenditure growth equations, DOLS – Table 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Spending on ALMP (lagged 3 years)	**-0.035**	-0.034	-0.033	-0.034	-0.039*	-0.043**	-0.024
x GDP (lagged 3 years)	**-0.046***	-0.051**	-0.041**	-0.052**	-0.027	-0.04**	-0.055**
ECEC enrolment 0-2	**0.047**		0.03	0.048	0.053	0.046	0.052
x GDP	**-0.047*****		-0.038***	-0.043**	-0.035**	-0.043***	-0.046***
ECEC enrolment 3-5	**-0.022**		-0.009	-0.025	-0.018	-0.015	-0.014
x GDP	**0.02**		0.017	0.019	0.025*	0.015	0.009
Spending on ECEC		**-0.022**	-0.022				
x GDP		**0.016**	0.007				
ECEC enrolment 0-2 x spending on ECEC			0.007				
ECEC enrolment 3-5 x spending on ECEC			0.007				
Lower ETR single: new job				**-0.007**			
x GDP				**-0.026**			
Lower ETR single: additional hours				**-0.003**			
x GDP				**0.003**			
Lower ETR couple: new job					**0**		
x GDP					**-0.023****		
Lower ETR couple: additional hours					**0.007**		
x GDP					**0.027****		
Spending on health services						**-0.11*****	
x GDP						**-0.014**	
Other social spending in kind	**0.058****	0.064**	0.06**	0.062***	0.068***	0.03	0.036
x GDP	**-0.004**	-0.026	-0.016	-0.015	-0.024	-0.015	0.018
Tax breaks for families							**-0.03****
x GDP							**0.028*****
Volume of redistribution	**0.029**	0.014	0.015	0.031	0.026	0.045*	0.027
x GDP	**-0.046*****	-0.029	-0.032*	-0.044***	-0.06***	-0.065***	-0.042***
Share of taxes paid by the bottom 30%	**-0.029**	-0.026	-0.023	-0.032	-0.019	-0.018	-0.038**
x GDP	**0.002**	0.015	0.015	0.001	0	0.008	-0.003

Share of benefits received by the bottom 30%	**0.001**	0.006	0.004	-0.011	-0.006	0.017	0.007
x GDP	**-0.051*** **	-0.036**	-0.033*	-0.043**	-0.041**	-0.056**	-0.061***
In-cash spending on families	**0.062*** **	0.057***	0.062***	0.064***	0.052**	0.033	0.056**
x GDP	**-0.002**	0.017	0.006	-0.004	-0.013	0.007	-0.007
Ln (GDP p.c.)	0.178***	0.178***	0.172***	0.195***	0.17***	0.229***	0.179***
Ln (life expectancy)	0.38	0.238	-0.111	0.677	1.443	-0.948	1.087
Dependency ratio	-0.008	-0.006	-0.008	-0.006	-0.007	-0.003	-0.007
Adjusted R^2	0.619	0.636	0.652	0.623	0.572	0.658	0.644
Number of observations	482	482	482	482	465	482	482
Number of countries	32	32	32	32	32	32	32
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x GDP” means the interaction between the policy variable in the line above and the log of GDP per capita. The log of GDP per capita is standardised along with the policy variables to facilitate the interpretation of results. The dependent variable is the log of total social spending per capita.

Annex Table 3.D.8. Per capita social expenditure growth equations, DOLS – Table 2

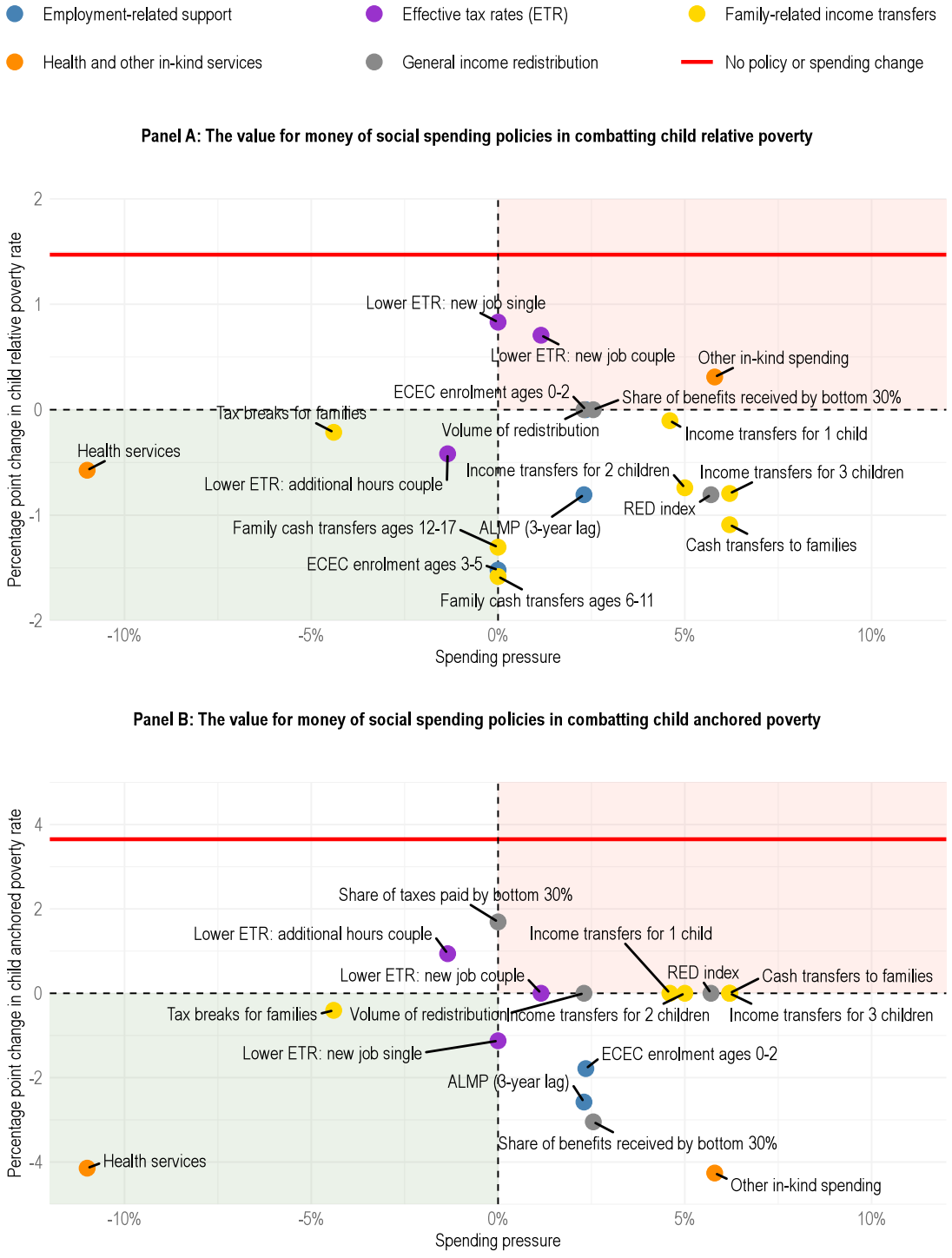
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Spending on ALMP (lagged 3 years)	-0.01	-0.017	-0.039*	-0.033	-0.032	-0.041*	-0.017	-0.015	-0.016
x GDP (lagged 3 years)	-0.045**	-0.044**	-0.009	-0.008	-0.015	-0.03	-0.022	-0.026	-0.023
ECEC enrolment 0-2	0.041	0.059*	0.024	0.025	0.02	0.022	-0.001	-0.004	-0.001
x GDP	-0.043***	-0.045***	-0.038**	-0.038**	-0.036**	-0.031	-0.02	-0.027**	-0.03**
ECEC enrolment 3-5	-0.054***	-0.046**	-0.001	-0.018	-0.029	-0.024	-0.02	-0.029	-0.026
x GDP	0.001	-0.001	-0.002	0.007	0.012	-0.005	0.015	0.016	0.016
Other social spending in kind	0.016	0.033	0.056**	0.062***	0.072***	0.055**	0.062***	0.067***	0.069***
x GDP	0.008	-0.003	-0.026	-0.031	-0.031	-0.006	-0.083***	-0.083***	-0.085***
Volume of redistribution			0.032	0.032	0.021		0.061***	0.056***	0.056***
x GDP			-0.058***	-0.053***	-0.052***		-0.067***	-0.056***	-0.059***
Size of benefits	0.133***	0.105***							
Size of taxes	-0.03	-0.048**							
Share of taxes paid by the bottom 30%	-0.027		-0.01	-0.018	-0.017		0.005	0.003	0.003
x GDP			0.004	-0.002	-0.001		0.029**	0.027*	0.026*
Share of benefits received by the bottom 30%	0.059		0.014	0.006	0.002		0.086*	0.087*	0.082*
x GDP			-0.035*	-0.033	-0.037*		-0.047***	-0.038**	-0.037**
Size of benefits x share of benefits received by the bottom 30%	0.026**								
Size of taxes x share of taxes received by the bottom 30%	-0.014								
Income transfers for 1 child			**0.046*** **						
x GDP			**-0.003**						
Income transfers for 2 children				**0.05*** **					
x GDP				**0.006**					
Income transfer for 3 children					**0.062*** **				
x GDP					**0.001**				
RED index						**0.057****			
x GDP						**-0.012**			
In-cash spending on families	0.03	0.031				0.025			
x GDP	-0.013	-0.018				-0.015			
In-cash spending on families, ages 0-5							**0.014**		
x GDP							**-0.001**		

In-cash spending on families, ages 6-11								**-0.003**	
x GDP								**-0.032**	
In-cash spending on families, ages 12-17									**0.004**
x GDP									**-0.032**
GDP per capita (logged)	0.274***	0.264***	0.157***	0.161***	0.169***	0.168***	0.08	0.091*	0.094*
Life expectancy (logged)	0.604	0.875	0.454	0.527	0.024	0.079	2.278	2.222	2.219
Dependency ratio	-0.003	-0.002	-0.006	-0.007	-0.008	-0.008	-0.006	-0.007	-0.007
Adjusted R^2	0.675	0.657	0.568	0.567	0.587	0.553	0.616	0.632	0.627
Number of observations	478	478	469	469	469	469	333	333	333
Number of countries	32	32	32	32	32	32	28	28	28
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

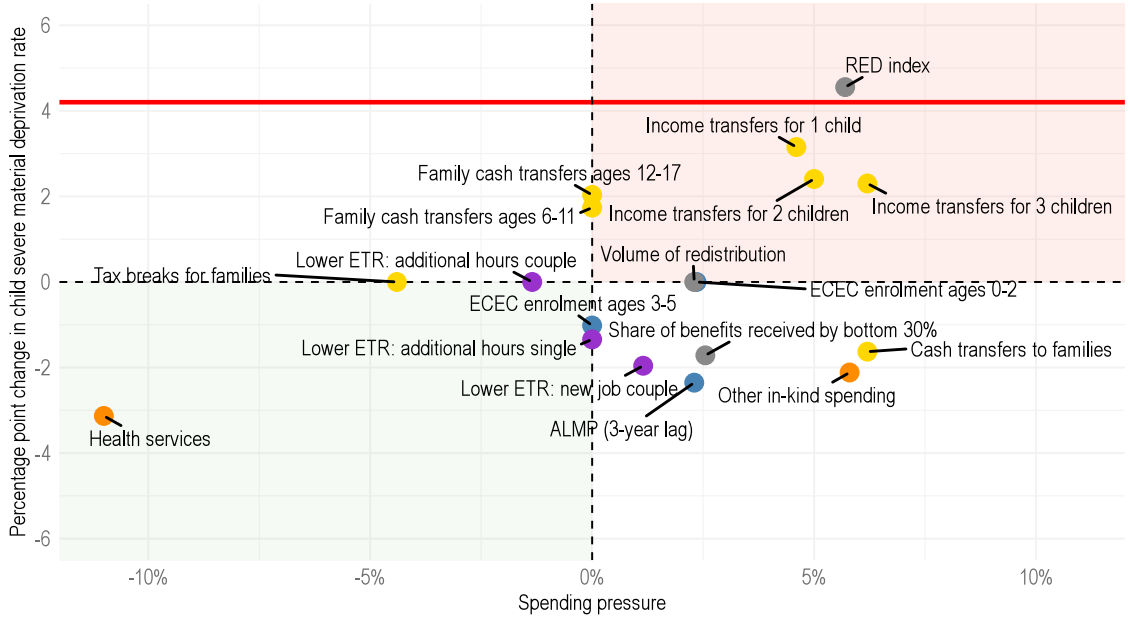
Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x GDP” means the interaction between the policy variable in the line above and the log of GDP per capita. The log of GDP per capita is standardised along with the policy variables to facilitate the interpretation of results. The dependent variable is the log of total social spending per capita.

Annex 3.E. Value for money at different levels of social expenditure and GDP

Annex Figure 3.E.1. The value for money for a hypothetical country with relatively low levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in combatting severe material deprivation among children



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with low levels of logged per capita social spending and logged GDP per capita (both one standard deviation below the sample average), and average policy settings.

How to read the figure: The vertical axis indicates the p.p. difference in child poverty rates related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving child poverty outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy enhances overall social spending efficacy. Positive values suggest that the policy expansion yields relatively worse outcomes over time than what could be achieved if per capita social expenditure increased and all policies remained at their average levels. Points above the red line indicate that an increase in the given policy by one standard deviation would reduce overall social spending effectiveness to the extent that the increase in social expenditure becomes associated with higher child poverty rates.

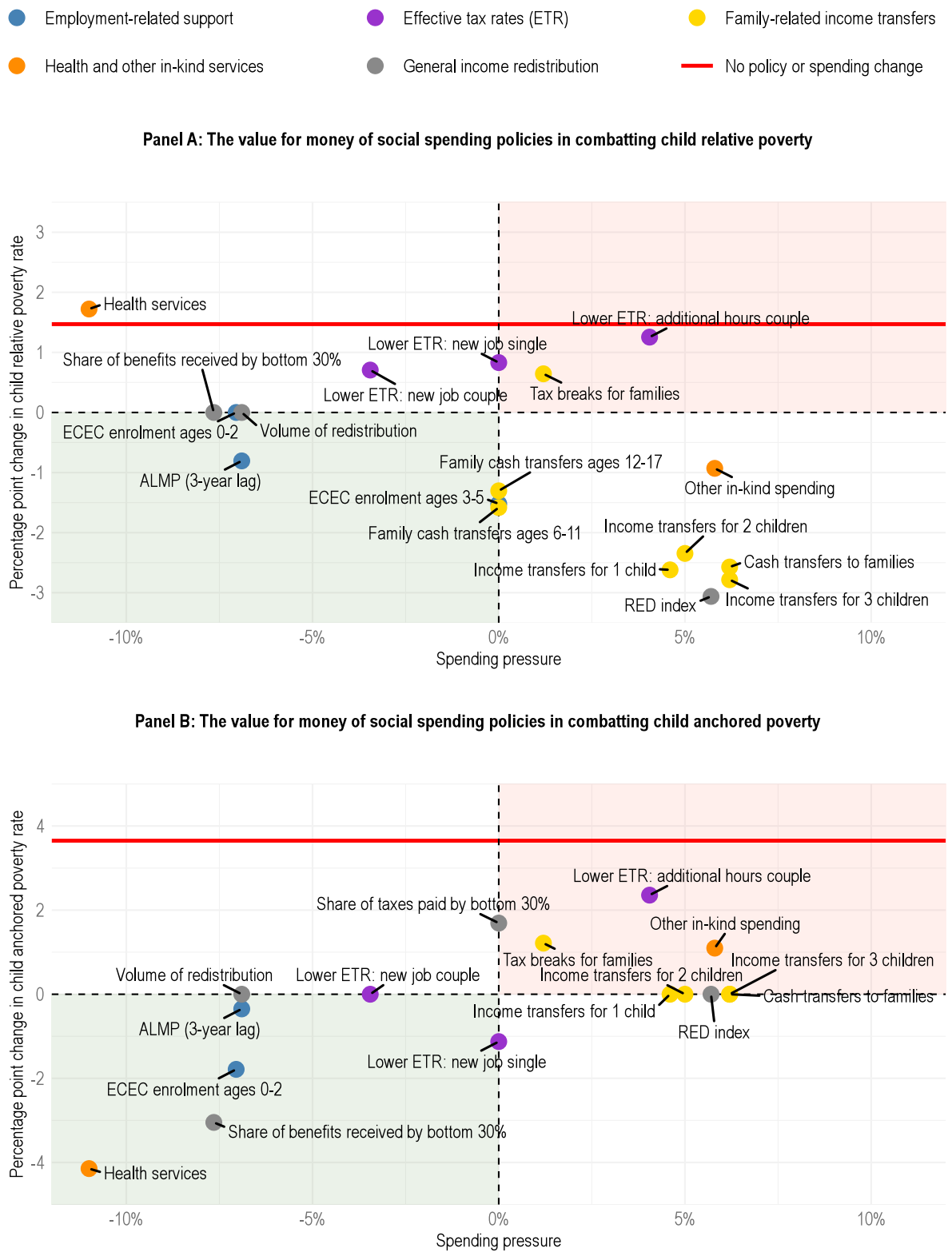
Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in either the child outcome or spending regressions are displayed.

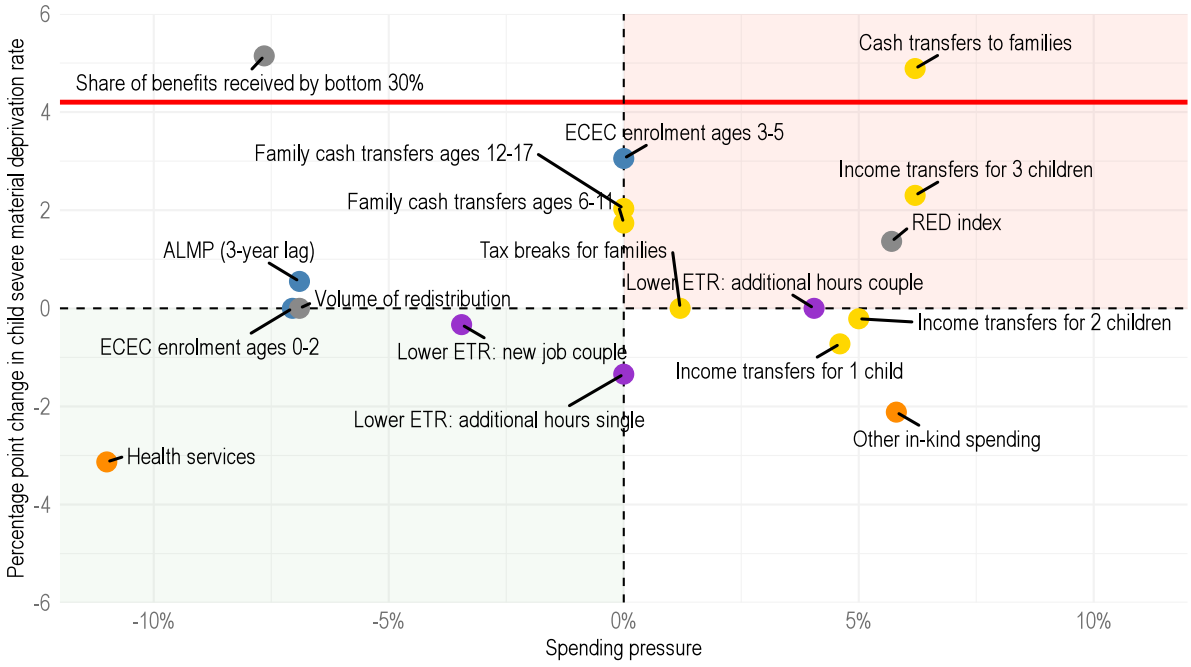
Example: Increasing the share of social expenditure dedicated to active labour market programmes (ALMP) by one standard deviation (+2.3 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation below its average level is predicted to enhance the overall social spending effectiveness in reducing child relative poverty by 0.8 p.p. (to -2.3 p.p.) compared to the effect of raising social spending levels under the unchanged, average policy mix (-1.5 p.p.). This represents a gain in overall social spending effectiveness by over 50%. At the same time, such an increase in the share of social expenditure dedicated to ALMP is predicted to raise spending pressure by around 2.3% of per capita social expenditure (up from an expected 8.9% increase to 11.2%) for an assumed increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically). This represents an increase in spending pressure by around 25% compared to the scenario where GDP increases over time, but policies remain unchanged.

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Section 3.3 “Assessing value for money” for a description of the methodology and Annex 3.D for the regression coefficients used in the calculations.

Annex Figure 3.E.2. The value for money of social policies for a hypothetical country with relatively high levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in combatting severe material deprivation among children



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with high levels of logged per capita social spending and logged GDP per capita (both one standard deviation above the sample average), and average policy settings.

How to read the figure: The vertical axis indicates the p.p. difference in child poverty rates related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving child poverty outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy enhances overall social spending efficacy. Positive values suggest that the policy expansion yields relatively worse outcomes over time than what could be achieved if per capita social expenditure increased and all policies remained at their average levels. Points above the red line indicate that an increase in the given policy by one standard deviation would reduce overall social spending effectiveness to the extent that the increase in social expenditure becomes associated with higher child poverty rates.

Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in either the child outcome or spending regressions are displayed.

Example: Increasing the share of social expenditure dedicated to active labour market programmes (ALMP) by one standard deviation (+2.3 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation above its average level is predicted to enhance the overall social spending effectiveness in reducing child relative poverty by 0.8 p.p. (to -2.3 p.p.) compared to the effect of raising social spending levels under the unchanged, average policy mix (-1.5 p.p.). This represents a gain in overall social spending effectiveness by over 50%. At the same time, such an increase in the share of social expenditure dedicated to ALMP is predicted to ease spending pressure by around 6.9% of per capita social expenditure (down from an expected 8.9% increase to 15.8%) for an assumed increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically). This represents a reduction in spending pressure by around 25% compared to the scenario where GDP increases over time, but policies remain unchanged.

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Section 3.3 “Assessing value for money” for a description of the methodology and Annex 3.D for the regression coefficients used in the calculations.

Annex 3.F. Indexation of major child cash benefit amounts to inflation or cost-of-living in selected OECD countries

Annex Table 3.F.1. Practices to adjust child cash benefit amounts vary across OECD countries

Country	Child/Family Benefit Indexation to Inflation? (Recent Practice)	Notes / References
Belgium	Yes (regionally automatic)	In Brussels and Wallonia, family/child benefit amounts are indexed to the *health index* (a cost-of-living measure) and adjusted automatically when the pivot index is reached (e.g. early 2025), (OECD, 2024[167]).
Canada	Yes (annual CPI)	The *Canada Child Benefit* (a taxable, income-tested cash benefit) is indexed annually to inflation each July using the CPI to maintain purchasing power (Gonzales, 2025[168]).
France	De facto (annual adjustments)	Family benefit base (BMAF) and child benefit rates are typically uprated annually in line with anticipated CPI changes (e.g. revaluation on 1 April each year), though exact indexation rules reflect policy choices rather than strict automatic indexing (Cleiss, 2026[169]).
Austria	No automatic indexation	Austrian family allowance (*Familienbeihilfe*) is not indexed to inflation under current policy settings (OECD, 2024[170]).
Luxembourg	Yes (price/wage linked)	Family allowances have been indexed again since October 2021; they are linked like the minimum wage indexation mechanism (e.g. indexed to inflation/wage movements) (OECD, 2014[171]).
United Kingdom	Historically yes but conditional	UK child benefit has historically been updated annually, often to keep pace with inflation or the "highest of prices, wages or 2.5 %" for certain benefits; indexation practice depends on fiscal policy decisions (OECD, 2025[172]).
Germany	No clear automatic CPI indexing	Child benefit reforms have sometimes involved ad hoc increases responding to inflationary periods (e.g. one-off inflation adjustments in 2022), but there's no strict CPI indexation rule in the standard benefit description (OECD, 2023[126]).
Spain/ Italy/ other EU	Varies, often discretionary	Many EU countries (e.g. Spain, Italy) do not have automatic inflation indexation for child benefits; increases are typically set by budgetary or legislative decision rather than strict indexation. Data on rates and expenditure trends are available, but specific automatic CPI linkage varies by country (Eurostat, n.d.[173]).

Notes

[1] Indicators of financial strain – whether self-reported or objective (e.g. the ability to cover three months of expenses using available assets) – can help provide a more comprehensive picture of households' economic pressure and experienced stress. However, the lack of consistent OECD-wide time series data limits their use in analysis such as in the present chapter. Similarly, combined measures such as AROPE are not available across the OECD and limited to recent years, and therefore not suitable for this analysis.

[2] To account for differences in household size and composition, income is "equivalised," meaning that total household income is divided by the square root of the household size. This adjustment reflects variations in living standards across families of different sizes.

[3] In most countries, average living standards have increased over time, causing the relative poverty line – defined as a share of median income – to rise accordingly. As a result, relative poverty may include

households whose living standards would not have been considered poor in earlier periods. In such contexts, anchored child poverty captures children in deeper poverty, that is, those with equivalised incomes below both the fixed (anchored) and the contemporaneous relative poverty thresholds; anchored poverty rates are therefore typically lower than relative poverty rates. However, anchored poverty rates can exceed relative poverty rates when median living standards decline, signalling a deterioration in living conditions that also affects children at the bottom of the income distribution.

[4] This indicator was prioritised over the child-specific material deprivation rate and the material and social deprivation rate of children because it offers longer annual time series that can be consistently matched with indicators of social expenditure and other policy design.

[5] Spending shares are not adjusted for the size of potential beneficiary groups because the analysis aims to assess the effectiveness of overall spending allocations across policy areas and the trade-offs they imply for policymakers. Population-weighted robustness checks (e.g. weighting ECEC spending by the population under age 5 and family benefits by the population under age 20) produce broadly similar results, confirming the robustness of the main findings, although health spending (weighted by the share of the population under age 65) becomes more strongly associated with lower severe material deprivation at higher levels of social spending (results available upon request).

[6] The term “taxes” is used in a very wide sense here and refers to reductions in income through both, taxes and social contributions.

[7] The volume of redistribution is measured by equivalised net benefits received from public transfers (benefits net of taxes paid) by the average working-age individual, expressed as a percentage of GDP per capita. The share of benefits received by the bottom 30% measures public social security cash benefits received by working-age individuals in the bottom 30% of the post-transfer, equivalised household income distribution, per equivalent household member, as a share of benefits received by all working-age individuals. The share of taxes paid by the bottom 30% is defined analogously, as taxes paid by working-age individuals in the bottom 30% of the post-transfer, equivalised household income distribution, per equivalent household member, as a share of taxes paid by all working-age individuals. These two indicators capture the distribution of benefits and taxes across the income distribution. The share of cash transfers to families measures cash expenditure on family benefits as a share of total social expenditure. Three additional indicators measure the share of total social expenditure provided in cash to children and their families during early childhood (ages 0-5), middle childhood (ages 6-11) and adolescence (ages 12-17). Tax breaks for families are measured as the amount of tax revenue forgone through tax provisions for families with children, expressed as a percentage of GDP and adjusted for the population share aged under 20. These provisions include child benefits excluded from the tax base, child tax allowances and child tax credits; where tax credits are paid out in cash, they are recorded as cash transfers. The *RED index* captures the joint redistributive effect of taxes and benefits, combining their progressivity and size. It is based on taxes and benefits calculated for hypothetical households covering single-parent and couple families with different numbers of children and work intensities at low to middle earnings. A value of zero corresponds to a schedule that is exactly proportional to gross income, while higher values indicate greater redistribution towards lower-income families. Finally, income transfers for one, two and three children measure the additional tax and benefit advantages received by hypothetical families with children relative to otherwise comparable households without children, providing measures of horizontal redistribution towards families with children. For the benefit and tax distribution indicators, households are ranked according to their post-transfer equivalised income because of data availability.

This may underestimate the redistributive effect of benefits or taxes where these themselves cause individuals to move into or out of the bottom 30% of the distribution.

[8] This is based on the average sample growth in the logged values of per capita social expenditure and GDP per capita in PPP constant prices from 1997 to 2021.

[9] The results show estimates that include country and time fixed effects, ensuring that the discussion is grounded in within-country associations between the two dependent variables and their explanatory factors.

[10] See Annex Table 3.D.1-6 (specification 1).

[11] See Annex Table 3.D.7 and 8.

[12] Evidence of this pattern is reflected in the estimation results. When no interaction with total social spending is included, within-country increases in ECEC coverage for children aged 3-5 are associated, on average, with a negative (though statistically insignificant) change in deprivation. Once an interaction with total social spending is introduced, the main coefficient – capturing changes in coverage around the country average – remains negative (and not statistically significant), while the interaction term becomes positive and significant. This indicates that, in higher-spending welfare systems, further increases in preschool coverage relative to a country's average are associated with a lower efficacy at preventing severe material deprivation among children compared to the average social policy mix.

[13] An alternative specification scales the share of social expenditures allocated to ALMP by the share of unemployed individuals in the working-age population to approximate exposure among likely beneficiaries. While intuitively appealing, this changes both the interpretation and statistical properties of the variable, shifting it from a measure of overall policy orientation towards a narrower measure of relative spending intensity for the unemployed. The results for this alternative measure become largely insignificant (available upon request), which can be expected for several reasons: As many ALMPs also target inactive and employed individuals, this scaling may understate their broader reach and thus lead to an attenuation of the estimated effects. In addition, incorporating unemployment introduces a cyclical and potentially endogenous component linked to both child poverty and social spending, contributing to smaller and less precisely estimated coefficients. For these reasons, the baseline specification using the unweighted ALMP spending share is preferred, although the sensitivity of results suggests that effects may differ depending on the populations ALMPs are intended to support and the size of the unemployed population.

[14] Higher take-home pay is sometimes associated with a reduced effectiveness of social expenditure to mitigate child relative poverty. However, caution is warranted when interpreting results based on relative income poverty measures, which adjust annually to changes in the median income. Broad reductions in ETRs across lower income ranges may raise median equivalised income, which can mechanically increase the share of children falling below the relative poverty threshold even when the disposable incomes of low-income families improve. The child anchored poverty rate is not impacted in this way as it relates to the poverty threshold in 2005 and estimates of severe material deprivation are unrelated to median income.

[15] The value for money approach is slightly adjusted for spending on ECEC as a share of total social expenditure in Figure 3.10, which is found to have no significant impact on any of the child poverty measures by itself. Instead, it appears that the impact on reducing income poverty is driven by higher enrolment, likely because it enables parents to raise their labour market participation and hence their earnings (see Section 3.4). To reflect this, the value for money calculation in Figure 3.10 assumes that the

simulated one-p.p. increase in the share of social expenditure allocated to ECEC services is invested entirely in expanding enrolment, namely to finance an expansion of pre-primary education and care (ages 3-5) by ten per cent, and a rise in enrolment at ages 0-2 with the remainder of the budget (+18 p.p.). The enrolment increases corresponding to a one-p.p. increase in the share of social spending dedicated to ECEC are estimated based on the average spending-to-enrolment ratios across countries and years in the sample. An enrolment increase of ten p.p. for children aged 3-5 represents near full enrolment on average across the OECD in 2023. The regression coefficients underlying the value for money calculations for “spending on ECEC to increase enrolment” are taken from specification 3 in Annex 3.B.

[16] The use of aggregate spending data in this analysis limits the ability to explore these mechanisms in detail, and the existing causal evidence on the translation of employment support into improved child material living conditions remains limited (Box 3.6).

4. The value for money of social policies in promoting educational and health outcomes

This chapter assesses the “value for money” of social policies in promoting the educational and self-reported health outcomes of 15-year-old adolescents. It examines how spending across policy areas, income transfers, as well as the timing of family cash benefits and education spending across childhood, affects the effectiveness of social expenditure and influences future spending pressures. It first reviews key trends in adolescents’ PISA performance and self-reported health, highlighting declines since the late 2000s and the persistence of strong socio-economic inequalities in both the risks of low academic and health outcomes and the chances of achieving higher levels. The analysis points to the need both to prevent poor outcomes and to expand opportunities for adolescents from low and middle socio-economic background to achieve high levels of academic performance, as a way to combine greater fairness with stronger preparation for increasingly technology-intensive societies. It highlights the importance of tailoring support to the needs of disadvantaged children and stresses that preventing disadvantage from accumulating early in life, while sustaining support throughout childhood and adolescence, is essential to improve educational and health outcomes and strengthen opportunities for social mobility later in life.

Children's educational and health outcomes constitute essential dimensions of their immediate well-being and can have profound implications for their future life trajectories. A substantial body of research demonstrates that cognitive development and educational attainment in childhood strongly shape later educational pathways, field-of-study choices, labour market outcomes, and broader social and economic outcomes in adulthood (OECD, 2025[1]). Similarly, childhood health conditions are closely associated with adult health status, including the prevalence of chronic diseases, functional limitations, and overall life expectancy (Mallo and Wolfe, 2020[2]; Flores, García-Gómez and Kalwij, 2020[3]).

Educational and health trajectories are also strongly shaped by socio-economic background, with inequalities emerging early in childhood and persisting over time. These disparities are driven in part by differences in families' economic and social resources, which influence the quality of the home learning environment, housing conditions, nutrition, and parents' capacity to support children's development. Socio-economically disadvantaged families are also more likely to live in deprived neighbourhoods characterised by poorer housing quality, greater environmental risks, and more limited access to high-quality services, including education, healthcare, childcare, green spaces, and recreational and sports infrastructure (OECD, 2025[4]; 2025[5]). Together, household resources and neighbourhood characteristics interact to shape children's opportunities and are strongly associated with educational achievement and health outcomes across the life course (Nieuwenhuis and Hooimeijer, 2016[6]; Edwards, 2005[7]; Troost, van Ham and Manley, 2023[8]; Robinette, Charles and Gruenewald, 2017[9]; Rebouças, Falcão and Barreto, 2021[10]; Palloni et al., 2009[11]; Pearce et al., 2019[12]; Pickett et al., 2022[13]).

This chapter complements the analysis presented in the previous chapter on child poverty by examining the impact of social policies on children's educational and health outcomes. Social policies may contribute to improvements in education and health indirectly through the reduction of economic disadvantage, while also exerting direct effects, for example through the provision of healthcare services or by promoting early literacy and numeracy development within early childhood education and care programmes.

Taken together, the two chapters provide a more comprehensive understanding of how social policies shape child well-being across multiple dimensions, including poverty, educational achievement, and self-reported health. They also highlight the potential complementarities and trade-offs policymakers face when allocating resources across different policy areas, choosing between modes of support such as cash transfers and services, and determining which population groups should be prioritised for support.

The remainder of this chapter is structured as follows: Section 4.1 describes recent trends in children's educational and health outcomes across selected measures, and their variation across socio-economic groups. Section 4.2 highlights key adaptations to the analytical value for money estimation framework to account for the cumulative effect of past social policies on adolescents' educational and health outcomes in the present. The following two sections describe the results of the analysis for educational and health outcomes, respectively, and section 4.5 concludes with a discussion of the main policy challenges in designing social policies that promote children's educational and health outcomes and their implications for social spending pressures.

4.1. Trends in children's educational and health outcomes

Raising student academic performance while ensuring fairness

Education has long been regarded as a key driver of social mobility and equality of opportunity, with evidence showing that educational expansion and broader access to secondary and tertiary education have contributed to upward mobility across many advanced economies. Research comparing learning progression during the school year and summer holidays also suggests that schools partially compensate for inequalities in children's home learning environments, as socio-economic achievement gaps tend to widen more when schools are closed (Box 4.1). However, the equalizing potential of education remains

limited by inequalities that emerge early in childhood, well before formal schooling begins. Children from disadvantaged backgrounds often enter school with lower cognitive and socio-emotional skills, and students from high socio-economic status families are more likely to overcome poor academic performance through access to greater economic, social and cultural resources, including tutoring, institutional support and second educational chances. Overall, while education remains an important mechanism for promoting upward mobility, schooling alone is often insufficient to fully offset broader socio-economic inequalities that shape children's life chances from an early age.

At the same time, many OECD countries have experienced a stagnation or decline in students' average academic performance following an earlier period of improvement. In many cases, this deterioration has been driven primarily by an expansion of the lower tail of the achievement distribution, with a growing share of students failing to reach baseline proficiency levels. However, several countries have also recorded substantial declines in the proportion of high-performing students (OECD, 2023[14]). These trends have raised concerns about future shortages of highly skilled workers and about countries' capacity to sustain innovation and remain competitive in increasingly technology-intensive economies. In a context of rapid technological change, demand is expected to grow particularly strongly for individuals with advanced STEM skills, which are widely seen as essential for innovation and productivity growth in frontier sectors such as artificial intelligence, cybersecurity and other cutting-edge digital technologies (European Commission, 2020[15]). Strong reading, scientific and mathematical literacy are also increasingly important not only for labour market success but also for active participation in society and democratic life. These skills enable individuals to critically assess information, distinguish evidence from misinformation, and engage constructively in public debate.

Against this background, a central policy challenge is to reconcile efficiency and fairness: raising overall levels of academic performance while ensuring that children from low- and middle-socio-economic backgrounds have equal opportunities to reach high levels of achievement. Greater fairness and social cohesion require providing support that reduces the share of children falling behind academically, while ensuring that low-SES children – who make up a large proportion of low performers – receive the stronger support they need to realise their potential. It also requires expanding opportunities to achieve high levels of performance, particularly for low- and middle-SES children, who are far less likely than their more advantaged peers to become high achievers. This may further spur economic growth, as there is evidence that it depends not only on average cognitive skills, but also on the share of high-performing students who are more likely to become scientists, engineers, entrepreneurs and highly skilled workers in innovation-intensive sectors (Hanushek and Woessmann, 2008[16]; 2015[17]).

The strength and nature of social stratification in educational trajectories vary substantially across countries depending on institutional contexts, influencing the extent to which socio-economic background affects the risk of poor educational or health outcomes, as well as the likelihood of achieving high levels of performance and well-being (Dräger et al., 2024[18]). For this reason, assessing equality of opportunity requires going beyond average outcomes and examining how children's chances of performing high academically are associated with their family background. At the same time, reducing the share of low-performing students remains most critical, both to improve individual and collective educational outcomes and to limit the risks of school disengagement, early school leaving, and later exclusion from employment, education or training.

Box 4.1. Education as the great equalizer?

Education has long been regarded as the central mechanism through which modern societies can promote equality of opportunity and foster upward social mobility. Yet cross-country evidence presents a more complex picture. While countries with higher income inequality also tend to display lower intergenerational mobility – consistent with the "Great Gatsby Curve" (Corak, 2013[19]; OECD, 2018[20]) – the relationship between economic inequality and inequality in educational attainment by social background appears much weaker (Bernardi and Plavgo, 2019[21]). In other words, countries with relatively similar levels of educational inequality may nevertheless display very different levels of social mobility. This suggests that education remains an important channel of mobility, but not necessarily a sufficient equalizer of life chances on its own.

Evidence from the social stratification literature shows that inequalities in educational attainment by social background declined substantially across many high human development countries during the second half of the 20th century (Breen et al., 2009[22]; Bernardi and Ballarino, 2016[23]; Barone and Ruggera, 2018[24]). Educational expansion, particularly at the secondary level, enabled broader access to qualifications that were previously restricted to more advantaged groups. Greater participation in higher education also contributed to increased social mobility, as the link between parental background and occupational attainment tends to weaken among individuals with tertiary education (Breen and Jonsson, 2007). These developments were particularly important for cohorts entering adulthood in the decades following the Second World War, when educational expansion coincided with strong economic growth and relatively low-income inequality.

Research comparing learning progression during the school year and summer holidays also suggests that schooling exerts an equalizing effect. Studies exploiting this "natural experiment" find that achievement gaps by socio-economic background tend to widen more rapidly during school holidays than during the school year, when children are exposed to formal schooling (Downey and Condron, 2016[25]; von Hippel, Workman and Downey, 2018[26]). While the equalizing effect observed during the school year is generally modest, these findings nevertheless indicate that schools partially compensate for inequalities in children's home learning environments.

At the same time, several factors limit the equalizing potential of education systems. First, inequalities emerge early in life, well before formal schooling begins. Children from disadvantaged socio-economic backgrounds often enter school with significantly lower average literacy, numeracy and socio-emotional skills than their more advantaged peers (Heckman, 2006[27]; Bradbury and Corak, 2015[28]). As a result, schools frequently operate on top of already substantial developmental gaps rather than starting from equal conditions.

Second, families with higher socio-economic status are often better able to shield their children from the consequences of poor academic performance. Research on "compensatory advantage" shows that students from advantaged families are more likely to continue progressing through the education system despite weak school performance, benefiting from access to private tutoring, remedial schooling, stronger parental guidance and broader social and cultural resources (Bernardi, 2014[29]; Bernardi and Triventi, 2020[30]; Yastrebov, Kosyakova and Kurakin, 2018[31]). Similar mechanisms operate in the labour market: individuals from advantaged backgrounds who fail to obtain high educational credentials are nevertheless more likely to avoid downward occupational mobility and access relatively secure and well-paid employment (Bernardi and Ballarino, 2014[32]).

Academic performance is declining but fewer youths are NEETs

Data from the *Programmes for International Student Assessment* (PISA) provide information on 15-year-olds academic achievement. Together, the share of students who are high achievers in PISA and those who are low performers – defined as those attaining Level 5 or 6 (high) or below Level 2 (low) in at least one of the three core subjects of reading, mathematics, or science – offer information on performance across the learnings distribution. Overall, the data suggest a decline in academic performance from 2009 to 2025, with the deterioration being particularly pronounced at the bottom of the distribution.

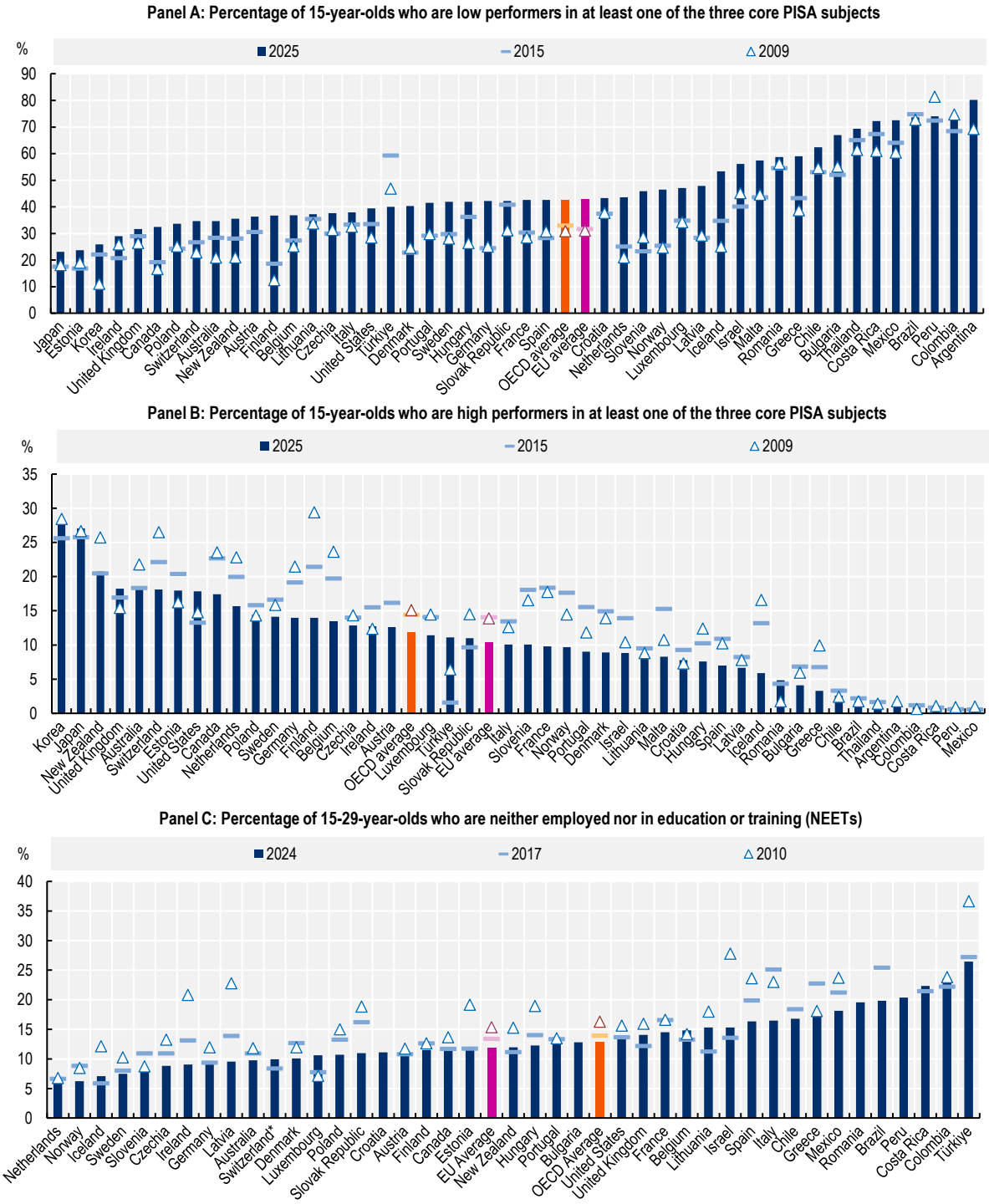
Across the OECD, more than four in ten children (43%, see Figure 4.1, Panel A) perform below baseline proficiency levels in PISA assessments, and this share has increased in nearly all countries since the late 2000s. However, cross-country differences remain substantial. In the 2025 assessment, the proportion of low-performing students was lowest in Japan and Estonia, where it remained below 25%, and highest in several Latin American countries, including Colombia, Mexico and Costa Rica, where it reached over 70% (OECD, 2026[33]). Across the OECD, the share of low-performing students increased by nearly 40% between 2009 and 2025, rising from 31% to 43%. This deterioration has been observed in almost all OECD countries, with the notable exceptions of Türkiye (+7 p.p.). The increase in low performance has been particularly marked in Iceland, Finland, the Netherlands, Norway and Greece, where the share of students performing below baseline proficiency levels rose by more than 20 p.p. over the period.

The share of 15-year-old students who are high achievers in PISA varies widely across OECD countries, ranging from nearly 30% in Korea and Japan to below 1% in Costa Rica and Mexico (Figure 4.1, Panel B). On average across the OECD, the proportion of high-performing students is over three times smaller than the share of low performers. In most OECD countries, the share of high performers declined between 2009 and 2025, falling on average from 15.1% to 11.9%. However, trends differ substantially across countries. The sharpest declines in rates of high achievers were observed in Finland, Iceland, Belgium, Switzerland, France and Germany, with reductions of around ten p.p. that reach 15 p.p. in Finland. By contrast, a small number of countries recorded increases in the share of high-performing students over the same period, including Türkiye, the United States and the United Kingdom, where increases of around 3 to 5 p.p. were recorded.

The share of young people who are neither in employment, education nor training (NEET) captures a population that is disengaged both from the education system and from the labour market. This group is of particular concern because transitions into stable employment are often more difficult for NEET youth (Ripamonti, 2023[34]; Rahmani and Groot, 2023[35]; Thompson, 2017[36]; Bynner and Parsons, 2002[37]), and periods of disengagement at young ages can generate long-lasting "scarring effects" on future employment prospects, earnings trajectories, and broader social outcomes. NEET youth also face elevated risks of poverty, poor health, and social exclusion.

Across the OECD, 13% of 15-29 year-olds are NEETs (Figure 4.1, Panel C). Encouragingly, the data show declining NEETs rates in most countries, down from an OECD average of 16% in 2010. The largest reductions, exceeding ten p.p., were recorded in Latvia, Israel, Ireland and Türkiye. Only Luxembourg observed a substantial increase in NEETs rates by 3.5 p.p. during this period. Lithuania, the United Kingdom, Israel, Belgium, Colombia and Iceland experienced increases of around one to four p.p. since 2017, although their current rates remain below 2010 levels. Today, the lowest rates are found in the Netherlands, Norway, Iceland, Sweden, Slovenia, Czechia, Ireland, Germany, Latvia and Australia, ranging from 6% to 10%, which compare to rates above 20% in Türkiye, Colombia and Costa Rica. Against a background of large and growing rates of low academic performers at age 15, the reductions in NEETs rates observed in most countries point towards education, labour market and social policies that were broadly effective at supporting those most at risk of disengagement.

Figure 4.1. Academic performance is deteriorating, but youth NEET rates are decreasing



Note: Panels A and B: The percentage of 15-year-old students who attained Level 5 or 6 (high performers, Panel A) or below Level 2 (low performers, Panel B) in at least one of the three core PISA subjects (reading, mathematics and science), among all 15-year-old students covered by the PISA sample. For more details on the sample population and the construction of the PISA proficiency scales and proficiency levels, see the PISA Technical Report for the corresponding round. Panel C: Data for 2024 from Iceland, the United States and Brazil refer to 2023, and data for 2024 from Chile refer to 2022. *For Switzerland, changes in the data collection mode in 2021 limit the comparability of 2024 data with earlier years.

Source: OECD Secretariat calculations based on OECD (n.d.[38]), *PISA Database* https://www.oecd.org/en/about/programmes/pisa/pisa-data.html and OECD (n.d.[39]), *Education at a Glance Database*, https://data-explorer.oecd.org/s/5dh.

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Socio-economically disadvantaged children experience worse education

Promoting social mobility requires addressing the socio-economic factors that that both increase the risk low academic performance and hamper the ability of children from disadvantaged backgrounds to reach high levels of academic performance.[1]

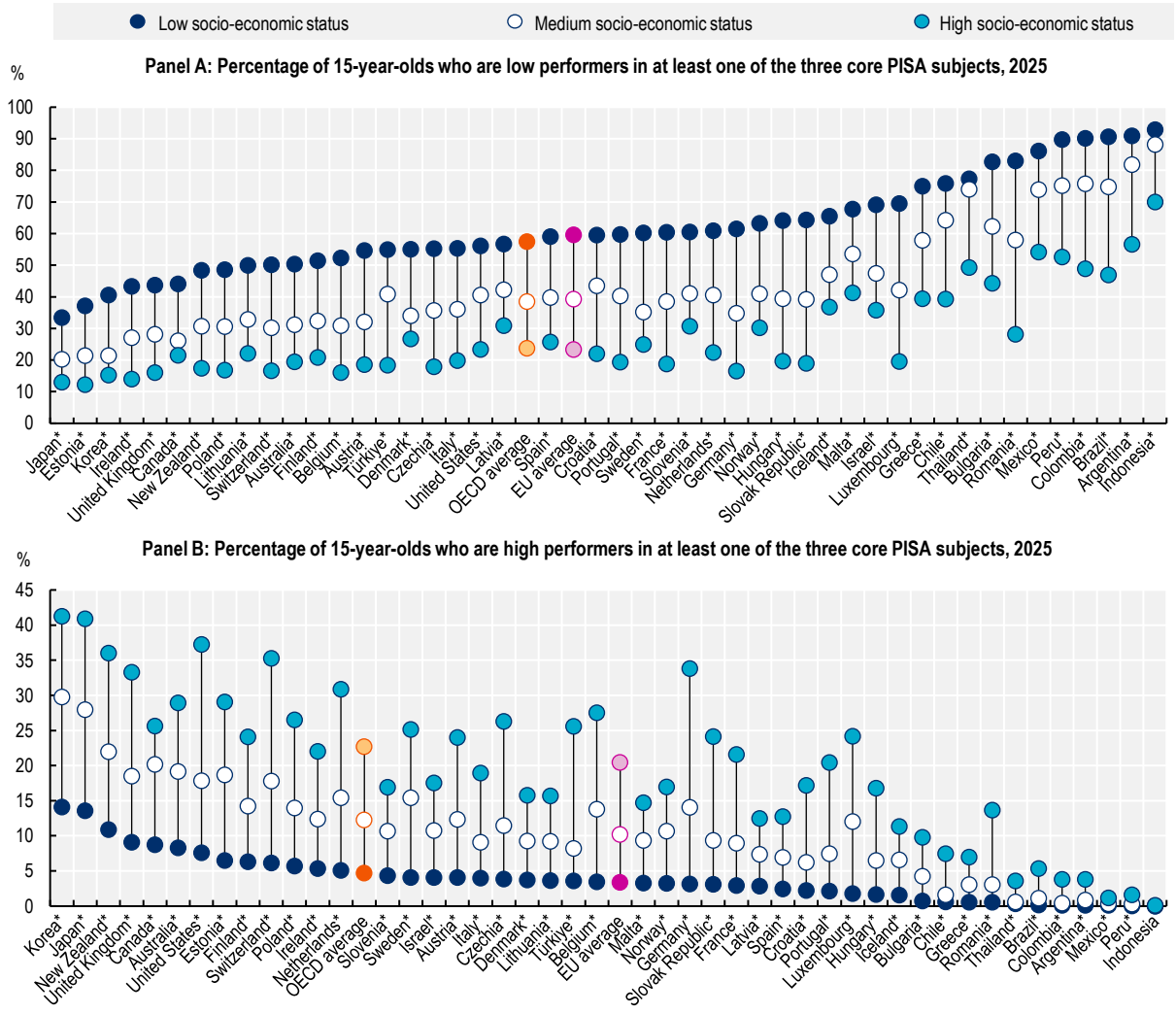
Figure 4.2, Panel A shows that students from families with low socio-economic status have a high probability to be low performers in the PISA test, ranging from less than 35% in Japan to around 90% in Colombia and Mexico. This is due to both, the relatively high share of low performers overall (43% across the OECD) and the highly stratified educational outcomes. Over half (58%) of all 15-year-olds in the bottom 25% of socio-economic status are low performers in PISA, compared to 38% of adolescents with medium socio-economic status and 24% of students with the highest 25% of socio-economic status. In every OECD county, adolescents with low socio-economic status are at least 60% more likely to be low performers compared to socio-economically advantaged students, an absolute difference that is above 20 p.p. in all countries. Low academic achievers are not drawn exclusively from the most disadvantaged groups: nearly half (49%) come from medium socio-economic backgrounds, whereas disadvantaged students accounted for 36% of low performers in 2025.

Symmetrically, on average, only 5% of 15-year-olds from the bottom quarter of the socio-economic distribution are high performers, compared with 12% among students from middle socio-economic backgrounds and 23% among those from the top quarter (Figure 4.2, Panel B). In all OECD countries, students from high socio-economic backgrounds are at least three times more likely to be high achievers than their disadvantaged peers, while the gap exceeds 10 p.p. in all countries except Mexico, Colombia, Greece, Chile and Iceland, where overall shares of high performers are comparatively low. In most countries the gap in high performance between students from high and middle socio-economic backgrounds is larger than the gap between middle- and low-status students, suggesting that highly advantaged family environments may provide particularly strong conditions for reaching top levels of achievement.

The idea that promoting upward educational mobility among disadvantaged students necessarily comes at the expense of overall school system performance is not supported by cross-country evidence. At the national level, countries with larger shares of high-performing socio-economically advantaged students also tend to be those in which disadvantaged students are more likely to achieve high levels of performance (correlation coefficient among OECD countries $r = 0.82$). This suggests that, at country level, policies aimed at increasing the academic achievement of disadvantaged students do not necessarily weaken the performance of more advantaged groups.

Moreover, it is important to note that the group of high-achieving 15-year-olds is not composed exclusively – or even predominantly – of socio-economically advantaged students. On average across the OECD in 2025, high performers were distributed almost equally between students from high and middle socio-economic backgrounds, who accounted for 44% and 47% of high achievers respectively. This largely reflects the greater size of the middle socio-economic group, which includes students ranked between the 25th and 75th percentiles on the PISA index of economic, social and cultural status. This pattern is broadly observed across most OECD countries. The main exceptions are Mexico, Colombia and Chile, where socio-economically advantaged students account for nearly 70% of high performers.

Figure 4.2. Adolescents' educational performance is strongly linked to socio-economic status



Note: High performance is defined as attaining Level 5 or 6 and low performance is considered a score below Level 2 in at least one of the three core PISA subjects (reading, mathematics and science). Percentages are based on the 15-year-old students covered by the PISA sample. The PISA index of economic, social and cultural status (ESCS) is a composite measure used to estimate a student's socio-economic background. The index is derived from several variables related to the student's home and family background: parents' highest level of education, parents' highest occupational status, and the availability of a series of home possessions, including books in the home. Here, students are divided into three groups according to their position in the distribution of ESCS scores in their country or economy in the given survey round. *The difference between students with high and low socio-economic status is statistically significant at the 5% level.

Source: OECD Secretariat calculations based on OECD (n.d.[38]), *PISA 2025 Database*, https://www.oecd.org/en/data/datasets/pisa-2025-database.html.

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Promoting adolescent health and reducing socio-economic inequalities

In parallel to trends in educational outcomes, similar concerns have emerged regarding child health, both in relation to possible deteriorations over time and to the persistent influence of social determinants on inequalities in child development and health outcomes.

Adolescents' health outcomes have deteriorated

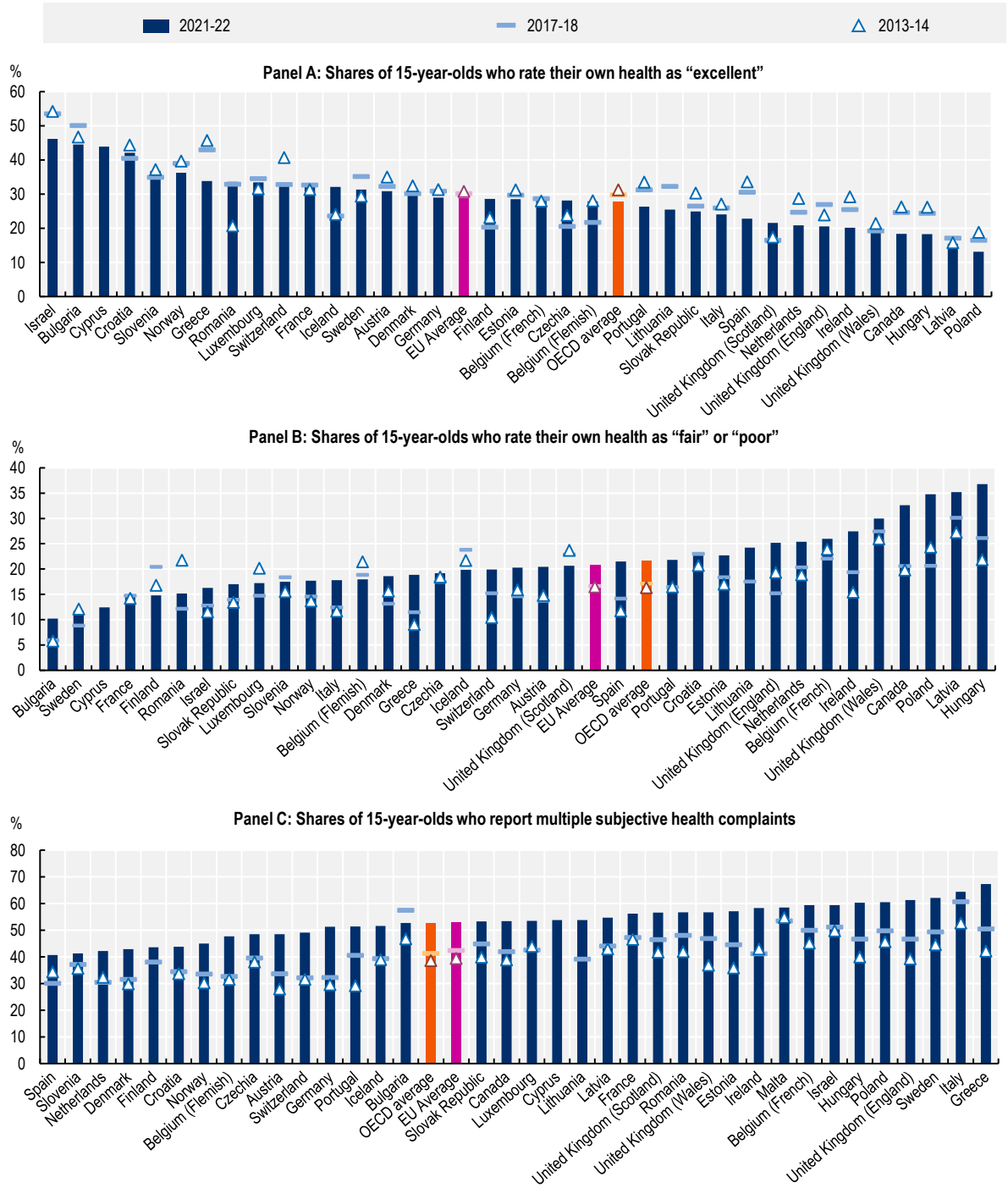
Health is a multidimensional concept, encompassing not only the absence of disease, but also individuals' physical and mental capacity to develop and function well. As such, it is difficult to capture fully through a single synthetic indicator. In practice, health is often measured using self-reported assessments, where individuals are asked to rate their own health status. While these measures provide valuable information on how people perceive their health and well-being, they also have important limitations, as they reflect subjective perceptions rather than objective measures of physical health or medical conditions.

For 11-to-15-year-old adolescents, a number of self-reported health indicators are provided by the *Health Behaviour in School-aged Children* (HBSC) survey (2026[40]). Figure 4.3 displays the results of how 15-year-olds view their health globally, tracking both the rates of adolescents who experience "excellent" health as well as those at the other end of the spectrum who view their own health as "fair" or "poor". Additionally, Figure 4.3, Panel C comprises an indicator of adolescent psychological well-being, which assesses the share of 15-year-olds who report having experienced at least two of a list of eight symptoms (e.g. headaches, difficulties getting to sleep, feeling low) more than once a week over the past six months. Overall, the data point to a deterioration in adolescents' health outcomes over the past decade, particularly through increased prevalence of negative health outcomes and especially low mental well-being.

Figure 4.3, Panel A shows that 28% of 15-year-olds across the OECD view their own health as "excellent", with wide variations across countries: Israel stands out as the country with the highest ratio (46%) whereas in Poland and Latvia, fewer than one in six adolescents report the same. Despite this variety, a common trend across countries is the decline in adolescents reporting "excellent" health from 2013-2014, by over 3 p.p. on average, down from 31%. While over three-quarters of countries with available data saw a decrease, the largest reductions were felt in Greece and Spain with over ten p.p. Notable exceptions are Iceland, Finland and Czechia, which registered substantial increases of around 4 to 8 p.p. during the same time frame. The COVID-19 pandemic may have played a role in this decrease in positive health for some individual countries, but no strong difference appears in the average decline between 2013-2014 and 2017-2018 compared to 2017-2018 and 2021-2022.

The share of adolescents who rate their own health as "fair" or "poor" is slightly smaller on average across the OECD (22%, Figure 4.3, Panel B). It ranges from less than 15% in Sweden, France and Finland to 35% or more in Hungary, Latvia and Poland. For this indicator, the deterioration of adolescent health is more marked. The proportion of 15-year-olds reporting "fair" or "poor" health increased by an average of 5 p.p. between 2013-2014 and 2021-2022. This upward trend was particularly pronounced in Hungary, Canada, Ireland and Poland where increases exceeded ten p.p. By contrast, Luxembourg, Finland, Iceland and Sweden recorded declines over the same period, of up to three p.p. Most of the deterioration occurred between 2017-2018 and 2021-2022. During this period, 84% of countries with available data experienced increases in the prevalence of poor self-reported health among 15-year-olds, compared with fewer than 70% of countries between 2013-2014 and 2017-2018. Moreover, the average increase exceeded 4 p.p. between 2017-2018 and 2021-2022, whereas the corresponding rise between 2013-2014 and 2017-2018 was only 0.8 p.p. This pattern may reflect the effects of the COVID-19 pandemic, which could have had a particularly adverse impact on adolescents already experiencing poorer health.

Figure 4.3. Adolescents' reports of low health are rising



Note: Panels A and B are based on 15-year-olds answers to the question "Would you say your health is …?" when they were presented with the response options "Excellent", "Good", "Fair" and "Poor". Panel C shows the percentage of 15-year-old school age children who report having experienced at least two symptoms of the following list more than once a week in the past six months: 1) "Headache", 2) "Stomach-ache", 3) "Backache", 4) "Feeling low", 5) "Irritability or bad temper", 6) "Feeling nervous", 7) "Difficulties in getting to sleep" and 8) "Feeling dizzy". The OECD average excludes Belgium (Flemish- and French-speaking regions) and the United Kingdom (England, Scotland and Wales). The EU average excludes Belgium (Flemish- and French-speaking regions).

Source: OECD Secretariat calculations based on the Health Behaviour in School-aged Children (HBSC) survey (2026[40]). HBSC is an international study carried out in collaboration with WHO/EURO, involving more than 44 countries and regions. The International Co-ordinator for the 2021/22 survey was Professor Oddrun Samdal, University of Bergen. For details, see http://www.hbsc.org.

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The prevalence of adolescents reporting multiple subjective health complaints also shows marked trends (Figure 4.3, Panel C). In 2021-2022, more than half (53%) of all 15-year-olds reported experiencing at least two symptoms more than once a week during the previous six months. The prevalence was high across all OECD countries, ranging from 41% in Spain and Slovenia to nearly 70% in Greece. Moreover, the share of adolescents experiencing multiple subjective health complaints increased substantially over time. On average across the OECD, rates rose by almost 3 p.p. between 2013-2014 and 2017-2018, followed by a further increase of more than 11 p.p. between 2017-2018 and 2021-2022. Over the entire period, all countries recorded significant increases, ranging from 6 p.p. in Slovenia and Spain to more than 20 p.p. in Greece, Portugal, Germany, Estonia, Austria and Hungary. Although the COVID-19 pandemic likely intensified these trends, deteriorating adolescent mental health was already evident prior to the pandemic. Between 2013-2014 and 2017-2018, all countries except Spain, the Netherlands and Ireland experienced increases in the proportion of 15-year-olds reporting multiple subjective health complaints.

Social determinants of child health inequalities

Social determinants of health have long been recognised as major drivers of childhood health outcomes, accounting for a large share of childhood illness, developmental difficulties and premature mortality (Moore et al., 2015[41]; Palloni et al., 2009[11]; Singh, Siahpush and Kogan, 2010[42]; Pickett et al., 2022[13]; Spencer, 2018[43]; Coller and Kuo, 2015[44]). For children, the social determinants of health encompass the social, economic and environmental conditions in which they are born, grow up, live and learn, as well as the institutions and systems that promote health and respond to illness (Coller and Kuo, 2015[44]). These determinants influence child health through complex interactions between structural factors – such as household income, parental education and employment conditions – and more proximal factors, including living conditions, nutrition, stress exposure and health-related behaviours (Pearce et al., 2019[12]; Spencer, 2018[43]). Because these determinants largely operate outside the healthcare system itself, they are strongly shaped by broader social and economic policies.

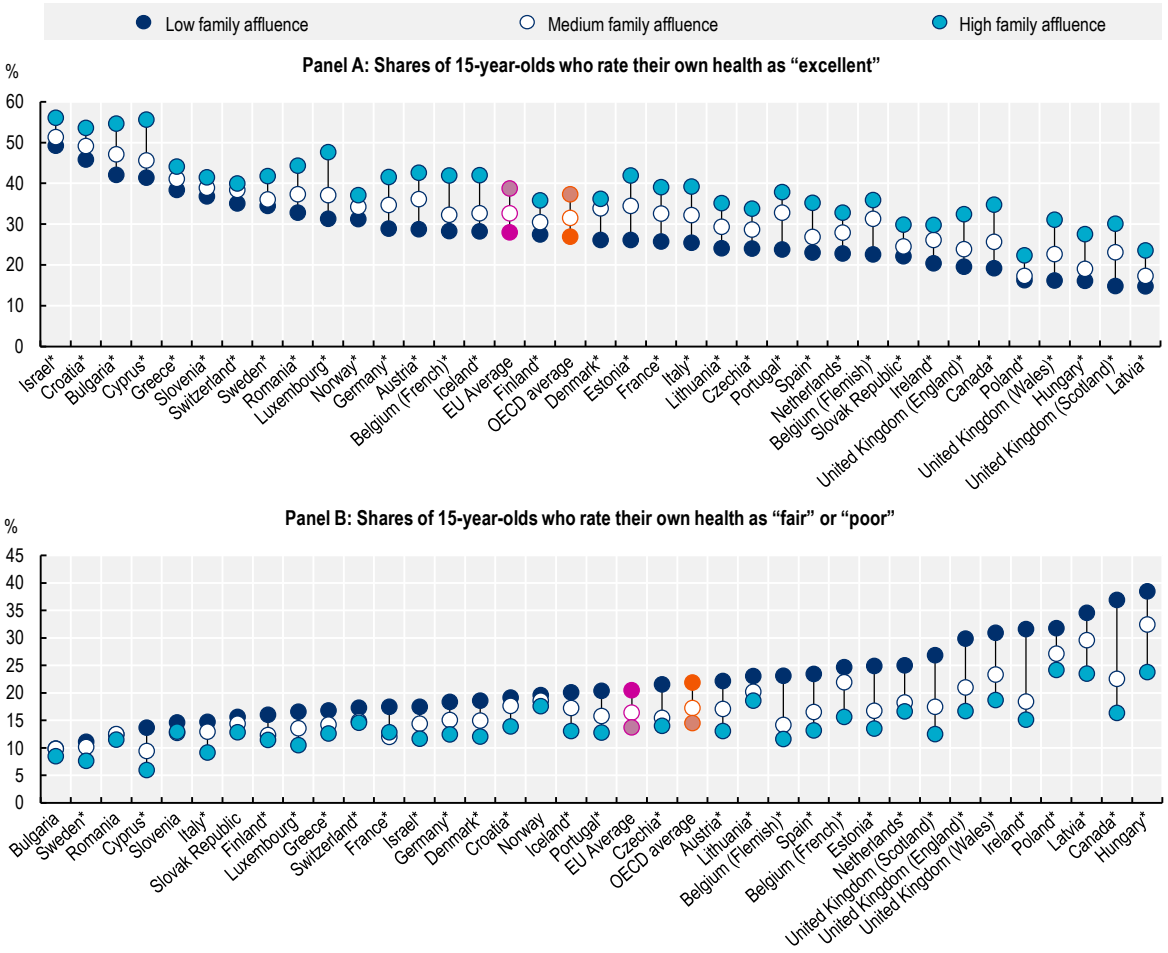
Clear socio-economic disparities emerge in adolescents' self-reported health. In every country, 11-, 13- and 15-year-olds from the 25% most affluent households are more likely to report "excellent" health than their peers in the bottom quarter of family affluence. On average across the OECD, 37% of adolescents in the top quarter of the family affluence scale report excellent health, compared to 32% of students in the middle two quarters and 27% of 15-year-olds in the bottom quarter (Figure 4.4, Panel A). The smallest discrepancies by socio-economic status are found in countries where the prevalence of excellent self-reported health is high overall. In Slovenia, Switzerland, Israel and Greece, highly affluent adolescents are at most 15% or seven p.p. more likely to self-report excellent health than the least affluent students. By contrast, the ratio exceeds 80% and represents a difference of at least 15 p.p. in Canada and the United Kingdom (Wales and Scotland) – all jurisdictions where the overall rates of "excellent" self-reported health are among the lowest.

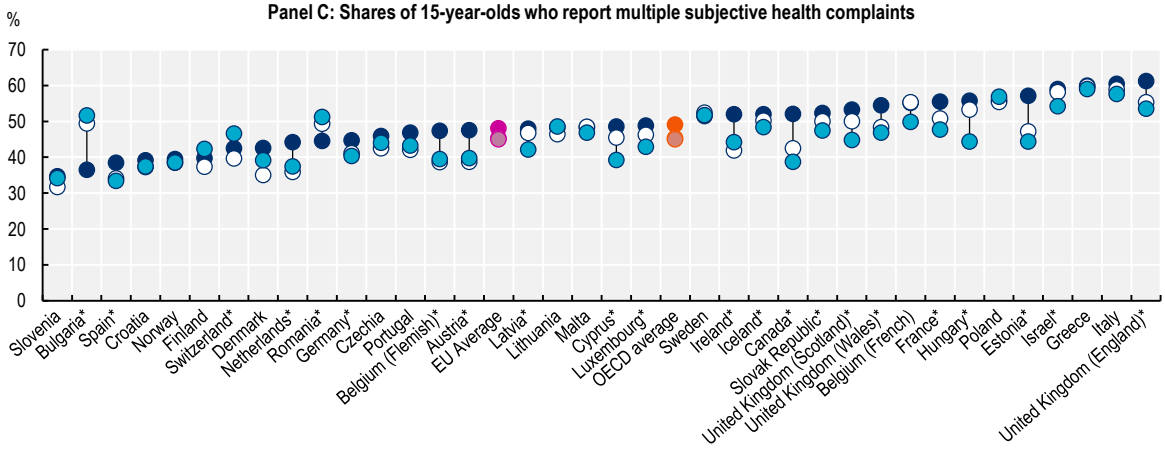
In terms of the prevalence of self-reports of "fair" or "poor" health, 15% of 11-, 13- and 15-year-olds from highly affluent families state these, compared to 17% of medium affluent students and 22% of their peers from the least affluent families. This pattern is observed in all OECD countries except Slovenia, the Slovak Republic and Norway where differences by family affluence are not statistically significant (Figure 4.4, Panel B). The largest inequalities are again found in countries where the overall self-reported health is comparatively poor. For example, in Canada and Ireland, highly affluent students are 20 and 17 p.p. less likely to report "fair" or "poor" health than the least affluent adolescents, respectively. Both countries have comparatively high rates of students reporting these negative health outcomes overall (around 30%).

Multiple subjective health complaints are widespread across all levels of family affluence, and their socio-economic gradient is much less pronounced (Figure 4.4, Panel C). On average across the OECD, 45% of adolescents from both the top quarter and the middle two quarters of the family affluence scale report

experiencing at least two out of a list of eight psychosomatic symptoms (e.g. stomach-ache, feeling nervous, difficulties getting to sleep) more than once a week over the past six months. The same was true for 49% of students in the bottom quarter of the family affluence scale. Countries with the largest inequalities are Canada, Estonia and Hungary where the least affluent adolescents are over 25% or 11 p.p. more likely to report multiple subjective health complaints than the most affluent students. Nearly 40% of OECD countries with available data show no statistically significant difference by family affluence score and in Switzerland, the opposite pattern is observed: the most affluent children are significantly more likely than their least affluent peers to report multiple subjective health complaints (47% and 43%, respectively).

Figure 4.4. Social inequalities in low and high self-reported health





Note: Panels A and B are based on 15-year-olds answers to the question "Would you say your health is …?" when they were presented with the response options "Excellent", "Good", "Fair" and "Poor". Panel C shows the percentage of 15-year-old school age children who report having experienced at least two symptoms of the following list more than once a week in the past six months: 1) "Headache", 2) "Stomach ache", 3) "Backache", 4) "Feeling low", 5) "Irritability or bad temper", 6) "Feeling nervous", 7) "Difficulties in getting to sleep" and 8) "Feeling dizzy". The OECD average excludes Belgium (Flemish- and French-speaking regions) and the United Kingdom (England, Scotland and Wales). The EU average excludes Belgium (Flemish- and French-speaking regions).

*The difference between 15-year-olds with high and low family affluence status is statistically significant at the 5% level. The HBSC Family Affluence Scale (FAS) is a composite measure of material wealth used to estimate a student's socio-economic background. For more details on the calculation of the HBSC FAS, please see the document Torsheim, T. (2019) "HBSC Family Affluence Scale Coding Guidance (V1): HBSC Methods Note 1", HBSC data Management Centre, University of Bergen, Bergen, https://drive.google.com/file/d/1oN8PHrBGhG-DEG316-GBMbFveQShG4vA/view?usp=sharing.

Source: OECD Secretariat calculations based on the Health Behaviour in School-aged Children (HBSC) survey (2026[40]). HBSC is an international study carried out in collaboration with WHO/EURO, involving more than 44 countries and regions. The International Co-ordinator for the 2021/22 survey was Professor Oddrun Samdal, University of Bergen. For details, see http://www.hbsc.org.

StatLink https://stat.link/gmyzoa

The evidence presented above shows that children's educational and health outcomes vary substantially across countries, while trends since the early 2010s point to a deterioration in outcomes across a large number – if not all – OECD countries. At the same time, persistent socio-economic disparities remain evident in all countries. Children from low- and middle-socio-economic backgrounds are generally more exposed to a range of social, economic and environmental risk factors, while also having more limited access to protective and enabling resources. This increases their likelihood of poor educational and health outcomes and reduces their chances of reaching high levels of achievement and well-being (OECD, 2021[45]).

The strong socio-economic disparities observed in adolescents' educational and health outcomes suggest that poverty-reduction measures could also yield additional indirect benefits for children's learning and well-being. In this regard, the social policies identified in Chapter 3 as effective in reducing child poverty and material deprivation are likely to generate positive spillover effects on children's educational and health outcomes. Moreover, the persistence of strong social gradients at both the lower and upper ends of educational performance and health outcomes indicates that both dimensions need to be considered simultaneously, as the barriers associated with avoiding poor outcomes may differ from those associated with achieving high levels of performance and well-being. Strengthening support for children from disadvantaged socio-economic backgrounds is particularly important, given their substantially lower likelihood of attaining high academic and health outcomes.

Importantly, low educational outcomes are not confined to children from the most disadvantaged backgrounds. A substantial share of low-performing students comes from middle socio-economic groups, suggesting scope for strengthening support for a broader range of children and families. Such efforts may

help prevent low- and middle-income children from falling behind educationally while also increasing their chances of reaching higher levels of academic performance, which are increasingly regarded as essential in economies characterised by rapid technological change and growing demand for advanced skills. The following analysis explores these relationships further.

4.2. Appling the value-for-money framework to educational and health outcomes: The methodology

This chapter applies the value-for-money framework developed in Chapter 3 (Section 3.3, "The methodology") to a set of children's educational and health outcomes. The approach retains the same two complementary dimensions of value for money: the effectiveness of social spending in improving child outcomes and its implications for the long-term evolution of social expenditure. The two dimensions are estimated separately and linked through the role of per capita social spending. The technical details of the framework, including the estimated equations and the variables included in each specification, are presented in Box 4.2.

The outcomes considered in this chapter capture complementary dimensions of educational achievement, labour-market engagement and adolescent health. They include the share of PISA high achievers, the share of PISA low achievers, the NEET rate, the share of 15-year-olds reporting excellent health, the share of 15-year-olds reporting fair or poor health, and the share of 15-year-olds reporting multiple subjective health complaints.

The main adaptation of the approach in this chapter relates to the age-specific nature of the outcomes. Whereas Chapter 3 examines poverty and material deprivation among children as a whole, this chapter focusses primarily on outcomes measured at age 15, with the NEET rate covering young people aged 15-29. The analysis therefore accounts for the time lag between exposure to a policy and the age at which its potential effects on outcomes are observed. In particular, policies that affect children earlier in life – such as ECEC, family cash benefits for younger children and education spending during earlier years – are introduced with lags designed to capture the period during which the cohort under consideration could have been exposed to them. For example, ECEC enrolment and spending are lagged to reflect participation when the cohort was of the relevant age, while education spending is similarly aligned with the cohort's educational pathway.

The estimation strategy also differs somewhat across outcomes because of data availability. For educational outcomes, the analysis uses dynamic ordinary least squares (DOLS), as in Chapter 3, incorporating leads and lags of first-differenced variables to account for short-run dynamics and potential sources of endogeneity. For adolescent health outcomes, the available country-year observations are more limited and do not support the DOLS specification. These outcomes are therefore estimated using a two-way fixed-effects ordinary least squares model. DOLS estimates are nevertheless used as robustness checks where feasible and produce broadly similar results.

The specifications additionally account for factors that are particularly relevant to educational and health outcomes. These include primary and secondary education expenditure per student and, for the education models, mean years of schooling among the population aged 25 and over. The models also retain the poverty-depth measure used in Chapter 3, while the determinants of social expenditure remain unchanged from the earlier framework.

The simulations used to assess value for money follow the same logic as those described in Chapter 3. First, the analysis estimates the change in each outcome and in social expenditure associated with an increase in social spending or GDP per capita, respectively, while keeping the policy mix unchanged. It then repeats the simulation while increasing one policy characteristic at a time. Value for money is measured by the difference between these two scenarios, capturing the additional improvement

in the outcome and the additional spending pressure associated with changing the policy design, conditional on overall growth in social spending or GDP.

As in Chapter 3, two types of policy changes are considered. For most policy characteristics, the simulations assume a one-standard-deviation increase in the policy variable. For policies measured as a share of total social expenditure, a second set of simulations assumes that one additional p.p. of total social expenditure is allocated to the policy area. The latter provides a common monetary basis for comparing alternative spending allocations.

Box 4.2. The value-for-money methodology applied to educational and health outcomes

The empirical framework

The value-for-money framework estimates two relationships separately. The first relates child outcomes to per capita social expenditure, policy design and other determinants of child outcomes:

$$CO_{it} = \alpha_i + \mu_t + TS_{it}\beta + P^T_{i,t-x}\gamma + TS_{i,t-x}P^T_{i,t-x}\delta + XO^T_{i,t-x}\eta + \sum_{k=-1}^{1} \Delta LLO^T_{i,t-x+k}\zeta_k + \varepsilon_{it} \quad (1)$$

where CO_{it} denotes the child outcome in country i and year t, TS_{it} is per capita total social expenditure, $P_{i,t-x}$ is the vector of policy characteristics at the time $t-x$ that corresponds to the period during which they could have had an impact on the cohort under analysis, and $XO_{i,t-x}$ captures other core drivers of child outcomes. For example, when estimating educational and health outcomes of 15-year-olds, ECEC enrolment rates from 11-15 years ago are used to reflect the cohort's participation in these services. In addition to enrolment in and spending on ECEC services, family cash benefits by children's age are lagged to represent the entitlements adolescents likely benefitted from throughout their childhood. Similarly, primary and secondary education expenditures from earlier periods are introduced to align with the educational pathways. Preventive health spending and spending on active labour market policies (ALMP) are lagged by three years to reflect the time needed for benefits to materialise. All other variables are assumed to impact child outcomes predominantly in the current period (t), as in Chapter 3 (see the results tables in Annex 4.C for detailed information on variable lags where applicable).[1] The interaction terms ($TS_{i,t-x}P^T_{i,t-x}$) allow the effectiveness of policy design to vary with the size of the welfare state.

The second equation models the long-run determinants of per capita social expenditure, which are assumed to impact social expenditure predominantly in the current period (t), as in Chapter 3:

$$TS_{it} = \rho_i + \sigma_t + GDP_{it}\theta + P^T_{i,t}\kappa + GDP_{i,t}P^T_{i,t}\lambda + XS^T_{it}\varphi + \sum_{k=-1}^{1} \Delta LLS^T_{i,t+k}\xi_k + \upsilon_{it} \quad (2).$$

where GDP_{it} denotes GDP per capita net of social spending and XS_{it} includes the structural demographic and health-related drivers of social expenditure. The interaction terms allow the relationship between policy design and social spending to vary according to economic development.

The two equations are estimated independently. Educational outcomes are estimated using DOLS, incorporating one lead, the contemporaneous value and one lag of the first differences of the explanatory variables ($\Delta LLO^T_{i,t-x+k}$ *and* $LLS^T_{i,t+k}$).[2] Because the available data for adolescent health outcomes are more limited, these models are estimated using two-way fixed-effects OLS, without the dynamic terms. Where feasible, DOLS specifications are estimated as robustness checks.

Outcomes and explanatory variables

Child outcomes (CO_{it}) comprise:

- share of PISA high achievers, attaining Level 5 or 6 in at least one of reading, mathematics and science;
- share of PISA low achievers, attaining below Level 2 in at least one of the three core subjects;
- NEET rate among 15-29 year-olds;
- share of 15-year-olds reporting excellent health;
- share of 15-year-olds reporting fair or poor health; and
- share of 15-year-olds reporting multiple subjective health complaints.

The vector of child-outcome drivers ($XO^{T}_{i,t-x}$) includes:

- log per capita total social expenditure, in constant USD PPP;
- log primary education expenditure per student; this captures general government spending on primary educational institutions at central, state and local level across private and public institutions.
- log secondary education expenditure per student, which covers general government spending on secondary educational institutions at central, state and local level across private and public institutions.
- mean poverty gap before taxes and transfers (as, for instance, deeper forms of poverty before taxes and benefits can diminish the effect of social policies on children's educational and health outcomes, for example when cash transfers are insufficient in size to cover families' lack of financial resources to provide a healthy home environment that stimulates learning); and
- mean years of schooling among the population aged 25 and over, included in the education specifications only to capture structural aspects of children's wider environment outside the school that may support their development.

The policy variables ($P^{T}_{i,t-x}$) are those identified in the chapter as potentially affecting the effectiveness of social expenditure in improving educational and health outcomes. They largely correspond to the policy characteristics examined in Chapter 3. Age-specific policies are introduced with lags reflecting the period during which the cohort under consideration could have been exposed to them (see the description of the empirical framework above).

The determinants of social expenditure (TS_{it}) are unchanged from Chapter 3 and comprise the log of GDP per capita net of social spending, log life expectancy at birth and the dependency ratio. See Chapter 3 for their definitions and interpretation.

Constructing the value-for-money measures

The value-for-money measures are calculated from the estimated coefficients of equations (1) and (2), using the same simulation approach as in Chapter 3.

For the outcome dimension, the analysis first simulates a half-standard-deviation increase in log per capita social expenditure while holding the policy mix fixed at its average. It then repeats the simulation while increasing one policy characteristic by one standard deviation. The difference between the two simulations represents the incremental change in the child outcome associated with the policy change, conditional on the increase in social expenditure.

For the spending-pressure dimension, the equivalent simulations increase GDP per capita by half a standard deviation, first with the policy mix unchanged and then together with a one-standard-deviation

increase in the policy characteristic. The difference between the two simulations represents the additional spending pressure associated with the policy change, conditional on economic growth.

For policy variables expressed as a share of total social expenditure, a second set of value-for-money simulations replaces the one-standard-deviation policy change with a one-p.p. increase in the expenditure share. This provides a common monetary scale for comparing alternative allocations of additional social resources across policy areas.

The simulated half-standard-deviation increases in GDP per capita and social expenditure correspond to approximately 11 years of average growth based on trends since the early 2000s.

1. Although adolescents' educational and health outcomes are shaped by the cumulative effects of their activities, environments and public policies throughout their lives, estimations do not include variables for the same policy across multiple time periods. Specifications with additional lags for drivers and policies were tested but discarded due to issues of multicollinearity and small sample sizes.
2. Lead and lags of first differenced variables are restricted to a total of three periods because they impose substantial demands on the data, while the available time series remain relatively short and sample sizes comparatively small.

Social policy leavers to improve children's educational and health outcomes

Policy features ($P_{i,t-x}$) capture key design characteristics of social expenditure systems that are assumed to influence the effectiveness of social spending in improving child outcomes as well as the spending pressures in response to GDP growth. The specific indicators included in the analysis are outlined below, and further details on variable definitions and data sources are provided in Annex 4.A and on the data imputations applied in Annex 4.B.

Social services can enhance children's educational and health outcomes through both direct and indirect mechanisms. Directly, services such as ECEC can foster cognitive and socio-emotional development during critical stages of childhood, while healthcare services for children contribute to improved physical and mental health outcomes. Indirectly, social services may strengthen children's well-being outcomes by supporting parents, for example through measures that promote parental health, facilitate labour market participation, improve family income, and reduce the risk of poverty and its associated adverse effects on child development. The selected set of policy indicators is largely equivalent to the policy variables covered in Chapter 3.[2]

Acknowledging the strong influence of families' economic resources as shown earlier in this chapter, we analyse role of social transfers on children's educational and health outcomes. A core subset of measures of income transfers from Chapter 3 is used.[3]

4.3. The value for money of social expenditure: Results

The value for money of social expenditure in improving children's educational outcomes

The results offer insights into the policy levers within social policy to support children's educational achievement[4] and thereby complement the analysis in Chapter 3. Looking first at the drivers of educational outcomes:

- A core result is the negative relationship between economic inequality and educational performance. The mean poverty gap, which captures the distance of the equivalised income of the average poor person from the relative poverty line before taxes and transfers, is a strong predictor for lower PISA scores. Countries with lower relative market incomes of the poor tend to have lower shares of PISA high performers and higher shares of PISA low performers and NEETs (coefficients

of -2, 2 and 2, respectively, for a 10-p.p. change in the mean poverty gap). When adding country fixed effects and analysing within-country variation only, the effect becomes even stronger: A reduction in equivalised market income of the average poor person by ten p.p. of the relative poverty threshold is associated with a reduction in the share of high performers by 3 p.p., an increase in the rate of low performers by 3 p.p. and a rise in NEETs by 2 p.p. This implies that poverty reduction is a key channel through which social spending may affect children's educational and employment outcomes.

- Greater levels of public expenditure on education per student over students' lifetimes is associated with higher PISA test performance when the estimation is based on pooled cross-country variation rather than within-country changes over time. Importantly, the timing of educational expenditure appears to play a significant role. Earlier investment is more strongly associated with reductions in low academic performance, whereas sustained and later investment may be more effective in fostering high achievement and preventing disengagement from education and employment. Specifically, a one-percent increase in past per-student expenditure on primary education is associated with a 6-p.p. reduction in the share of low performers in PISA, whereas a one-percent increase in spending on secondary education does not significantly affect the proportion of low performers (Annex Table 4.C.7).

  Moreover, there is some indication that past spending on both primary and – to a greater extent – secondary education may support higher performance, although the coefficients are not consistently statistically significant across specifications (Annex Table 4.C.2). In addition, countries with greater levels of per student expenditure on secondary education exhibit significantly lower NEETs rates four to six years later. This suggests that investment during adolescence may play an important role in sustaining educational engagement and facilitating successful transitions into further education or employment.

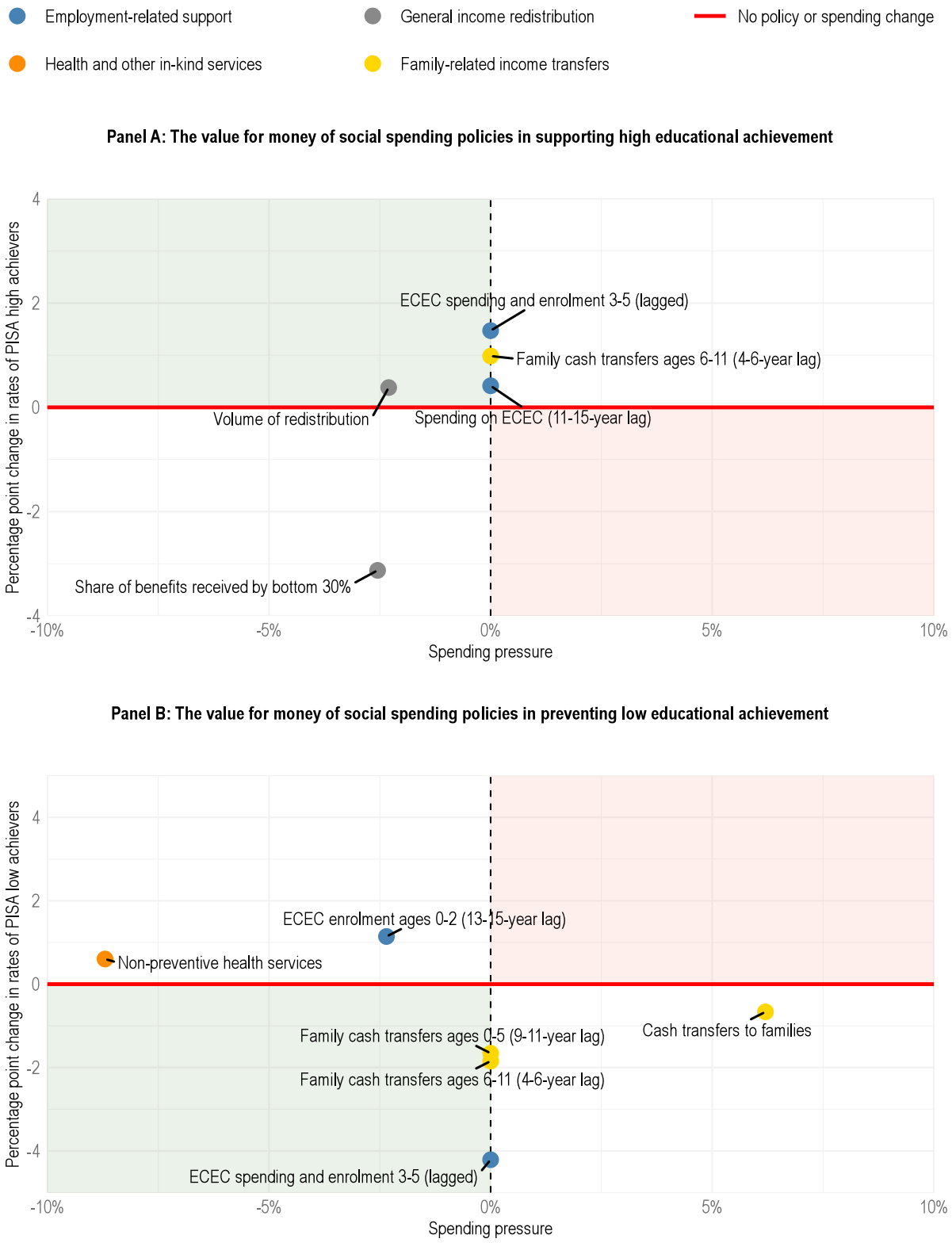
  When the analysis focusses on within-country variations (Annex Table 4.C.1, Annex Table 4.C.6, and Annex Table 4.C.11), the associations between educational spending and adolescents' educational outcomes are no longer statistically significant. This may reflect the fact changes in per-student education spending within countries over the past two decades have generally been much smaller than the differences observed across countries,[5] and may therefore not have been large enough within the period covered to generate clear and statistically identifiable effects on educational outcomes.

- There is some evidence that higher levels of educational attainment among the adult population are related to higher PISA test scores among adolescents. Across specifications, a within-country increase in the mean years of schooling by one year is associated with reductions in the rate of low performers between 2 and 5 p.p., although the effect is not significant in the baseline specification. In addition, one additional year of mean schooling among adults is associated with about one-p.p. higher rates of PISA high performers across countries (Annex Table 4.C.2) but this relationship disappears once country fixed effects are added. No clear relationship is found between educational attainment among the adult population and rates of youths who are NEETs.
- Total social expenditure also influences adolescents' educational outcomes and youth NEET rates, but its effectiveness depends on the design of social policies, as illustrated in Figure 4.5. Several mechanisms may explain these associations. On the one hand, policies that reduce child poverty – either by enhancing parental labour market activity and earnings or directly through income transfers – can lessen economic inequality, enhance resources available in low-income families, and consequently yield improvements in children's skills. On the other hand, investments in areas such as the provision of ECEC and child healthcare can support children's healthy development and learning directly.

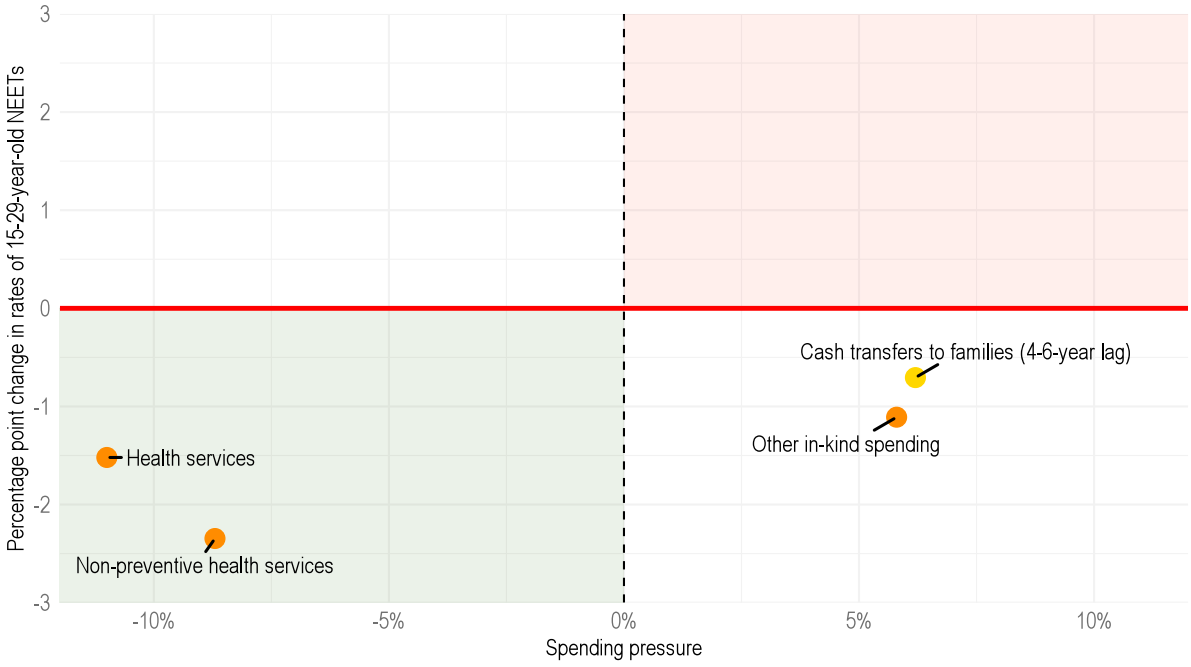
Figure 4.5 displays the value for money simulations of social policies with respect to children's educational outcomes, following the methodology outlined in the previous section and based on the regression

estimates in Annex 4.C that include country and time fixed effects. The green quadrants indicate that an increase in a given policy by one standard deviation is associated with better current or future educational outcomes as well as with greater spending moderation. Red quadrants identify both worse educational outcomes and greater spending pressures and the remaining two quadrants represent trade-offs between improved child outcomes and fiscal moderation. Notably, and contrary to the interpretation in Chapter 3, simulated changes in the effectiveness of social spending on adolescents' educational outcomes are directly linked to an amelioration or worsening of outcomes when social spending has no significant association with educational outcomes on its own. In other words, the red line and the 0-line coincide.[6]

Figure 4.5. The value for money of social policies to support educational outcomes, for average levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in reducing NEETs rates



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with average levels of logged per capita social spending, logged GDP per capita and policy settings. *How to read the figure:* The vertical axis indicates the p.p. difference in educational outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving youths' educational outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where educational outcomes would be without any change in policy nor an increase in logged per capita social expenditure.

Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.

Example: Increasing the share of social expenditure dedicated to cash benefits for families with children aged 6 to 11 by one standard deviation (+1.2 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from the average level is predicted to enhance the overall social spending effectiveness in raising the share of high achievers in the PISA test by one p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). The same scenario is further associated with a decline in the share of PISA low performers by 1.8 p.p. compared to the effect of raising social spending levels without any change in policy (no impact). At the same time, such an increase in the share of social expenditure dedicated families with children aged 6 to 11 is not predicted to change spending pressures (0% change) from the expected increase by 8.9% that is associated on average with an increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically).

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations.

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The role of services in promoting educational outcomes

In-kind social services can support educational performance by mitigating the detrimental effects of poverty and enhancing families' earnings capacity as well as by supporting children's development directly. More specifically:

- **The combination of take-up of and spending on ECEC services is a powerful enhancer of later educational achievement**

  The effects of ECEC coverage for children aged 3-5 and spending on ECEC are highly interdependent. Allocating greater shares of total social spending to ECEC services is linked to an increase in the share of high achievers by 0.4 p.p. by itself. However, high shares of spending *coupled with* a greater ECEC coverage at ages 3-5 are associated with even starker improvements in adolescents' PISA performance. A joint one-standard-deviation increase in the share of social spending dedicated to ECEC (i.e. by 2.3 p.p. of social spending) and enrolment at ages 3-5 (+ 18 p.p.) yield a value for money improvement of 1.4 p.p. in the share of high performers and of -4.2 p.p. in the rates of low performers in PISA.[7] Such a simultaneous expansion in the coverage at ages 3-5 and the weight of ECEC in the spending mix is not linked to any changes in spending pressure.

  Results for younger children (ages 0-2) provide further suggestive evidence of the importance of accompanying a relative growth in spending on ECEC with broad coverage in order to boost later educational outcomes. By itself, ECEC enrolment at age 0-2 is associated with no change in rates of high performers and with +1.1 p.p. higher shares of low performers, and greater impacts on low performance are observed for higher levels of per capita social expenditure. This positive association may reflect both the unequal distribution of access and the heterogeneous quality of services for children under age three. Children from low-income families are substantially less likely to participate in ECEC at these ages and, when they do, may on average access lower-quality services than more advantaged children (see Chapter 2). At the same time, socio-economically disadvantaged children are more likely to become low performers later in adolescence. By contrast, participation in pre-primary education from age three tends to involve much broader coverage of disadvantaged children and is more often delivered through structured early education systems governed by curricula and more homogeneous quality standards.

  Nevertheless, greater enrolment for children under age three is also associated with a 2.4%-reduction in the projected social spending increase that accompanies economic growth. This likely reflects the important role that childcare provision for very young children plays in supporting parental – particularly maternal – employment, thereby helping to strengthen household income and reduce longer-term demands on social protection systems (see Chapter 3).

  Overall, the results point to the provision of high-quality ECEC services with broad coverage as a powerful tool to enhance children's educational performance in a lasting way. This comes in addition to their potential to reduce child poverty by facilitating parental employment (see Chapter 3).

- **Health spending is linked to reductions in NEETs rates and spending pressure**

  Dedicating higher shares of social spending to health expenditure appears to be one of the most impactful policy tools to reduce NEETs rates. This effect is driven by non-preventive health spending, which suggests that greater emphasis on curative healthcare effectively removes barriers for youth to participate in education and work.

  One possible explanation is that a significant minority of NEETs experience physical or mental health problems, while the NEET population spans a broad age range that includes many young adults who are more likely than children or younger adolescents to benefit directly from curative healthcare. This may also explain why a higher share of social expenditure devoted to healthcare

is not associated with better PISA test outcomes among adolescents. In fact, greater spending on non-preventive healthcare is associated with slightly higher rates of low achievement in PISA, possibly reflecting the fact that much of this expenditure is directed towards addressing the healthcare needs of older age groups rather than supporting children's development and learning.

Moreover, health spending is found to help moderate the growth of social expenditure as economies develop, as already noted in Chapter 3. This likely reflects its role in improving population health, thereby reducing future demand for costly care while supporting higher labour market participation and productivity.

- **Other in-kind spending can help reduce NEETs rates**

  Allocating a greater share of social spending on in-kind services in incapacity-related, housing, and other social spending areas can contribute to lowering NEETs rates (-1.1 p.p. in Figure 4.5). The effect diminishes for more generous social protection systems, possibly indicating that these supports are highly complementary to other social policies in promoting participation in education, training or employment among youth. On the other hand, a greater use of such in-kind services in the policy mix shows no significant link with adolescents' performance in PISA.

  However, as discussed in Chapter 3, in-kind expenditure in these policy areas is associated with higher social spending pressures (+5.8% of additional spending), which may suggest that these services often complement rather than replace other forms of support.

- **ALMPs have no significant link with educational outcomes**

  Within-country variations in the share of social spending dedicated to ALMP are not significantly related to adolescents' performance in the PISA test or NEETs rates,[8] although a greater policy orientation towards ALMPs is lined to spending moderation, especially in wealthier economics (see Chapter 3).

The role of income transfers in promoting educational outcomes

Direct income transfers can enhance families' available resources and promote children's educational performance in addition to offering protection from poverty (see Chapter 3 on the latter). The evidence suggests that early spending on families is protective against low adolescent academic performance whereas later income support, especially on middle-income households, supports high academic performance.

- **Higher income support systems are associated with high educational performance**

  A higher level of average income support is associated with greater rates of PISA high performers in high spending contexts, with no change in the rates of low achievers. Additional analysis suggests that this is driven by average levels of benefits rather than taxes (see Annex Table 4.C.1): for a given level of average taxes, an increase in average benefits by one standard deviation is linked to an increase in high performers by 1.3 p.p. whereas reducing the average level of taxes for a given level of benefits shows no significant effect. At the same time, greater use of redistribution through benefits is associated with additional spending pressure (see Annex Table 4.C.19).

  For PISA low performers and NEETs rates, neither within-country changes to the average size of income support nor average levels of benefits and taxes separately appear to matter.

- **Countries with more progressive income redistribution systems tend to show higher shares of students with high PISA scores but further shifts towards narrowly targeted transfers may weaken overall performance**.

  Cross-country estimates (i.e. without country fixed effects) suggest that larger shares of benefits allocated to the bottom 30% by one standard deviation (around 10 p.p.) are associated with a 4.5-p.p. increase in the share of high performers and a reduction in low performers by 3.6 p.p.

Similarly, a rise in taxes paid by the bottom 30% by one standard deviation (3.5 p.p.) are associated with increased rates of low performers by 1.8 p.p., an effect that increases further for above-average levels of social spending (interaction coefficient of +2), and fewer high achievers in contexts where total social spending per capita is high (interaction coefficient of -1.3) (see Annex Table 4.C.2 and Annex Table 4.C.7).

However, when restricting the analysis to within-country variation, a different pattern emerges: an increase in the share of income benefits received by the bottom 30% by one standard deviation is linked to a 3.1-p.p. *reduction* in the share of high performers, and no significant association is found for low performers. In other words, although countries with income support systems that are, on average, more concentrated on lower-income households exhibit stronger educational outcomes, further increases in the degree of targeting within countries over time appear to be associated with a lower share of high-performing students. On the other hand, the targeting of taxes is no longer related to changes in rates of high or low performers. Hence, financial support to middle-income families appears to be particularly salient to promote educational achievement at the top. This may be achieved at the cost of increased social spending pressure since lower benefits targeting is associated with greater social expenditures in extensive welfare systems, as already discussed in the analysis in Chapter 3.

- **Greater shares of social expenditure on family cash benefits are associated with better academic performance and their timing across childhood matters**

  The share of social expenditure that is distributed to families in cash is weakly linked to reduced rates of PISA low performers in the same period. In the value-for-money simulations, increasing the share by one standard deviation (an additional 4.5 p.p. of total social expenditure allocated to family cash benefits) is associated with a 0.7-p.p. reduction in the share of low-performing students and no significant relationship with the rate of high performers. This effect, however, becomes stronger as per capita social spending increases, suggesting that cash benefits are more effective in improving educational outcomes when embedded within more comprehensive welfare systems. Additional results by socio-economic status (Box 4.3 and Annex 4.C) further indicate that family cash spending during early and middle childhood substantially reduces the share of low-performing students from low-SES backgrounds in high-spending contexts (the estimated interaction coefficients exceed 5 p.p.).

  Further, spending a greater share of total social expenditure on families in cash in high social spending contexts is related to lower NEETs rates five years later (-0.7 in the value for money simulation, an effect that also increases in per capita social spending levels).

  This contrasts with the above results on general income redistribution mechanisms through taxes and benefits, which appear effective at promoting high educational performance but not at mitigating low achievement. One potential explanation might be that labelling cash benefits as intended for children can reinforce spending on children, which becomes especially impactful in households where economic resources are scarce (see Chapter 3).

  When analysing family cash benefits by age groups, past spending on family benefits for early and middle childhood is strongly linked to decreases in the rates of adolescent low performers in high spending contexts, whereas contemporaneous cash benefits on adolescents have no impact. For shares of PISA high performers, past spending during middle childhood is related to increases in high spending contexts. While contemporaneous family cash benefits for adolescents are found insignificant in the baseline value for money calculations (see Figure 4.5), alternative regression specifications employed as robustness checks signal a strong positive relationship between a greater policy orientation towards cash benefits for adolescents and increased shares of PISA high performers.[9] Overall, orienting a greater share of social spending towards cash benefits provided during early and middle childhood appears to prevent poor educational outcomes among 15-year-olds, likely by preventing children from falling behind and containing educational gaps

between children. On the other hand, continued support provided later in childhood and adolescence is associated with higher levels of achievement, possibly because the provision of additional resources helps provide a home learning environment that is conducive to high educational performance.

In line with the idea that cash benefits for young children are particularly protective against negative later educational outcomes, family cash benefits paid during adolescence[10] have no effect on NEETs rates among 15-29 year-olds eight years later, while past spending on family benefits across all ages are associated with reductions in NEETs rates.

Overall, the evidence suggests that cash spending on families is generally linked to additional spending pressure (see the value for money simulations in Chapter 3 for more detail). At the same time, age-specific cash spending on families is not significantly associated with changes in spending pressures. One potential explanation could be that age-specific benefits are largely substitutive, and countries may direct additional resources towards particular age groups without changing the total allocation of family cash benefits.

Last but not least, additional results discussed in the Box 4.3 and reported in Annex 4.C suggest that promoting social mobility among low- and middle-SES children depends on placing greater emphasis on specific policy areas, particularly access to ECEC services and income support. At the same time, concentrating a larger share of income support benefits on households in the bottom 30% of the income distribution does not appear to improve their chances of high performance. This may reflect the fact that stronger targeting is often accompanied by lower benefit levels for lower-income and middle-class households overall.

Box 4.3. Promoting high academic performance among low- and middle-SES students

Additional analyses of the policy features associated with high academic performance among adolescents from low- and middle-socio-economic status (SES) backgrounds point to several policy dimensions that appear particularly important for supporting upward educational mobility. The findings show that higher shares of social spending on early childhood education and care (ECEC) coupled with higher enrolment rates among children aged 3 to 5, are associated with greater chances that middle-SES adolescents achieve high performance in PISA at age 15. Positive associations of both relative spending and enrolment are also observed for low-SES students, although they are not statistically significant, possibly because of the comparatively limited variation over time in the share of disadvantaged students reaching top performance levels. Increased preschool participation is not significantly associated with higher performance among high-SES students, potentially because children from more advantaged families may already benefit from home learning environments and parental investments that partly substitute to formal ECEC participation.

Income support also appears to play an important role in supporting higher achievement among comparatively disadvantaged students. For high levels of social expenditure, larger average income transfers are associated with higher probabilities that low- and middle-SES adolescents – but not high-SES adolescents – become high performers, likely reflecting the higher income support received especially by low- and middle-income families in more generous income transfer systems. However, stronger targeting of benefits towards the bottom 30% of the income distribution is not associated with significant increases in the share of low- and middle-SES students reaching high-performance levels. For middle-SES students, the association is even negative, which may reflect that tighter targeting has sometimes been accompanied by lower levels of support for middle-SES families (Mcknight, 2015[46]).

The timing of family cash support also appears to matter. Increased spending on family cash benefits during early childhood is particularly strongly associated with higher chances of low-SES students reaching high-performance levels. Spending later in childhood shows clearer associations for middle-SES students, while the estimated effects for low-SES students remain positive but statistically imprecise, possibly because of the relatively small share of disadvantaged adolescents attaining top PISA scores. At the same time, indicators of higher spending on family cash benefits at every stage of childhood are also associated with greater chances of high-SES students performing high. While the mechanisms cannot be directly identified, this may reflect the greater capacity of advantaged households to translate additional income into investments that enhance educational performance, such as access to higher-quality schools or enriched home learning environments, or paying for private tutoring.

The value for money of social expenditure on children's health outcomes

The tables in Annex 4.C display the regression estimates from the analysis on health outcomes. The results are again shown with and without country fixed effects in addition to time fixed effects to analyse within-country associations as well as differences in levels across countries. The results offer insights into the policy drivers of children's health outcomes, and they complement the previous analyses on child poverty and educational outcomes. Looking first at the drivers of adolescent health outcomes:

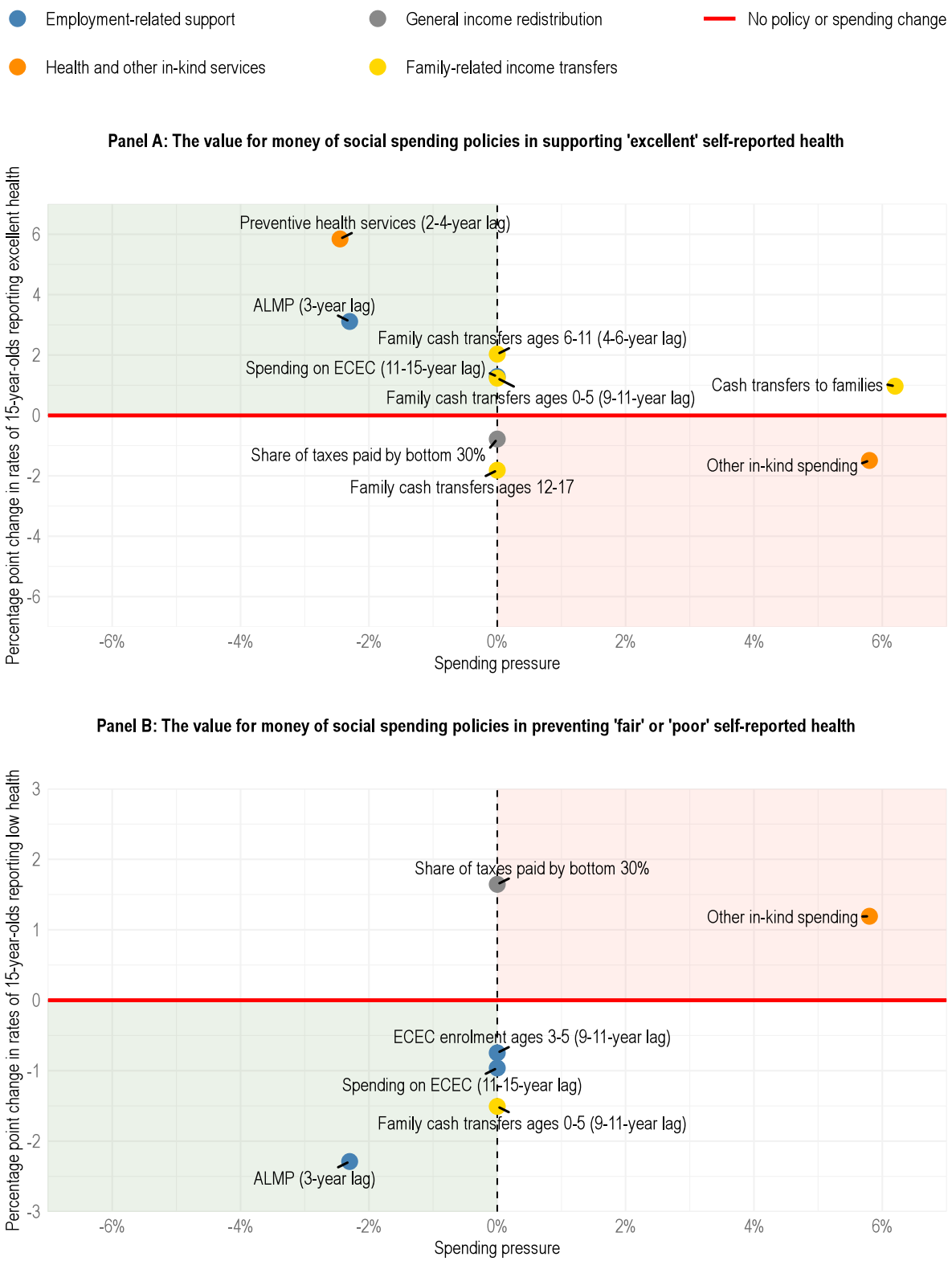
- Market inequalities at the bottom of the income distribution have no clear link to children's health outcomes. There is some evidence across specifications that within-country increases in the mean poverty gap before taxes and transfers seem detrimental to the share of adolescents experiencing their own health as "excellent" and to rates of 15-year-olds reporting multiple subjective health

complaints (with coefficients around -0.2 and +0.3 p.p., respectively) but no consistent patterns emerge.

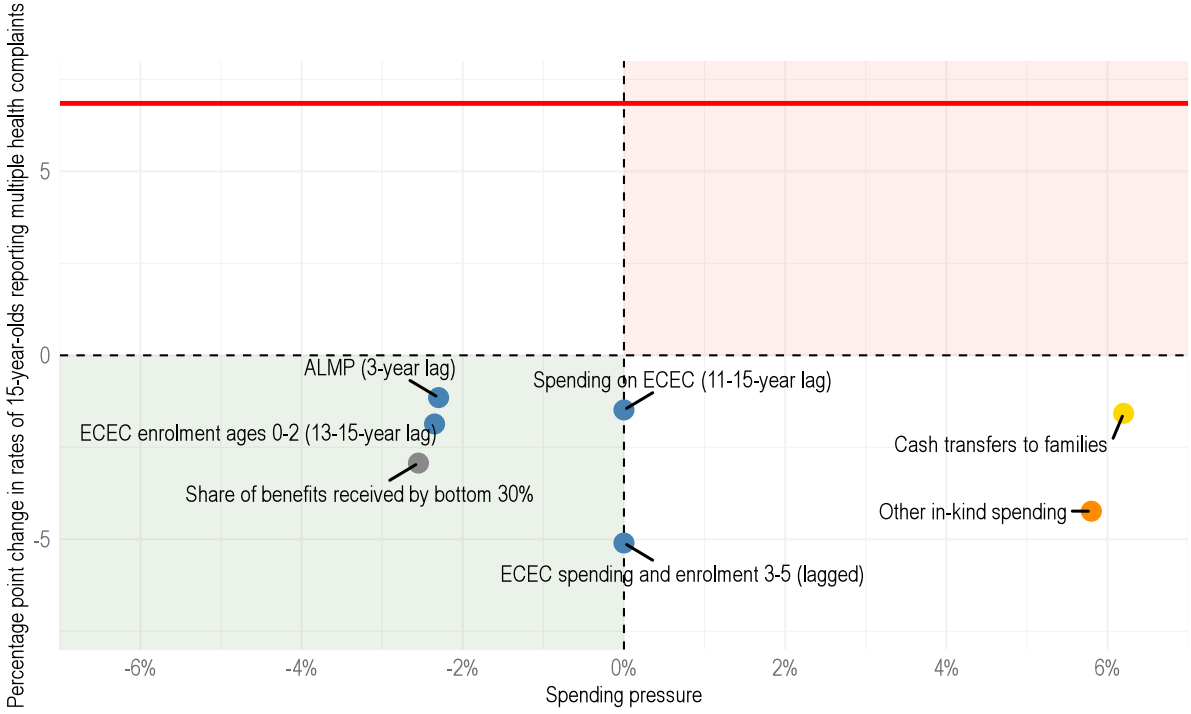
- On average, social expenditure has large negative effect on the share of 15-year-olds reporting multiple subjective health complaints: an increase in the log of per capita social expenditure by half a standard deviation – representing the average historical social expenditure growth over one decade approximately – lowers the rate of adolescents reporting multiple subjective health complaints by nearly 7 p.p. However, total social expenditure is not related to changes in the share of adolescents reporting their own health as "excellent", nor to those rating it as "fair" or "poor". This implies that the overall effectiveness of social spending depends critically on its policy features to improve adolescent self-reported health whereas for the share of 15-year-olds who report multiple subjective health complaints, policy design plays a smaller role in the strong overall relationship. The impact of social spending on children's health outcomes may be both direct – for example, by providing preventive and curative healthcare to children – and operate indirectly by reducing children's exposure to poverty and enhancing family resources that support a healthy lifestyle and limit exposure to harmful environments.

Figure 4.6 displays the value for money simulations of social policies with respect to children's health outcomes based on the fixed effects regression estimates in Annex 4.C. As before, the green quadrants indicate that an increase in a given policy by one standard deviation is associated with better health outcomes over time, as well as with greater spending moderation. Red quadrants identify both worse outcomes and greater spending pressures and the remaining two quadrants represent trade-offs between improved child outcomes and fiscal moderation.[11]

Figure 4.6. The value for money of social policies to foster children's health outcomes, for average levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in preventing multiple subjective health complaints



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with average levels of logged per capita social spending, logged GDP per capita and policy settings. *How to read the figure:* The vertical axis indicates the p.p. difference in 15-year-olds' health outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving adolescent health outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where health outcomes would be without any change in policy nor an increase in logged per capita social expenditure.

Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.

Example: Increasing the share of taxes that are paid by the bottom 30% by one standard deviation (+3.5 p.p.) from the sample average when logged per capita social spending rises by 0.5 standard deviations from the average level is predicted to reduce the share of children reporting excellent health by 0.8 p.p. and to increase the share of children reporting "fair" or "poor" health by 1.6 p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). At the same time, such an increase in the relative tax burden of the poorest 30% alongside GDP growth is associated with 6.2% lower additional social spending compared to the typically spending increase that accompanies a half-standard-deviation increase in logged GDP per capita.

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations.

StatLink https://stat.link/dqsxrk

The role of services in promoting health outcomes

A range of in-kind social services can support adolescent health directly by supporting their development throughout childhood, possibly mitigating some of the adverse effects of child poverty, and indirectly by supporting their parents, including to enhance their earnings capacity.

- **Higher spending on preventive healthcare is associated with an increased share of adolescents reporting excellent health.**

  Preventive health expenditure has the largest impact on improvements in positive health outcomes among all policy measures. Increasing its share in total social expenditure by one standard deviation (0.9 p.p.) is expected to yield an additional 6-p.p. increase in 15-year-olds reporting their health as excellent in the value for money simulation (Panel A, Figure 4.6). This represents an additional 20% of adolescents reporting excellent health for the average OECD country. Greater effects are predicted for higher-than average levels of per capita social expenditure. On the other hand, preventive health spending does not result in significant changes in adolescents' negative health outcomes, namely the share of 15-year-olds reporting their own health as "fair" or "poor", or the proportion reporting multiple subjective health complaints. This could indicate that curative health measures are more relevant for children with poor health, although the analysis shows no significant association between the share of social expenditure allocated to non-preventive health expenditure and any of the three adolescent health measures.

  These results may underestimate the effect of healthcare on children's health due to substantial measurement issues. Only a small share of health spending goes to children, with much of it being spent on the elderly, especially for non-preventive healthcare (OECD, 2025[47]). Disproportionate increases in health spending on older population groups could therefore disguise the relationship between healthcare and adolescent health outcomes, reducing its magnitude or leading to insignificant results.

  As already suggested in Chapter 3, prioritising health spending in the social policy mix tends to substantially moderate social spending pressure (11% reduction in additional spending as economies develop). This probably reflects the role of generous public health systems in improving population health, thereby reducing future demand for costly care while supporting higher labour market participation and productivity among working-age adults. While the largest gains in spending moderation stem from non-preventive spending, increases in preventive health spending – holding non-preventive spending constant – are associated with particularly beneficial effects on the evolution of social spending in advanced economies (-2.5% lower additional spending for the average country as depicted in Figure 4.6, which rises to 7.4% for countries with high GDP as shown in Annex Figure 4.D.3).

- **Increases in ECEC spending come with improvements across all of children's later health outcomes**

  While across countries, changes in the share of social expenditure dedicated to ECEC are not related to adolescents' later health outcomes, greater spending on ECEC services comes with improvements in all three health outcomes in high spending environments when focussing on within-country variation: For the average OECD country, a one-standard-deviation increase in ECEC spending improves the share of 15-year-olds reporting their health as excellent by an additional 1.3 p.p., reduces the share of adolescents declaring their health as "fair" or "poor" by 1 p.p. and lowers the rate of 15-year-olds experiencing multiple subjective health complaints by 1.5 p.p. in the value-for-money simulation (Figure 4.6).

  In addition to spending on ECEC, greater enrolment in ECEC (ages 3-5) further enhances the protective effects against adolescents' poor health outcomes: For the average OECD country, the value for money simulation reduces the share of 15-year-olds reporting their own health as "fair" or "poor" both by prioritising ECEC spending in the policy mix (-1 p.p. for a one-standard-deviation

increase) and separately by increasing enrolment rates among 3-5 year-olds by a standard deviation (-0.7 p.p.). Augmenting spending on ECEC services and enrolment levels at ages 3-5 *simultaneously* by one standard deviation is over three times more impactful at lowering the share of 15-year-olds who report multiple subjective health complaints than spending on ECEC alone, and raising coverage by itself has no significant impact at all.

Enrolment at lower ages (0-2) also provides suggestive evidence of protective effects of ECEC attendance against later negative health outcomes. A one-standard-deviation increase is associated with lower rates of multiple subjective health complaints (-1.9 p.p. for the average OECD country), with greater effects observed when per capita social expenditure is high. Multiple subjective health complaints are experienced by nearly one in two 15-year-olds on average across the OECD, irrespective of family affluence. In contrast, rates of "fair" or "poor" self-reported health are less frequent and more concentrated among children from less affluent families (22% vs. 14% among highly affluent children on average, see Figure 4.4). The significant protective link between ECEC enrolment under 3 and lower adolescent rates of multiple subjective health complaints but not poor self-rated health is therefore consistent with the child population that attends these services and does not mean that ECEC services for younger ages are less effective at mitigating later negative health outcomes than at ages 3-5. Instead, the results could be interpreted as suggestive evidence of benefits of ECEC attendance also for more advantaged children.

As discussed before, a greater prioritisation of ECEC services in the policy mix is not related to increases in social spending pressure. On the contrary, expanding coverage of education and care services, especially among children under age 3, can help ease longer-term pressures, as it supports parental employment and fosters early human capital development, thereby reducing future reliance on income support and other costly social interventions as economies grow.

- **ALMP are associated with better self-reported health in adolescents**

  Increasing the share of social spending dedicated to active labour market programmes by one standard deviation increases spending efficacy, yielding higher shares of children describing their own health as "excellent" (+3.1 p.p.), lower rates of children reporting their health as "fair" or "poor" (-2.3 p.p.) and lower rates of 15-year-olds reporting multiple subjective health complaints (-1.1 p.p.).

- **Other in-kind spending is associated with better health outcomes in higher-spending welfare states**

  Devoting a greater share of social expenditure to in-kind spending on incapacity-related, housing and other social policy areas is linked to a 4.2-p.p. reduction in rates of adolescents who report multiple subjective health complaints for the average OECD country. At the same time, the simulation predicts a worsening of adolescent self-reported health at average levels of spending (-1.5 p.p. for "excellent" health, and +1.2 for "poor" or "fair" health). However, as per capita social expenditure levels grow, such in-kind spending becomes more valuable. It is linked to improved health outcomes across all three measures in high spending contexts (see Annex Figure 4.D.4). The strong dependence on spending levels suggests important complementarities of these types of supports with other policies that promote adolescent health. However, these benefits are associated with substantial spending pressures as discussed before.

The role of income transfers in promoting health outcomes

Providing additional financial resources to families can improve children's health in numerous ways. For example, it may improve their access to nutritious food, sports and leisure activities, the quality of their housing, and possibly family relationships by reducing stress, which typically comes with financial strain. Promising policy levers are:

- **Targeting income transfers towards lower-income households can strengthen adolescent health**

  Although changes in the average size of countries' income support systems are not significantly associated with any of the three adolescent health outcomes, targeting transfers towards lower-income households appears to represent an effective policy lever for promoting adolescent health. Reducing the share of taxes paid by the bottom 30% is linked to improvements in self-reported health by 0.8 p.p. for excellent health, and by -1.6 p.p. for the share of adolescents rating their own health as "fair" or "poor". Similarly, raising the share of benefits given to the bottom 30% by one standard deviation enhances social spending effectiveness at reducing the share of children reporting multiple subjective health complaints in the simulations (-3 p.p. for the average OECD country), with greater impact at higher spending levels.

  Greater targeting of benefits is linked to spending moderation in wealthier countries. As detailed in Chapter 3, a greater targeting of benefits is typically accompanied by lower overall volumes of benefits.

- **Cash spending on families appears beneficial for adolescents' health**

  A one-standard-deviation increase in social expenditure allocated to family cash benefits is associated with a decline in the share of adolescents reporting multiple subjective health complaints by -1.6 p.p. in the same time period. In addition, family cash benefits are linked to a rise in 15-year-olds who declare their own health as "excellent" by +1 p.p., with higher impacts at higher levels of spending. Effects on the share of children experiencing their own health as "fair" or "poor" are not significant, although coefficients are negative.

  When assessing the impact of cash benefits for families throughout children's lives, past transfers during early childhood appear effective at mitigating the prevalence of low self-reported health in adolescence. Cash benefits during early childhood further increase adolescent self-reports of excellent health along with spending during middle childhood, which indicates the importance of sustained investment during childhood to promote positive health outcomes. On the other hand, family benefits paid out during adolescence are negatively linked to 15-year-olds describing their own health as excellent. This highlights the critical importance of early and middle childhood in shaping healthy development and may suggest that increased spending on family benefits during adolescence is insufficient to compensate for limited investment earlier in life. The data reveal no clear age-spending patterns for multiple subjective health complaints.

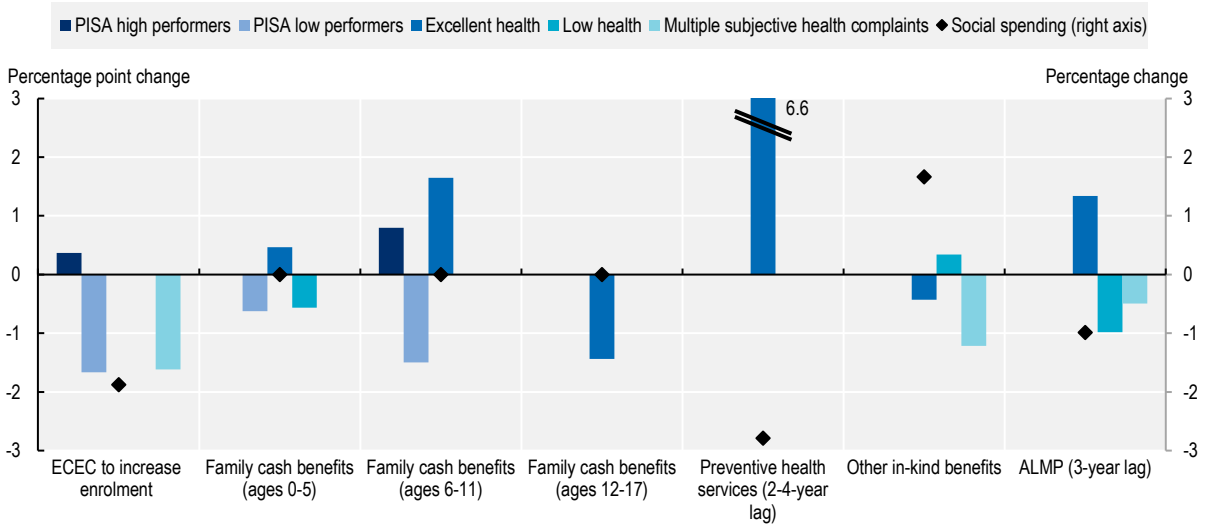
  As described in the discussion on educational outcomes and in Chapter 3, the evidence points to a positive association between an expansion in the use of cash spending on families and greater social spending pressures.

Comparing the value for money of equivalent investments (in monetary terms) across social policy domains

The analysis presented thus far has focussed on comparing estimated effects of policy changes on children's educational and health outcomes in terms of policy expansions by one standard deviation of the observed sample variation. This approach offers the advantage of rendering policies expressed in different units broadly comparable. To analyse the results in terms of equivalent monetary investments, we can rescale the estimated effects on child outcomes and spending pressures for a subset of policies that refer to social expenditure shares. This may align more closely with the trade-offs policymakers face when deciding on long-term spending allocations. Figure 4.7 presents the expected benefits of an equivalent investment (one additional p.p. of total social expenditure) allocated to a given policy area in the average OECD country.

Figure 4.7. Allocations across policy areas shape spending effectiveness at improving children's educational and health outcomes and social expenditure levels

Estimated effects of a one-p.p. increase in the share of social expenditure allocated to different policy domains on children's educational and health outcomes and total social spending levels



Note: *How to read the figure:* The bars capture the predicted p.p. difference in 15-year-olds' educational and health outcomes (left-hand scale) resulting from allocating an additional 1% of social expenditure to the respective policy area as the log of per capita social expenditure grows by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policy mix. In other words, it shows the incremental, long-run effect of changes to the spending allocation on the effectiveness of total social expenditure in improving child outcomes, under the assumption that per capita total social spending increases over time. Calculations are based on a hypothetical country with initially average sample values of spending allocations and logged per capita social spending.

Equivalently, the black diamonds display the percentage change in additional projected social spending (right-hand scale) resulting from allocating an additional 1% of social expenditure to the respective policy area as the log of GDP per capita increases by half a standard deviation (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any change to the policy mix. The diamonds hence represent the per cent change in the projected growth of long-run social spending following a change in the spending allocation, under the assumption of GDP per capita growth over time. These spending pressure results are displayed only for average sample values of the initial spending allocation and logged GDP per capita, and do not show any possible dynamic effects related to economic growth. Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s. See Sections 4.2 and 3.3 "Assessing value for money" for a full description of the methodology.

"Other in-kind benefits" groups expenditures on housing, incapacity-related and other social policy areas. The simulated increase in spending on ECEC is assumed to be invested entirely in expanding enrolment, namely to finance an expansion of pre-primary education and care (ages 3-5) by ten per cent, and a rise in enrolment at ages 0-2 with the remainder of the budget (+18 p.p.). The enrolment increases corresponding to a one-p.p. increase in the share of social spending dedicated to ECEC are estimated based on the average spending-to-enrolment ratios across countries and years in the sample. An enrolment increase of ten p.p. for children aged 3-5 represents near full enrolment (OECD average enrolment was at 89% in 2023).

Example: For a simulated increase in social expenditure over time (corresponding to approximately 11 years), allocating one additional p.p. of social expenditure to ECEC services to expand enrolment is expected to reduce the share of 15-year-olds who perform low on the PISA test by 1.7 p.p. compared to the scenario where social expenditure increases but the spending allocations remain unchanged. Similarly, as GDP per capita increases over time (and thus, countries' capacity to finance social programmes), per capita social spending is expected to follow its historical upward trajectory. Greater relative investment in ECEC services to increase enrolment is associated with a 1.9% reduction in the projected additional growth of social spending compared to the scenario in which GDP per capita increases, but the allocation of social spending remains unchanged (a half-standard-deviation increase in logged GDP per capita, equivalent to approximately 11 years of growth, is linked to an 8.9% increase in per capita social expenditure under the average policy mix).

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Annex 4.C for the regression coefficients used in the calculations.

StatLink https://stat.link/mrqfec

Comparing adolescents' outcomes for equivalent expenditure reallocations across spending domains identifies two spending areas with large effect sizes. First, investing the additional p.p. of social expenditure to expanding ECEC coverage is associated with improved educational performance (1.7 p.p. fewer low performers and 0.4 p.p. more high performers, which represent 4% and 3% improvements relative to the OECD averages in 2025, respectively) and -1.6 p.p. fewer 15-year-olds reporting multiple subjective health complaints.

Second, preventive health stands out for its strong relationship with excellent self-reported health: increasing the share of total social expenditure allocated to preventive health by one p.p. is associated with a 6.6-p.p. increase in the share of adolescents reporting excellent health (equivalent to an increase by 24% from 2021-2022 levels).

Figure 4.7 also highlights differences in the expected impact of increases in spending on family cash benefits depending on the stage of childhood targeted. Investment directed towards children in middle childhood (ages 6-11) is associated with the largest improvements in educational outcomes: an additional one p.p. of total social expenditure to programmes targeting this age group is associated with 1.5 p.p. fewer low-performing students and 0.8 p.p. more high-performing students in PISA assessments. More generally, the estimated effects of additional spending on children aged 0 to 5 are smaller in magnitude than those associated with increases in spending targeted at older children. A higher baseline level of expenditure may help explain why additional spending appears to yield smaller marginal effects at younger ages compared with later states of childhood where average expenditure is lower: on average, OECD countries devote approximately twice as much to family cash benefits during early childhood as they do during middle childhood and adolescence, largely reflecting the prominence of childbirth-related leave benefits. In addition, variation in family cash expenditure during early childhood (as measured by its standard deviation) is approximately twice as large as during subsequent developmental periods, potentially reflecting differences in the composition and objectives of spending programmes across countries, which may influence the overall results. Nevertheless, a greater share of cash benefits targeted towards young children remains associated with improvements across a broad range of educational and health outcomes.

For the average OECD country, dedicating one additional p.p. of social expenditure to ALMP is associated with improved health among adolescents, with 1.3 p.p. of 15-year-olds reporting "excellent" health, one-p.p. fewer adolescents indicating their own health as "fair" or "poor", and 0.5-p.p. fewer 15-year-olds reporting multiple subjective health complaints.

Rescaling reduces the magnitude of other in-kind benefits by a factor of 3.5. Shifting an additional p.p. of expenditure to services in the areas of invalidity related, housing and other social policies is thus linked to a reduction in adolescents with multiple subjective health complaints by 1.2 p.p. As before, increases in other spending in kind are found to be less effective at promoting self-reported health than the average composition of social expenditure.

4.4. Implications for social policy

The examination of recent trends shows that a large share of 15-year-old adolescents across the OECD have experienced declines in both academic outcomes and self-reported health. Combined with the persistence of strong social stratification in children's educational and health outcomes, these trends contribute to unequal starting conditions early in life (Clarke and Thévenon, 2022[48]; OECD, 2021[45]). This is particularly reflected in our analysis by the strong positive within-country association between increases in the mean poverty gap – a measure of poverty depth – and both the share of young people who are NEET and the proportion of low performers in PISA, alongside a negative association with the share of high-performing students. Taken together, these findings suggest considerable scope for social, education

and health policies to address the underlying drivers of these inequalities and potentially help reverse deteriorating trends in child educational and health outcomes.

Designing policies capable of tackling entrenched socio-economic inequalities requires addressing the multiple and interconnected factors that shape gaps in children's educational and health outcomes. On the one hand, children from low-income families are more likely to experience poor home learning environments, including more limited access to educational resources, fewer opportunities to study in quiet and adequate conditions, and higher levels of financial strain and family stress that can reduce parents' capacity to support learning. Parents in disadvantaged households may also be less familiar with learning-support practices and have less time available to engage with their children because of demanding, unstable or non-standard working conditions. On the other hand, disadvantaged children are also more likely to grow up in neighbourhoods characterised by lower-quality schools and public services, fewer educational and recreational opportunities, and greater exposure to social and environmental risks, all of which can negatively affect educational achievement, health and broader well-being outcomes.

Encouragingly, a wide range of policy levers exists to address these inequalities in early life and help offset the disadvantages associated with growing up in unequal environments. These include early childhood education and care, education system policies, income support, health services and broader social policies. However, strengthening their impact requires overcoming a number of interrelated challenges and addressing them in a co-ordinated and integrated manner, so that policies reinforce one another and can collectively produce meaningful and lasting improvements in children's developmental trajectories.

Leveraging ECEC to improve children's education and health

Scaling up ECEC services requires sustained public investment to expand availability, affordability, and quality, which places upward pressure on social spending given the labour-intensive nature of the sector and its limited scope for productivity gains. However, ensuring that these investments translate into broader and more equitable coverage is crucial to ease longer-term spending pressures and to allow children and families to fully benefit from these services.

The potential of ECEC to start preparing children for life is widely emphasised in policy discussions. However, the evidence on its impact on developmental, educational and health outcomes is mixed. The literature suggests that the long-term benefits of ECEC depend on specific conditions, with the age at enrolment and the quality of services emerging as key factors (OECD, 2025[49]; 2011[50]).

This nuanced picture is also reflected in the findings presented above. The associations between childcare coverage and adolescents' educational and health outcomes differ depending on the age group considered. Higher enrolment in pre-primary education and care for children aged 3-5 and dedicating greater shares of social expenditure to ECEC are associated with better academic performance at age 15 – reflected in lower shares of low performers and higher shares of high performers in PISA – as well as with greater protection against poor health outcomes in adolescence. By contrast, weaker and more mixed results are found between enrolment of children under age 3 in formal childcare and later PISA test scores or health outcomes.

The absence of clear beneficial effects for younger children suggests scope to strengthen the role of ECEC in laying solid foundations for physical and cognitive development. It also reflects that the provision of ECEC services for children under age 3 has not yet delivered the expected impact at scale, due to several overlapping factors. First, as noted in Chapter 2, participation in formal childcare remains lower among children from disadvantaged backgrounds, despite evidence that they stand to benefit the most. In addition, the quality of provision – crucial for positive outcomes – is more heterogeneous for services offered to younger children than for pre-primary education, meaning that not all forms of formal care services deliver comparable benefits for younger children. More generally, the evidence on the impact of early enrolment

in ECEC services for children under age 3 is quite mixed: earlier enrolment does not systematically translate into better outcomes, and effects vary depending on the outcomes considered (Box 4.4).

By contrast, the positive association between enrolment of 3-5 year-olds and performance at age 15 aligns with evidence from PISA microdata, which shows that children who attend ECEC for at least two years tend to achieve higher scores, particularly in mathematics (OECD, 2025[49]). This likely reflects both the broader coverage of these services – including among disadvantaged children, with in 2023 on average 89% of 3- to 5-year-old children being covered – and the more structured nature of pre-primary education (OECD, 2026[51]).

Moreover, the findings suggest that higher ECEC coverage is more likely to translate into improvements in children's later educational and health outcomes when accompanied by increased levels of spending. For education, the benefits associated with pre-primary participation appear stronger in contexts with higher investment, highlighting the importance of combining expanded access with sufficient resources to ensure service quality. Similarly, for health outcomes, higher shares of social expenditure devoted to ECEC are associated with better outcomes across all indicators, even at comparable levels of coverage, suggesting that investment in high-quality ECEC can also play an important role in supporting healthy child development.

While further research is needed to better understand the underlying mechanisms, these findings are consistent with evidence from individual-level studies (e.g. Morrissey (2019[52])), which identify multiple pathways through which high-quality ECEC can affect child health. These include direct positive effects through access to health screening, care, nutrition and other health-promoting activities; potential negative effects through increased exposure to infections; and indirect effects via higher household resources linked to parental employment, as well as through improved educational trajectories that support healthier behaviours and outcomes over time.

Overall, the literature confirms that high-quality ECEC can improve cognitive, social and emotional skills in both the short and long term, with stronger effects for disadvantaged children. However, these benefits are not automatic: they depend on programme design, quality, and context (Box 4.4). Four main policy implications emerge.

- First, investing in the quality of ECEC services is critical. Evidence from intensive, high-quality targeted programmes – such as the Perry Preschool, Chicago Child-Parent Centers and the Abecedarian project – shows substantial long-term gains in education, health and earnings, although these interventions were highly resource-intensive and targeted, limiting their generalisability. Evidence from larger-scale (or universal) programmes show more mixed results, highlighting the importance of quality in achieving positive outcomes at scale.
- Second, intensity and duration of ECEC attendance matter. Given the cumulative nature of learning, more time spent in ECEC can support skill development, particularly for disadvantaged children, provided programmes are of high quality. While intensive participation (e.g. 30 hours or more per week) is associated with better cognitive outcomes, especially for vulnerable children, evidence on socio-emotional outcomes is less clear, and very early, high-intensity enrolment may carry some risks.
- Third, increasing participation among disadvantaged children is essential. Since benefits are strongest for children from lower socio-economic backgrounds, policies should prioritise expanding access in deprived areas and addressing financial, social and cultural barriers that may limit take-up, even where services are available. Affordability of ECEC services is key. For instance, recent evidence from the United States suggests that relatively modest spending on free childcare for non-college-educated single mothers can significantly reduce investment gaps in children's development, partly because these households reinvest savings from childcare support (Caucutt et al., 2026[53]). By contrast, achieving similar effects for two-parent households would require substantially higher investment.

- Fourth, sustaining the impact of high-quality ECEC requires smooth transition across stages of the system and strong co-ordination with other services. For ECEC to have lasting effects on child development, it is essential to ensure smooth transitions within ECEC and from ECEC to primary and subsequent levels of education. This implies aligning curricula and learning expectations, adapting pedagogies to children's developmental stages, maintaining rich teacher-child interactions, and ensuring effective co-ordination between settings. Sustaining early gains therefore requires not only preparing children for school, but also adapting primary education – and subsequent investments – to build on the skills acquired in the early years.

Box 4.4. Impact of ECEC on child development depends on quality and intensity of services provided, and inclusion of disadvantaged children

The impact of early childhood education and care (ECEC) on child development critically depends on the quality and intensity of provision, as well as on the extent to which services effectively reach disadvantaged children.

Because of the cumulative nature of learning, more time spent in ECEC can support skill development, provided programmes are able to adapt content and practices to children's evolving competencies (Li et al., 2020[54]; Melhuish and Gardiner, 2020[55]). Evidence suggests that more intensive participation (i.e. more hours) can yield positive effects – particularly for children from low socio-economic backgrounds – when provision is of high quality. High-intensity ECEC (around 30 hours or more per week) is associated with stronger cognitive and language development, especially for vulnerable children. By contrast, evidence on socio-emotional outcomes is less conclusive, and extended hours at very young ages (especially under age 2) may be associated with some longer-term behavioural risks. Overall, the literature indicates that intensive, high-quality ECEC generates the largest gains for disadvantaged children.

For very young children, however, findings are more mixed (Duncan et al., 2022[56]). Full-day or high-intensity participation at early ages often shows limited or ambiguous benefits, particularly for non-cognitive outcomes. While theories of skill formation and early inequality point to the potential value of early enrolment, empirical evidence suggests that "earlier" is not always "better," and effects depend strongly on quality. Enrolment between ages 2 and 3 tends to be beneficial, whereas evidence for younger children is more mixed (Melhuish et al., 2015). Concerns about very early enrolment (especially under age 1) relate mainly to social, emotional and health outcomes, particularly when combined with long hours. For cognitive and language development, participation in the first year of life can have neutral or even negative effects, although high-quality ECEC between ages 1 and 3 is generally associated with positive outcomes in language, early numeracy and motor skills (Carbuccia et al., 2020[57]). For example, evidence from the French ELFE cohort shows positive effects on language skills, no impact on motor skills, and some negative effects on behaviour at age 1 (Berger, Panico and Solaz, 2020[58]). Importantly, positive effects – especially on language – are concentrated among disadvantaged children. More broadly, the literature consistently finds stronger impacts for children from low-income and low-educated families, while starting age appears less relevant for children from more advantaged backgrounds.

In addition to quality, the scale and intensity of provision matter for long-term impacts on inequalities. Evidence from intensive, targeted programmes in the United States – such as the Perry Preschool, Chicago Child-Parent Centers and the Abecedarian project – shows substantial long-term gains in education, health and earnings (McCoy et al., 2017[59]). However, these programmes were highly intensive, long in duration, and focussed on disadvantaged children, which limits their generalisability. For example, the Abecedarian programme provided year-round services over the first five years of life.

These interventions were also costly, with per-child expenditures far exceeding typical spending levels in OECD countries (Whitaker et al., 2026[60]). More recent large-scale programmes targeting broader populations have produced more mixed results, reinforcing the importance of quality in achieving positive outcomes at scale (Burchinal et al., 2024[61]).

Evidence from European ECEC systems, which tend to rely more on universal provision, further highlights the central role of quality. A meta-analysis of 17 longitudinal studies across nine European countries finds small but persistent positive effects of process quality on language, literacy and mathematics outcomes (Ulferts, Wolf and Anders, 2019). Another meta-analysis confirms that ECEC quality is a key determinant of lasting impacts and finds little evidence of fade-out over time (Van Huizen and Plantenga, 2015[62]). In addition, gains are consistently concentrated among children from lower socio-economic backgrounds.

Universal preschool programmes for children aged 3-5 may have stronger impacts than targeted programmes for two key reasons (Duncan et al., 2022[56]). First, they can generate positive peer effects, as children benefit from interacting with a broader and more balanced group of classmates. Second, when entire cohorts enter school with higher and more homogeneous skill levels, teachers can build more effectively on these foundations. This reduces disparities in early skills and allows teaching to be pitched at a higher level for all students, fostering dynamic complementarity between preschool and later learning. By contrast, when skill gaps are large at school entry, teachers often focus on bringing lower-performing students up to a minimum level, which can limit overall learning gains and contribute to the fade-out of early advantages.

While ECEC can provide a supportive environment for children's early development and learning, it cannot on its own ensure that the benefits of early investment are sustained. To deliver lasting gains, ECEC policies need to be complemented by broader investments in education and health, so that early advantages translate into improved outcomes in adolescence and adulthood.

Sustaining investment in education across the school-age years

Investments in education are associated with improved educational outcomes at age 15. This finding reinforces earlier work by Egert et al. (2020[63]), which shows that higher public spending on education is linked to increases in average years of schooling – a proxy for human capital. Using an approach to identify factors increasing the effectiveness of spending on education that similar to the one used here for social policies, the authors also identify several policy features that amplify the returns to education spending, including higher participation in pre-primary education, greater institutional autonomy, lower student-teacher ratios, a later age of tracking in secondary education, and fewer financial barriers to tertiary education.

A key contribution of the present analysis is to show that the level and allocation of education spending matter for different dimensions of performance. Countries with higher per capita investment in primary education, all else equal, tend to have fewer low performers in PISA, while spending on secondary education is more closely associated with a greater share of high performers. However, when the analysis is restricted to within-country trends over time, no statistically significant associations are found. This likely reflects limitations in the available data for identifying robust time-series relationships. More substantially, it suggests that variations in per capita education spending within countries over the past two decades have not been consistently large enough to generate clear changes in the shares of low and high performers.

From a policy perspective, reducing the share of low performers and increasing the share of high performers are complementary objectives that help combine greater fairness with stronger responses to the future demand for highly skilled workers. Lowering the number of low performers is essential for

improving life chances and promoting social inclusion, while increasing the share of high performers can be a goal in itself to support productivity and competitiveness in high-skill sectors. Achieving these objectives may therefore require targeted investments addressing different groups. In particular, boosting the number of high achievers may involve not only supporting those at risk of low performance, but also investing in students who would otherwise perform at intermediate levels. Combining improvements in overall academic performance – including increasing the share of students achieving high levels of performance – with greater fairness therefore requires ensuring that policies particularly benefit the most disadvantaged students – both by reducing their risk of falling behind and by strengthening their chances of reaching high levels of academic performance.

Aligning support to the stronger needs from low- and middle- SES children

The importance of cash transfers in helping families meet the costs of raising children – and their impact on poverty, with knock-on effects on children's health and development – is well documented, as highlighted in Chapter 3. That chapter also shows that, while increasing pressure on social spending, a higher share of expenditure allocated to cash transfers is effective in reducing income poverty, but has more limited effects on severe material deprivation. The findings in the present chapter further indicate that the design of income support is a key determinant of its effectiveness in enhancing children's educational and health outcomes.

Family-related benefits, in particular, appear to have a clearer association with adolescents' educational and health outcomes. The results suggest that a higher share of social expenditure devoted to cash benefits for families is associated primarily with a reduced share of low performers in PISA. This is consistent with the predictability and the "framing effect" of family-targeted transfers highlighted in the literature (e.g. Page (2024[64])), which shows that the impact of income on child outcomes depends on its regularity and source. For example, windfall gains such as lottery winnings tend to have little effect on children's outcomes, whereas structured transfers – especially those explicitly targeted at families with children – are more likely to generate positive impacts.

Linking benefits to the presence of children may create incentives for parents to allocate a larger share of resources to child-related investments than they would with equivalent unlabelled income. In line with this, Waldfogel (2025[65]) shows that cash support to families tends to increase child-related consumption across countries, regardless of whether transfers are earmarked or conditional, pointing to a broader responsiveness of household spending when additional resources are available in the presence of children.

Spend early to prevent, later to promote

The timing of cash benefit support across childhood also matters, with earlier spending playing a stronger role in preventing poor outcomes, and sustained spending during later years being more closely associated with promoting higher achievement and well-being. Specifically, increases in cash transfers during early and middle childhood are associated with reductions in the share of low-performing students in PISA, while higher transfers targeted at middle childhood and to some extent adolescence are linked to greater shares of high performers at age 15. This pattern is consistent with findings on education spending: higher investment in primary education is associated with fewer low performers, whereas higher spending in primary education and, more strongly, secondary education are linked to a greater share of high performers.

Similar dynamics are observed for children's health outcomes. Greater spending during early childhood is linked to lower rates of children reporting fair or poor health at age 15 whereas sustained spending during early and middle childhood is associated with a higher proportion of 15-year-olds reporting excellent health. Echoing recent work by Hendren and Sprung-Keyser (2020[66]) and Page (2024[64]), these findings suggest

that early childhood is not the only stage at which cash assistance can make a difference. Rather, they point to a more nuanced relationship between the timing of income support and educational and health outcomes in adolescence than is implied by a simple "skills-beget-skills" framework.

Explaining how cash benefit support contributes to higher school performance and better health is not straightforward. However, evidence shows that the costs of raising children increase markedly during adolescence in many countries, often reaching levels comparable to those of adults (Rapp and Thévenon, 2025[67]). This helps explain the importance of income support for families with adolescents, particularly in covering expenses related to education and broader developmental needs. Even when transfers are not specifically earmarked for education, they can ease budget constraints, enabling families to invest in a healthier and more supportive learning environment – such as better housing conditions, access to leisure, sports and social activities – all of which are important for adolescent well-being and engagement in learning. Further analysis of household spending patterns among families with adolescents would help clarify how income support is allocated and shed light on the mechanisms linking cash transfers to improved educational outcomes.

While the level and timing of spending on cash benefits are important determinants of effectiveness, other institutional features also play a key role in shaping their impact on children's educational and health outcomes. In particular, eligibility conditions can be designed to better reach specific groups – including harder-to-reach populations such as Indigenous communities – and to link benefit receipt to behaviours that support child development (Banerjee et al., 2024[68]). These conditions may include requirements related to school enrolment, minimum academic performance, or participation in health checks, thereby increasing the likelihood that transfers translate into improved outcomes for children.

For example, the Chile's *Beca Indígena* programme, in place since 1991, illustrates how conditional financial support can lead to substantial improvements in both educational attainment and adult labour market outcomes (Lucas, McEwan and Irribarra, 2025[69]). The programme provides renewable grants to Indigenous students enrolled in upper-primary, secondary, and tertiary education. Eligibility is based on certified Indigenous ancestry, school enrolment, minimum academic performance, and household income below a proxy-means threshold. Grants are sizeable relative to household income and can be renewed across successive levels of education. Since its inception, the programme has expanded significantly – from around 300 beneficiaries in 1991 to over 92 000 in 2021 – creating variation in exposure across cohorts. This allows for an assessment of its long-term effects. Among the most exposed Indigenous cohorts (born between 1992 and 2000), schooling increased by 0.6 years and labour earnings by around 20%. Scaling these results suggests that an additional year of grant exposure leads, on average, to a 0.3-year increase in schooling and a 10% increase in earnings.

The effectiveness of such programmes depends on key contextual and design features (Lucas, McEwan and Irribarra, 2025[69]). In the case of Chile, *institutional stability* ensured consistent programme rules over more than three decades. The *renewability* of grants across educational stages provided sustained incentives to remain in education, while academic performance requirements encouraged student effort and achievement. These features were further reinforced by broader contextual conditions, including *sustained investments* in education quality and favourable labour market dynamics associated with economic growth, which increased demand for skilled workers.

Tailoring the scope and intensity of support to the needs of low- and middle-SES children

Achieving both higher educational and health outcomes across the population and greater equality of opportunity requires tailored support for children with the greatest needs. This implies following the principle of proportionate universalism, whereby policies are universal in scope but provide more intensive support to the most disadvantaged children according to their level of need.

The findings of the present analysis highlight the important role of preschool attendance and family cash benefits in substantially reducing the share of low-performing students from low- and middle-SES backgrounds, while also increasing their chances of reaching high levels of performance and, in turn, improving prospects for social mobility. The effects of family cash benefits during early and middle childhood also appear particularly strong for low-SES children in preventing low performance, suggesting both greater needs and higher returns to income support among disadvantaged groups.

Larger average income support is associated with significantly higher chances for low- and middle-SES students to achieve high performance. By contrast, stronger targeting of support towards households in the bottom 30% of the income distribution does not appear to increase effectiveness, although it may help contain social spending pressures. One likely explanation is that stronger targeting often coincides with lower overall levels of income support. The results even suggest lower chances of high academic performance among middle-SES students, possibly because they are disproportionately affected by benefit reductions while also representing the largest pool of potential high achievers: across the OECD, middle-SES students account on average for 43% of high performers and around half of low performers.

At the same time, a major challenge remains in expanding opportunities for low-SES students to achieve high levels of academic performance. Across the OECD, only around 5% of 15-year-olds from the bottom quarter of the socio-economic distribution are high performers, compared with 13% among students from middle socio-economic backgrounds and 28% among those from the top quarter.

The mixed effects of targeting income support towards the lowest-income households are not entirely surprising. As shown in Chapter 3, directing a larger share of benefits to these groups can help reduce income poverty and contain pressures on social spending, but tends to have more limited effects on severe material deprivation and, likely, on the broader home learning environment, which extends beyond the poorest households. The results presented in this chapter further suggest that increasing the share of benefits allocated to the bottom 30% of the income distribution is associated with a decline in the share of high performers. This may reflect the limits of a narrowly targeted approach when it is not accompanied by stronger support for low- and middle-income families, who constitute an important pool of potential high achievers.

At the same time, stronger targeting appears to generate benefits for health outcomes. Increasing the share of benefits directed to the bottom 30% is associated with reductions in the share of adolescents reporting multiple subjective health complaints, with stronger effects observed at higher levels of spending. Similarly, reducing the tax burden on lower-income households is associated with improvements in adolescents' self-reported health.

Overall, these findings suggest that while targeting income support towards lower-income groups can help contain spending pressures and improve certain health outcomes, a broader distribution of support that also reaches low- and middle-income households may be more effective in reducing severe material deprivation, strengthening home learning environments, and sustaining higher educational performance.

Investing in health to strengthen adolescent health and contain long-term social spending

Increased health spending is associated with some improvements in adolescents' health, with preventive health expenditure standing out as the component most strongly linked to increases in the share of children reporting excellent health. By contrast, the absence of a clear association between curative (non-preventive) health spending and adolescent health outcomes may reflect data limitations, particularly the difficulty of identifying the share of such expenditure that directly benefits children. Strengthening the estimation of child-specific health expenditure data would help clarify how different types of health spending translate into improvements in child health outcomes, particularly given that such estimates are not routinely produced (Morgan and Mueller, 2023[70]).

Interestingly, while no association is found between health spending and performance in PISA tests, the results suggest that higher health expenditure is linked to lower rates of young NEETs. Although this relationship warrants further investigation to better understand the underlying mechanisms, it is consistent with a broader body of research showing that NEET status is associated with long-term socio-economic disadvantages, including lower educational attainment, higher unemployment risks, and poorer mental health, alongside low self-esteem and social exclusion (OECD, 2025[71]; Gunnes et al., 2025[72]). These findings underline the importance of health support as part of a broader policy approach to help disengaged youth reconnect with education and employment.

Finally, a higher share of social spending allocated to health appears, overall, to help moderate the long-run growth of social expenditures, likely by maintaining the employability of the working-age population and preventing the need for more costly interventions as health conditions worsen.

The potential of ALMPs to enhance children's health

Last, there is some indication that spending on ALMPs*,* although not primarily designed for this purpose, may contribute to improving adolescent health. This finding warrants further investigation to identify more precisely the types of programmes and mechanisms at play, as children are not the direct beneficiaries of these measures. One possible explanation is that ALMPs improve parents' employment prospects and job stability, thereby strengthening household resources and reducing financial stress. This, in turn, may ease parental pressure, support more positive parenting practices, and foster a more stable and supportive home environment – conditions that are conducive to good health among children. While this interpretation would need to be confirmed using individual-level data, it is consistent with the broader social objectives that ALMPs are intended to achieve in some countries (see Chapter 1).

References

Banerjee, A. et al. (2024), "Social Protection in the Developing World", *Journal of Economic Literature*, Vol. 62/4, pp. 1349-1421, https://doi.org/10.1257/JEL.20241646. [68]

Barone, C. and L. Ruggera (2018), "Educational equalization stalled? Trends in inequality of educational opportunity between 1930 and 1980 across 26 European nations", *European Societies*, Vol. 20/1, pp. 1-25, https://doi.org/10.1080/14616696.2017.1290265. [24]

Berger, L., L. Panico and A. Solaz (2020), "The Impact of Center-Based Childcare Attendance on Early Child Development: Evidence from the French Elfe Cohort", No. 254, INED, Paris. [58]

Bernardi, F. (2014), "Compensatory advantage as a mechanism of educational inequality: A regression discontinuity based on month of birth", *Sociology of Education*, Vol. 87/2, pp. 74-88, https://doi.org/10.1177/0038040714524258. [29]

Bernardi, F. and G. Ballarino (2016), *Education, Occupation and Social Origin: A Comparative Analysis of the Transmission of Socio-economic Inequalities*, Edward Elgar Publishing, https://hdl.handle.net/1814/41005. [23]

Bernardi, F. and G. Ballarino (2014), "Participation, equality of opportunity and returns to tertiary education in contemporary Europe", *European Societies*, Vol. 16/3, pp. 422-442, https://doi.org/10.1080/14616696.2012.750729. [32]

Bernardi, F. and I. Plavgo (2019), "Education as an equalizer for human development?", *UNDP (United Nations Development Programme), New York*, https://hdr.undp.org/content/education-equalizer-human-development. [21]

Bernardi, F. and M. Triventi (2020), "Compensatory advantage in educational transitions: Trivial or substantial? A simulated scenario analysis", *Acta Sociologica*, Vol. 63/1, pp. 40-62, https://doi.org/10.1177/0001699318780950. [30]

Bradbury, B. and M. Corak (2015), *Too Many Children Left Behind: The U.S. Achievement Gap in Comparative Perspective*, Russell Sage Foundation, https://www.jstor.org/stable/10.7758/9781610448482. [28]

Breen, R. et al. (2009), "Nonpersistent inequality in educational attainment: Evidence from eight European countries", *American Journal of Sociology*, Vol. 114/5, pp. 1475-1521, https://doi.org/10.1086/595951. [22]

Burchinal, M. et al. (2024), "Unsettled science on longer-run effects of early education", *Science*, Vol. 384/6695, pp. 506-508, https://www.science.org/doi/10.1126/science.adn2141. [61]

Bynner, J. and S. Parsons (2002), "Social Exclusion and the Transition from School to Work: The Case of Young People Not in Education, Employment, or Training (NEET)", *Journal of Vocational Behavior*, Vol. 60/2, pp. 289-309, https://doi.org/10.1006/jvbe.2001.1868. [37]

Carbuccia, L. et al. (2020), *Revue de littérature sur les politiques d'accompagnement au développement des capacités des jeunes enfants [Rapport de recherche]*, Laboratoire interdisciplinaire d'évaluation des politiques publiques, https://sciencespo.hal.science/hal-03455799. [57]

Caucutt, E. et al. (2026), "Child Skill Production: Accounting for Parental and Market-Based Time and Goods Investments", *Journal of Political Economy*, Vol. 134/1, pp. 150-209, https://doi.org/10.1086/738480. [53]

Clarke, C. and O. Thévenon (2022), "Starting unequal: How's life for disadvantaged children?", *OECD Policy Papers on Well-being and Inequalities*, No. 6, OECD Publishing, Paris, https://doi.org/10.1787/a0ec330c-en. [48]

Coller, R. and A. Kuo (2015), "Social Determinants of Child Health", *Child Health*, pp. 79-110, https://doi.org/10.1093/MED/9780199309375.003.0005. [44]

Corak, M. (2013), "Income Inequality, Equality of Opportunity, and Intergenerational Mobility", *Journal of Economic Perspectives*, Vol. 27/3, pp. 79-102, https://doi.org/10.1257/JEP.27.3.79. [19]

Downey, D. and D. Condron (2016), "Fifty Years since the Coleman Report: Rethinking the Relationship between Schools and Inequality", *Sociology of Education*, Vol. 89/3, pp. 207-220, https://doi.org/10.1177/0038040716651676. [25]

Dräger, J. et al. (2024), "The relevance of tracking and social school composition for growing achievement gaps by parental education in lower secondary school: a longitudinal analysis in France, Germany, the United States, and England", *European Sociological Review*, Vol. 40/6, pp. 964-980, https://doi.org/10.1093/ESR/JCAD076. [18]

Duncan, G. et al. (2022), "Investing in Early Childhood Development in Preschool and at Home", *NBER Working Paper Series*, Vol. 29985, https://doi.org/10.3386/w29985. [56]

Edwards, B. (2005), “Does it take a village? An investigation of neighbourhood effects on Australian children’s development.”. [7]

Égert, B., J. Botev and D. Turner (2020), “The contribution of human capital and its policies to per capita income in Europe and the OECD”, *European Economic Review*, Vol. 129, p. 103560, https://doi.org/10.1016/J.EUROECOREV.2020.103560. [63]

European Commission (2020), “European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience”, https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/european-skills-agenda_en (accessed on 21 May 2026). [15]

Flores, M., P. García-Gómez and A. Kalwij (2020), “Early life circumstances and labor market outcomes over the life cycle”, *Journal of Economic Inequality*, Vol. 18/4, pp. 449-468, https://doi.org/10.1007/s10888-020-09446-7. [3]

Gunnes, M. et al. (2025), “Young adults not in education, employment, or training (NEET): a global scoping review”, *BMC Public Health*, Vol. 25/1, https://doi.org/10.1186/S12889-025-24781-Y. [72]

Hanushek, E. and L. Woessmann (2015), *The Knowledge Capital of Nations: Education and the Economics of Growth*, The MIT Press, https://www.jstor.org/stable/j.ctt17kk9kq. [17]

Hanushek, E. and L. Woessmann (2008), “The Role of Cognitive Skills in Economic Development”, *Journal of Economic Literature*, Vol. 46/3, pp. 607-68, https://doi.org/10.1257/JEL.46.3.607. [16]

HBSC (2026), *Health Behaviour in School-aged Children (HBSC) Survey*, https://www.hbsc.org/. [40]

Heckman, J. (2006), “Skill formation and the economics of investing in disadvantaged children”, *Science*, Vol. 312, pp. 1900-1902, https://doi.org/10.1126/science.1128898. [27]

Hendren, N. and B. Sprung-Keyser (2020), *A Unified Welfare Analysis of Government Policies*, Oxford University Press, https://doi.org/10.1093/qje/qjaa006. [66]

Li, W. et al. (2020), “Timing in Early Childhood Education: How Cognitive and Achievement Program Impacts Vary by Starting Age, Program Duration, and Time Since the End of the Program”*, Ed WorkingPaper: 20-201*, https://doi.org/10.26300/5tvg-nt21. [54]

Lucas, A., P. McEwan and D. Irribarra (2025), “The Long-Run and Intergenerational Effects of Conditional Cash Transfers: Evidence from Chile’s Indigenous Grants”*, NBER Working Paper*, No. 33798, https://doi.org/10.3386/W33798. [69]

Mallo, M. and B. Wolfe (2020), *The Influence of Early Life Health Conditions on Life Course Health*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w27174. [2]

McCoy, D. et al. (2017), “Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes”, *Educational Researcher*, Vol. 46/8, pp. 474-487, https://doi.org/10.3102/0013189X17737739. [59]

Mcknight, A. (2015), "A fresh look at an old question: is pro-poor targeting of cash transfers more effective than universal systems at reducing inequality and poverty?", *CASE*, No. 191, Centre for Analysis of Social Exclusion, LSE, London, https://researchonline.lse.ac.uk/id/eprint/103977/1/McKnight_a_fresh_look_at_an_old_question_published.pdf (accessed on 10 April 2018). [46]

Melhuish, E. and J. Gardiner (2020), *Study of Early Education and Development (SEED): Impact Study on Early Education Use and Child Outcomes up to age five years*, Department for Education, https://assets.publishing.service.gov.uk/media/5e4e5c1ed3bf7f393c09149e/SEEDage5briefFEB.pdf (accessed on 27 April 2026). [55]

Moore, T. et al. (2015), "Early childhood development and the social determinants of health inequities", *Health Promotion International*, Vol. 30/suppl 2, pp. ii102-ii115, https://doi.org/10.1093/heapro/dav031. [41]

Morgan, D. and M. Mueller (2023), "Understanding international measures of health spending: Age-adjusting expenditure on health", *OECD Health Working Papers*, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/043ed664-en. [70]

Moritz, S. and T. Bartz-Beielstein (2017), "imputeTS: Time Series Missing Value Imputation in R", *The R Journal*, Vol. 9/1, p. 207, https://doi.org/10.32614/rj-2017-009. [86]

Morrissey, T. (2019), "The Effects Of Early Care And Education On Children's Health", *Health Affairs Brief*, https://doi.org/10.1377/hpb20190325.519221. [52]

Nieuwenhuis, J. and P. Hooimeijer (2016), "The association between neighbourhoods and educational achievement, a systematic review and meta-analysis", *Journal of Housing and the Built Environment*, Vol. 31/2, pp. 321-347, https://doi.org/10.1007/s10901-015-9460-7. [6]

OECD (2026), *PF3.2 Enrolment in childcare and pre-school*, OECD Family Database, https://webfs.oecd.org/Els-com/Family_Database/PF3_2_Enrolment_childcare_preschool.pdf (accessed on 4 September 2026). [51]

OECD (2026), *PISA 2025 Results (Volume I): Future-Ready Students*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/73451bc5-en. [33]

OECD (2025), "Building child-friendly neighbourhoods: Empowering communities with data-driven action", *OECD Papers on Well-being and Inequalities*, No. 33, OECD Publishing, Paris, https://doi.org/10.1787/4f46a260-en. [4]

OECD (2025), *Education at a Glance 2025: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/1c0d9c79-en. [71]

OECD (2025), *Health at a Glance 2025: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/8f9e3f98-en. [47]

OECD (2025), *OECD Skills Outlook 2025: Building the Skills of the 21st Century for All*, OECD Publishing, Paris, https://doi.org/10.1787/26163cd3-en. [1]

OECD (2025), *Reducing Inequalities by Investing in Early Childhood Education and Care*, Starting Strong, OECD Publishing, Paris, https://doi.org/10.1787/b78f8b25-en. [49]

OECD (2025), "The importance of monitoring neighbourhood conditions for children's well-being and development", *OECD Papers on Well-being and Inequalities*, No. 34, OECD Publishing, Paris, https://doi.org/10.1787/143ae959-en. [5]

OECD (2024), *PISA 2022 Technical Report*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/01820d6d-en. [73]

OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/53f23881-en. [14]

OECD (2021), *Measuring What Matters for Child Well-being and Policies*, OECD Publishing, Paris, https://doi.org/10.1787/e82fded1-en. [45]

OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris, https://doi.org/10.1787/9789264301085-en. [20]

OECD (2011), *Doing Better for Families*, OECD Publishing, Paris, https://doi.org/10.1787/9789264098732-en. [50]

OECD (n.d.), *Education at a Glance Database*, https://data-explorer.oecd.org/s/5dh. [39]

OECD (n.d.), *OECD Child Well-being Data Portal*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html. [74]

OECD (n.d.), *OECD Education at a Glance*, https://data-explorer.oecd.org/s/51d (accessed on 14 September 2026). [83]

OECD (n.d.), *OECD Education Database*, https://data-explorer.oecd.org/s/5ca (accessed on 14 September 2026). [75]

OECD (n.d.), *OECD Family Database*, https://www.oecd.org/en/data/datasets/oecd-family-database.html (accessed on 14 September 2026). [79]

OECD (n.d.), *OECD Health expenditure and financing*, https://data-explorer.oecd.org/s/51c (accessed on 14 September 2026). [78]

OECD (n.d.), *OECD Health Statistics*, https://data-explorer.oecd.org/s/515 (accessed on 14 September 2026). [84]

OECD (n.d.), *OECD Historical population data*, https://data-explorer.oecd.org/s/516 (accessed on 14 September 2026). [85]

OECD (n.d.), *OECD Income Distribution Database*, https://www.oecd.org/en/data/datasets/income-and-wealth-distribution-database.html (accessed on 14 September 2026). [80]

OECD (n.d.), *OECD National Accounts*, https://data-explorer.oecd.org/s/2lm (accessed on 14 September 2026). [81]

OECD (n.d.), *OECD Social Expenditure Database*, https://data-explorer.oecd.org/s/5cb (accessed on 14 September 2026). [76]

OECD (n.d.), *PISA Database*, https://www.oecd.org/en/about/programmes/pisa/pisa-data.html (accessed on 8 September 2026). [38]

OECD/Eurostat/WHO (2017), *A System of Health Accounts 2011: Revised edition*, OECD Publishing, Paris, https://doi.org/10.1787/9789264270985-en. [77]

Page, M. (2024), "New Advances on an Old Question: Does Money Matter for Children's Outcomes?", *Journal of Economic Literature*, Vol. 62/3, pp. 891-947, https://doi.org/10.1257/JEL.20231553. [64]

Palloni, A. et al. (2009), "Early childhood health, reproduction of economic inequalities and the persistence of health and mortality differentials", *Social Science and Medicine*, Vol. 68/9, pp. 1574-1582, https://doi.org/10.1016/j.socscimed.2009.02.009. [11]

Pearce, A. et al. (2019), "Pathways to inequalities in child health", *Archives of Disease in Childhood*, Vol. 104/10, pp. 998-1003, https://doi.org/10.1136/archdischild-2018-314808. [12]

Pickett, K. et al. (2022), "The social determinants of child health and inequalities in child health", *Paediatrics and Child Health*, Vol. 32/3, pp. 88-94, https://doi.org/10.1016/J.PAED.2021.12.003. [13]

Rahmani, H. and W. Groot (2023), "Risk Factors of Being a Youth Not in Education, Employment or Training (NEET): A Scoping Review", *International Journal of Educational Research*, Vol. 120, p. 102198, https://doi.org/10.1016/j.ijer.2023.102198. [35]

Rapp, S. and O. Thévenon (2025), "Parenting on a budget: The cost of raising children in changing family configurations and its policy implications", *OECD Papers on Well-being and Inequalities*, No. 36, OECD Publishing, Paris, https://doi.org/10.1787/bd0b594e-en. [67]

Rebouças, P., I. Falcão and M. Barreto (2021), "Social inequalities and their impact on children's health: a current and global perspective", *Jornal de Pediatria*, Vol. 98/Suppl 1, p. S55, https://doi.org/10.1016/J.JPED.2021.11.004. [10]

Ripamonti, E. (2023), "School-to-work transition: putting non-cognitive skills in context. The case of NEET and suggestions for policy", *International Journal for Educational and Vocational Guidance*, Vol. 25/2, pp. 335-356, https://doi.org/10.1007/s10775-023-09635-6. [34]

Robinette, J., S. Charles and T. Gruenewald (2017), "Neighborhood Socioeconomic Status and Health: A Longitudinal Analysis", *Journal of community health*, Vol. 42/5, p. 865, https://doi.org/10.1007/S10900-017-0327-6. [9]

Singh, G., M. Siahpush and M. Kogan (2010), "Neighborhood socioeconomic conditions, built environments, and childhood obesity", *Health Affairs*, Vol. 29/3, pp. 503-512, https://doi.org/10.1377/hlthaff.2009.0730. [42]

Spencer, N. (2018), "The social determinants of child health", *Paediatrics and Child Health*, Vol. 28/3, pp. 138-143, https://doi.org/10.1016/J.PAED.2018.01.001. [43]

Thompson, R. (2017), "Opportunity structures and educational marginality: the post-16 transitions of young people outside education and employment", *Oxford Review of Education*, Vol. 43/6, pp. 749-766, https://doi.org/10.1080/03054985.2017.1352502. [36]

Troost, A., M. van Ham and D. Manley (2023), "Neighbourhood effects on educational attainment. What matters more: Exposure to poverty or exposure to affluence?", *PLOS ONE*, Vol. 18/3, p. e0281928, https://doi.org/10.1371/JOURNAL.PONE.0281928. [8]

UNESCO (n.d.), *UNESCO UIS Methodology for Estimation of Mean Years of Schooling*, https://databrowser.uis.unesco.org/view#s=&geoMode=countries&geoUnits=&timeMode=range&view=table&chartMode=multiple&chartHighlightSeries=&chartHighlightEnabled=true&indicatorPaths=UIS-EducationOPRI%3A0%3AMYS.1T8.AG25T99. [82]

Van Huizen, T. and J. Plantenga (2015), "Universal Child Care and Children's Outcomes: A Meta-Analysis of Evidence from Natural Experiments"*, U.S.E. Discussion Paper Series*, No. 15-13, Utrecht School of Economics, https://www.uu.nl/sites/default/files/rebo_use_dp_2015_15-13.pdf. [62]

von Hippel, P., J. Workman and D. Downey (2018), "Inequality in Reading and Math Skills Forms Mainly before Kindergarten: A Replication, and Partial Correction, of "Are Schools the Great Equalizer?"", *Sociology of education*, Vol. 91/4, p. 323, https://doi.org/10.1177/0038040718801760. [26]

Waldfogel, J. (2025), *Child Benefits: A Smart Investment for America's Future*, Russell Sage Foundation, https://doi.org/10.7758/LIWL3023. [65]

Whitaker, A. et al. (2026), "Why are preschool programs becoming less effective?", *Journal of Policy Analysis and Management*, Vol. 45/1, p. e70031, https://doi.org/10.1002/PAM.70031. [60]

Yastrebov, G., Y. Kosyakova and D. Kurakin (2018), "Slipping Past the Test: Heterogeneous Effects of Social Background in the Context of Inconsistent Selection Mechanisms in Higher Education", *Sociology of Education*, Vol. 91/3, pp. 224-241, https://doi.org/10.1177/0038040718779087. [31]

Annex 4.A. Sample description

The sample is based on available data for 32 OECD countries from 1997 to 2021, excluding Australia, Chile, Colombia, Costa Rica, Japan and Mexico due to extensive missing data across variables and over time. Detailed information on the indicator construction is provided in Annex Table 4.A.1and summary statistics are presented in Annex Table 4.A.2. For variables that include imputed values, the statistics represent average values across the five datasets that result from the imputation process. For further information on the imputations, see Annex 4.B. The regression analyses are restricted to the period 2002-2021. Data for the earlier years (1997 to 2001) serve to incorporate time lags.

Annex Table 4.A.1. Description of variables used in the value for money analysis of adolescents' educational and health outcomes

Indicator	Definition	Data source
Child Outcome variables		
Share of PISA high achievers	The percentage of 15-year-old students who attained Level 5 or 6 in at least one of the three core PISA subjects (reading, mathematics and science). For more details on the construction of the PISA proficiency scales and proficiency levels, see the *PISA 2022 Technical Report* (OECD, 2024[73]) and the corresponding Technical Reports from earlier rounds. PISA test results are used from 2009, 2012, 2015, 2018 and 2022. Data for years between surveys are imputed using Stineman interpolation.	*OECD Child Well-being Data Portal* (OECD, n.d.[74])
Share of PISA low achievers	The percentage of 15-year-old students who attained below Level 2 in at least one of the three core PISA subjects (reading, mathematics and science). For more details on the construction of the PISA proficiency scales and proficiency levels, see the *PISA 2022 Technical Report* (OECD, 2024[73]) and the corresponding Technical Reports from earlier rounds. PISA test results are used from 2009, 2012, 2015, 2018 and 2022. Data for years between surveys are imputed using a Stineman interpolation.	*OECD Child Well-being Data Portal* (OECD, n.d.[74])
NEETs	Percentage of population aged 15-29 years not in education, employment or training. Children and young people are classified as "NEET" if they had neither received formal education and/or training in the regular educational system in the four weeks prior to being surveyed, nor were either working for pay or profit for at least one hour or had a job but were temporarily not at work during the survey reference week. Education or training corresponds to formal education; therefore, someone not working but following non-formal studies is considered NEET.	*OECD Education Database* (OECD, n.d.[75])
Share of 15-year-olds reporting excellent health	The percentage of 15-year-old school age children who responded with "excellent" when they were asked "Would you say your health is …?" and presented with the response options "Excellent", "Good", "Fair" and "Poor". Data are taken from the HBSC surveys 2013-2014, 2017-2018, and 2021-2022 and data for years between surveys are imputed using a Stineman interpolation. Values for subnational jurisdictions in Belgium and the United Kingdom were aggregated to form a national average.	*OECD Child Well-being Data Portal* (OECD, n.d.[74])

Indicator	Definition	Data source
Share of 15-year-olds reporting low health	The percentage of 15-year-old school age children who responded with "poor" or "fair" when they were asked "Would you say your health is …?" and presented with the response options "Excellent", "Good", "Fair" and "Poor". Data are taken from the HBSC surveys 2013-2014, 2017-2018, and 2021-2022 and data for years between surveys are imputed using a Stineman interpolation. Values for subnational jurisdictions in Belgium and the United Kingdom were aggregated to form a national average.	*OECD Child Well-being Data Portal* (OECD, n.d.[74])
Share of 15-year-olds reporting multiple subjective health complaints	The percentage of 15-year-old school age children who report having experienced at least two symptoms of the following list more than once a week in the past six months: 1) "Headache", 2) "Stomach-ache", 3) "Backache", 4) "Feeling low", 5) "Irritability or bad temper", 6) "Feeling nervous", 7) "Difficulties in getting to sleep" and 8) "Feeling dizzy". Data are taken from the HBSC surveys 2013-2014, 2017-2018, and 2021-2022 and data for years between surveys are imputed using a Stineman interpolation. Values for subnational jurisdictions in Belgium and the United Kingdom were aggregated to form a national average.	*OECD Child Well-being Data Portal* (OECD, n.d.[74])
Policy variables		
Spending on health services	The variable refers to the share of public and mandatory private and voluntary private expenditures on health in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[76])
Spending on preventive health services	This indicator approximates the share of public and mandatory private and voluntary private expenditures on preventive care in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices, and some values have been imputed. It is constructed by multiplying the indicator "Spending on health services" described above with the share of preventive care in government/compulsory schemes, voluntary schemes/household out-of-pocket payments and non-resident financing schemes in total expenditure on health. Following the Classification of Healthcare Functions (ICHA-HC), preventive care refers to primary prevention (health measures aimed at avoiding diseases and risk factors, e.g. vaccinations) and secondary prevention (detection of disease and therapy as early as possible, e.g. via screening). It includes information, education and counselling programmes; immunisation programmes; early disease detection programmes; healthy condition monitoring programmes; epidemiological surveillance and risk and disease control programmes; and preparing for disaster and emergency response programmes. For more detailed information, see Chapter 5 in *A System of Health Accounts 2011: Revised edition* (OECD/Eurostat/WHO, 2017[77]).	*OECD Social Expenditure Database* (OECD, n.d.[76]) and *OECD Health expenditure and financing* (OECD, n.d.[78])
Spending on non-preventive health services	This indicator approximates the share of public and mandatory private and voluntary private expenditures on non-preventive care in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices. It represents the difference between the indicators "Spending on health services" and "Spending on preventive health services". Accordingly, some values rely on imputed values for spending on preventative health services.	*OECD Social Expenditure Database* (OECD, n.d.[76]) and *OECD Health expenditure and financing* (OECD, n.d.[78])
ECEC enrolment 0-2	The per cent of children aged 0 to 2 enrolled in formal care institutions. Some values have been imputed.	*OECD Family Database,* Indicator PF3.2 (OECD, n.d.[79])
ECEC enrolment 3-5	The per cent of children aged 3 to 5 enrolled in early childhood education and care services. Some values have been imputed.	*OECD Family Database,* Indicator PF3.2 (OECD, n.d.[79])

Indicator	Definition	Data source
Spending on ECEC	The variable refers to the share of public and mandatory private and voluntary private expenditures on ECEC services in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[76])
Spending on ALMP	The variable refers to the share of public and mandatory private and voluntary private expenditures on active labour market programmes in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[76])
Other social spending in kind	The indicator comprises the public and mandatory private and voluntary private expenditures paid in kind for incapacity-related, housing and other social policy areas as a share of total social expenditure (cash and in-kind in the areas of families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices. The indicator excludes from the numerator spending on active labour market programmes, families and health (they enter as separate policy variables), unemployment (countries do not report in-kind benefits in this area), survivors (they mainly cover in-kind benefits related to the funeral and are thus less relevant to child outcomes) and old-age benefits (outside the scope).	*OECD Social Expenditure Database* (OECD, n.d.[76])
Cash transfers to families	The variable refers to the share of public and mandatory private and voluntary private expenditures allocated to families in cash in the total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The variable is denoted in per capita USD PPP and constant 2015 prices.	*OECD Social Expenditure Database* (OECD, n.d.[76])
Cash transfers to families during early childhood (ages 0-5)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 0-5 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 0-5 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[76]) and *OECD Family Database,* Indicator PF1.6 (OECD, n.d.[79])
Cash transfers to families during middle childhood (ages 6-11)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 6-11 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 6-11 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[76]) and *OECD Family Database,* Indicator PF1.6 (OECD, n.d.[79])

Indicator	Definition	Data source
Cash transfers to families during adolescence (ages 12-17)	This indicator approximates the public and mandatory private and voluntary private expenditures that is allocated in cash to families with children aged 12-17 as a share of total social expenditure (including spending on families, health, survivor and incapacity-related benefits, housing, active labour market programmes, unemployment, and other social policy areas, but excluding spending on old age and pensions). The indicator is denoted in per capita USD PPP and constant 2015 prices. It is constructed by multiplying the indicator "Cash transfers to families" described above with age-spending profiles. The latter capture the average family cash benefits for a child at ages 12-17 as a share of the average cash benefits for children at ages 0-17 and contain imputed values for some years.	*OECD Social Expenditure Database* (OECD, n.d.[76]) and *OECD Family Database,* Indicator PF1.6 (OECD, n.d.[79])
Volume of redistribution	This indicator is calculated as the average amount per equivalent household member of public transfers received (public social security, excluding employment-related social insurance transfers and private transfers received) minus taxes on income and wealth paid and of contributions paid by working-age individuals to public social security schemes, expressed as a percentage of GDP per capita. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80]) and *OECD National Accounts* (OECD, n.d.[81])
Average size of taxes	The average taxes per equivalent household member paid by working-age individuals, as a share of average disposable income per equivalent household member of working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80])
Average size of benefits	The average public transfers (public social security) per equivalent household member received by working-age individuals, as a share of average disposable income per equivalent household member of working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80])
Share of taxes paid by the bottom 30%	The taxes per equivalent household member paid by working-age individuals in the bottom 30% of post-transfer, equivalised household income, as a share of taxes per equivalent household member paid by all working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80])
Share of benefits received by the bottom 30%	The public transfers (public social security) per equivalent household member received by working-age individuals in the bottom 30% of pre-transfer income, as a share of public transfers per equivalent household member received by all working-age individuals. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80])
Child outcome drivers		
Total social expenditure (TS)	Total social spending refers to countries' public, private mandatory and private voluntary expenditures in-cash and in-kind in eight different policy areas: health, incapacity-related benefits, unemployment, active labour market programmes, family, housing, survivors, and other social policy areas (e.g. social assistance). It excludes spending on old age. It is denoted in constant USD PPP (base 2015 = 100) and in logarithmic form.	*OECD Social Expenditure Database* (OECD, n.d.[76])
Mean poverty gap before taxes and transfers	The mean poverty gap before taxes and transfers, i.e. the difference between the average equivalised pre-tax income of individuals living in a working-age household below the relative poverty line and the relative poverty line, as a share of the relative poverty line. Some values have been imputed.	*OECD Income Distribution Database* (OECD, n.d.[80])
Mean years of schooling	Average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades. Some values have been imputed.	*UNESCO UIS Methodology for Estimation of Mean Years of Schooling* (UNESCO, n.d.[82])
Spending on primary education	General government spending (at central, state and local level) for primary educational institutions across all educational institutions (both public and private), in constant US dollars per student, PPP converted (price base 2020). Some values have been imputed.	*OECD Education at a Glance* (OECD, n.d.[83])
Spending on secondary education	General government spending (at central, state and local level) for secondary educational institutions across all educational institutions (both public and private), in constant US dollars per student, PPP converted (price base 2020). Some values have been imputed.	*OECD Education at a Glance* (OECD, n.d.[83])

Indicator	Definition	Data source
Total social spending drivers		
GDP per capita	GDP per capita net of total social spending per capita (as defined in "total social expenditure" above), denoted in USD PPP in constant prices and in logarithmic form.	*OECD National Accounts* (OECD, n.d.[81])
Life expectancy	Years of life expectancy at birth, denoted in logarithmic form.	*OECD Health Statistics* (OECD, n.d.[84])
Dependency ratio	The population aged less than 20 years or 65 years or over as a ratio of the population aged 20-64.	*OECD Historical population data* (OECD, n.d.[85])

Annex Table 4.A.2. Summary statistics

Variable	Unit	Standard deviation	Mean	Minimum	Maximum
Share of PISA high achievers	Percentage of children	5.13	15.91	1.58	32.25
Share of PISA low achievers	Percentage of children	7.81	29.93	11.09	59.33
NEETs	Percentage of children	6.52	14.57	4.90	43.60
Share of 15-year-olds reporting excellent health	Percentage of children	7.72	29.08	13.16	54.19
Share of 15-year-olds reporting low health	Percentage of children	5.24	18.26	8.86	36.79
Share of 15-year-olds reporting multiple subjective health complaints	Percentage of children	13.23	25.05	7.88	67.28
ALMP	Percentage of social expenditure (excl. old age spending)	2.33	3.33	0.00	19.52
ECEC enrolment, ages 0-2	Percentage of children	18.12	30.35	0.19	76.20
ECEC enrolment, ages 3-5	Percentage of children	17.74	80.69	31.71	100.10
Spending on ECEC	Percentage of social expenditure (excl. old age spending)	2.26	3.96	0.00	10.66
Health services	Percentage of social expenditure (excl. old age spending)	9.37	44.67	23.33	81.03
Spending on preventive health services	Percentage of social expenditure (excl. old age spending)	0.88	1.35	0.01	7.27
Spending on non-preventive health services	Percentage of social expenditure (excl. old age spending)	8.87	43.19	22.24	78.41
Other in-kind spending	Percentage of social expenditure (excl. old age spending)	3.49	5.44	0.19	17.97
Volume of redistribution	Percentage of GDP	0.05	-0.05	-0.18	0.08
Average size of taxes	Percentage of average disposable income	10.80	28.42	0.02	56.55
Average size of benefits	Percentage of average disposable income	6.18	16.47	3.18	34.82
Taxes paid by bottom 30%	Percentage of total taxes paid	3.52	9.34	1.33	26.77
Benefits received by bottom 30%	Percentage of total benefits received	10.49	33.70	12.00	58.00
Cash transfers to families	Percentage of social expenditure (excl. old age spending)	4.46	8.72	0.25	25.01
Cash transfers to families during early childhood (ages 0-5)	Percentage of social expenditure (excl. old age spending)	2.66	4.21	0.11	18.78
Cash transfers to families during middle childhood (ages 6-11)	Percentage of social expenditure (excl. old age spending)	1.23	2.19	0.11	6.19
Cash transfers to families during adolescence (ages 12-17)	Percentage of social expenditure (excl. old age spending)	1.26	2.12	0.10	6.19
Social expenditure	USD PPP (base year = 2015)	3 448.01	6 293.26	626.84	18 794.87
Social expenditure, logged	Log of USD PPP (base year = 2015)	0.65	8.57	6.44	9.84
Mean poverty gap before taxes and transfers	Percentage of the relative poverty line (50% of equivalised median disposable income)	8.39	61.11	35.57	80.62
Mean years of schooling	Years	1.59	11.75	5.86	14.26
Spending on primary education	USD PPP (base year = 2020)	4 100.73	9 286.35	1 173.67	23 762.94
Spending on primary education, logged	Log of USD PPP (base year = 2020)	0.52	9.02	7.07	10.08

Spending on secondary education	USD PPP (base year = 2020)	4 399.16	10 552.20	2 184.32	26 547.73
Spending on secondary education, logged	Log of USD PPP (base year = 2020)	0.46	9.17	7.69	10.19
GDP per capita	USD PPP (base year = 2020)	15 585.90	39 239.12	10 923.12	110 467.82
GDP per capita, logged	Log of USD PPP (base year = 2020)	0.38	10.51	9.30	11.61
Life expectancy at birth	Years	3.13	79.07	69.70	84.20
Life expectancy at birth, logged	Log of years	0.04	4.37	4.24	4.43
Dependency ratio	Ratio	7.13	66.03	48.15	92.67

Note: These summary statistics are based on available data for 32 OECD countries excluding Australia, Chile, Columbia, Costa Rica, Japan and Mexico from 1997 to 2021. For variables that include imputed values, the statistics represent average values across the five datasets that result from the imputation process. For further information on the imputations, see Annex 4.B.

Annex 4.B. Data imputations

As for the panel analysis in Chapter 3, variables used in the regression analysis in this chapter contain incomplete time series. Again, Stineman interpolation between observed values, implemented via the R package *imputeTS* (Moritz and Bartz-Beielstein, 2017[86]), is applied to indicators that are unlikely to change substantially over time and where only few observations are missing. The approach was used for *Mean years of schooling*, *Spending on primary education*, *Spending on secondary education* in addition to the variables already mentioned in Annex 3.C, namely those that capture the share of social expenditure allocated on average to cash benefits for a child at ages 0-5, 6-11 and 12-17. Moreover, we impute observation values for the following outcome variables between survey rounds: *Share of PISA high achievers*, *Share of PISA low achievers*, *Share of 15-year-olds reporting excellent health*, *Share of 15-year-olds reporting low health*, *Share of 15-year-olds reporting multiple subjective health complaints*.

In a second step, the same multiple imputation method described in Annex 3.C was applied to the variables *Mean years of schooling*, *Spending on primary education*, *Spending on secondary education*, and to the variable describing the percentage of expenditure on health that is spent on preventive care, which is later use to construct the indicators *Spending on preventive health services* and *Spending on non-preventive health services*. Further, the variables *ECEC enrolment 0-2*, *ECEC enrolment 3-5*, *Volume of redistribution*, *Average size of taxes*, *Average size of benefits*, *Share of taxes paid by the bottom 30%*, *Share of benefits paid by the bottom 30%*, and *Mean poverty gap before taxes and transfers* contain the same imputed values as those used for the regression analysis in Chapter 3.

Annex 4.C. Regression results

In the regression estimations presented below, policy variables and the two main drivers – the log of total social expenditure per capita and the log of GDP per capita – are standardised using all available observations, including imputed values for variables where applicable, for the 32-country sample over the period 1997-2021. First differenced and lagged variables are constructed after standardisation, and the regression analysis is restricted to the period 2002-2021. For specifications in which the dependent variable is available for a shorter period, the estimation sample is reduced correspondingly.

Educational outcomes

Annex Table 4.C.1. PISA high achievers, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	**1.174**	0.805	0.769	1.291	1.395*	1.348	0.579	1.245*	0.941
x TS (lagged 3 years)	**0.535**	0.617	0.587	0.521	0.7	0.528	0.903	0.935	0.62
ECEC enrolment 0-2 (lagged 13-15 years)		-0.268	-0.14						
x TS (lagged 13-15 years)		0.017	-0.059						
ECEC enrolment 3-5 (lagged 9-11 years)		1.561	1.878						
x TS (lagged 9-11 years)		0.574	0.259						
Spending on ECEC (lagged 11-15 years)	**0.168**		-0.659	0.236	0.549	0.2	-0.996	0.198	0.006
x TS (lagged 11-15 years)	**0.828***		0.669	0.868*	0.567	0.588	0.876	-0.081	0.176
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			-0.33						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			1.472*						
Spending on health services	**0.771**	2.154**	1.352		0.356	0.788	3.895**	1.472	1.826
x TS	**1.189**	1.638**	1.852**		0.879	0.92	1.138	1.176	-0.086
Spending on preventive health services (lagged 2-4 years)				**-0.376**					
x TS (lagged 2-4 years)				**0.013**					
Spending on non-preventive health services				**0.607**					
x TS				**0.903**					
Other social spending in kind	**-1.784**	-1.365	-2.167**	-1.668	-2.632***	-1.541	-2.923**	-3.288***	-2.644
x TS	**1.13**	1.222	1.282*	1.035	0.77	0.503	1.3	1.986*	2.666
Volume of redistribution	**0.532**	0.77	0.396	0.677			0.75	0.729	0.618
x TS	**0.759***	0.542	0.849*	0.778			1.188*	0.606	0.58
Size of benefits					1.31*	-0.356			
Size of taxes					-1.257	-0.614			
Share of taxes paid by the bottom 30%	**-0.199**	-0.271	-0.913	-0.212		-0.215	-0.903	-1.07	-0.454
x TS	**-0.387**	-0.316	-0.326	-0.445			-0.645	-0.641	-0.452
	-3.128*	-1.911	-1.311	-3.167*		-5.055***	-0.369	-3.469**	-5.263***

Share of benefits received by the bottom 30% x TS	**-0.489**	0.263	0.116	-0.317			-0.406	-0.034	-0.337
Size of benefits x share of benefits received by the bottom 30%						-0.178			
Size of taxes x share of taxes received by the bottom 30%						-0.361			
Cash transfers to families x TS	**0.771**	1.528*	1.673**	0.795	0.507	1.083*			
	0.569	0.456	0.482	0.409	0.976*	0.566			
Cash transfers to families, ages 0-5 (lagged 9-11 years) x TS (lagged 9-11 years)							**0.974**		
							1.347		
Cash transfers to families, ages 6-11 (lagged 4-6 years) x TS (lagged 4-6 years)								**1.105**	
								1.969*	
In-cash spending on families, ages 12-17 x TS									**1.189**
									-0.073
Total social expenditure per capita (logged)	1.953	2.101	3.229	2.118	1.212	2.852	9.14**	1.139	0.236
Primary education spending (logged, lagged 7-9 years)	0.197	0.405	2.421	0.372	1.851	0.096	2.233	2.104	1.384
Secondary education spending (logged, lagged 2-4 years)	-3.281	-0.978	-1.498	-3.712	-2.685	-1.133	2.875	-5.421	-3.981
Mean poverty gap	-0.261***	-0.171	-0.209	-0.257***	-0.329***	-0.24**	-0.158	-0.249***	-0.374***
Mean years of schooling	-0.805	-0.76	-0.442	-0.75	-1.052	-1.085	0.236	-0.69	-0.346
Adjusted R^2	0.367	0.442	0.526	0.367	0.316	0.386	0.598	0.511	0.464
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	336	275	275	335	335	335	182	289	239
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.2. PISA high achievers, DOLS estimations with time fixed effects only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	2.223***	2.55***	2.777***	1.801***	2.771***	2.156***	3.012***	1.705***	1.333
x TS (lagged 3 years)	-1.351**	-1.726***	-1.852**	-0.951	-1.453	-1.541***	-2.132***	-0.418	-0.208
ECEC enrolment 0-2 (lagged 13-15 years)		-0.718	-0.752						
x TS (lagged 13-15 years)		-0.616	-0.893						
ECEC enrolment 3-5 (lagged 9-11 years)		1.458***	2.518***						
x TS (lagged 9-11 years)		0.719*	0.702*						
Spending on ECEC (lagged 11-15 years)	-0.807		-1.674**	-0.845	-0.84	-0.496	-1.287	-0.418	-1.179
x TS (lagged 11-15 years)	-0.565		-0.202	-0.507	-0.459	-0.55	0.372	0.696	1.445
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			-0.509						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			0.973						
Spending on health services	0.086	0.662	0.415		1.542	0.42	-0.099	-1.51	-2.175
x TS	-1.201	-0.019	-0.38		-2.461*	-0.871	-1.48	1.491	1.778
Spending on preventive health services (lagged 2-4 years)				0.767					
x TS (lagged 2-4 years)				-2.275*					
Spending on non-preventive health services				-0.941					
x TS				0.319					
Other social spending in kind	-1.231	-1.894**	-1.494	-1.751	0.31	-0.913	-0.64	-0.079	-0.655
x TS	-1.064	-0.51	-0.183	-0.444	-2.081*	-1.208	-0.812	-2.935***	-2.236**
Volume of redistribution	0.021	0.44	0.683	-0.265			-1.195	-0.563	-0.731
x TS	1.634**	1.134	0.64	2.112***			2.614**	1.74**	1.901**
Size of benefits					-2.733***	1.628			
Size of taxes					-0.549	-1.249**			
Share of taxes paid by the bottom 30%	0.37	-0.104	-0.069	0.107		-0.413	-0.665	-0.573	-0.125
x TS	-1.253*	-0.726	-1.062*	-0.975			-0.555	0.856	0.423
Share of benefits received by the bottom 30%	4.457***	3.734***	4.123***	4.423***		5.089***	3.859***	3.606***	4.041***
x TS	0.339	2.481*	1.65	0.642			-0.196	0.81	0.09
Size of benefits x share of benefits received by the bottom 30%						-0.877*			
Size of taxes x share of taxes received by the bottom 30%						-0.89			
Cash transfers to families	-0.367	0.985	0.686	-0.617	-0.224	-0.52			
x TS	-0.066	0.892	0.344	0.223	0.312	0.581			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							-1.301***		
x TS (lagged 9-11 years)							-1.33***		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								-1.638**	
x TS (lagged 4-6 years)								2.654***	
In-cash spending on families, ages 12-17									-1.441*
x TS									2.339**

Total social expenditure per capita (logged)	-3.345***	-2.585**	-3.186***	-3.424***	-0.777	-2.937**	-4.573***	-2.828**	-1.558
Primary education spending (logged, lagged 7-9 years)	2.254	3.218***	3.969***	2.007	2.233*	2.016	2.863***	0.969	0.691
Secondary education spending (logged, lagged 2-4 years)	4.498	4.83	3.521	3.64	1.005	4.594	5.756**	2.699	2.686
Mean poverty gap	-0.221**	-0.309***	-0.31***	-0.237**	0.176**	-0.245*	-0.219***	-0.022	-0.06
Mean years of schooling	0.873**	1.063**	1.181*	1.02**	1.15**	0.784**	1.268*	1.149**	0.851
Adjusted R^2	0.708	0.772	0.784	0.723	0.556	0.691	0.832	0.775	0.76
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	336	275	275	335	335	335	182	289	239
Country fixed effects	No	No	No	No	No	No	No	No	No
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: "x" signifies an interaction between two variables. "x TS" means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.3. PISA high achievers among low-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	0.194	0.18	0.074	0.37	0.294	0.181	0.608	0.329	0.112
x TS (lagged 3 years)	0.381	0.478	0.323	0.285	0.335	0.266	0.343	0.544	0.151
ECEC enrolment 0-2 (lagged 13-15 years)		0.766	0.913						
x TS (lagged 13-15 years)		0.148	0.238						
ECEC enrolment 3-5 (lagged 9-11 years)		0.66	0.953						
x TS (lagged 9-11 years)		0.08	0.013						
Spending on ECEC (lagged 11-15 years)	0.156		-0.71	0.188	0.349	0.095	-0.077	0.686	0.292
x TS (lagged 11-15 years)	0.352		-0.081	0.307	0.227	0.22	-1.115*	-0.667	-0.222
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			-0.026						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			0.754						
Spending on health services	-0.286	0.441	0.097		-0.38	-0.111	1.685	0.374	0.588
x TS	0.73*	0.789	0.76		0.593	0.585	-0.114	0.653	0.277
Spending on preventive health services (lagged 2-4 years)				-0.205					
x TS (lagged 2-4 years)				0.535					
Spending on non-preventive health services				-0.108					
x TS				0.606					
Other social spending in kind	-1.185	-0.718	-1.047	-1.287	-1.498	-0.85	-2.263**	-2.204**	-2.206
x TS	0.126	0.265	0.251	0.233	-0.053	-0.272	0.974	0.698	1.146
Volume of redistribution	0.502	0.657	0.494	0.722			0.858	0.579	0.105
x TS	0.793**	0.549	0.657*	0.697*			0.458	0.799**	1.165*
Size of benefits					0.687	-0.487			
Size of taxes					-0.336	0.067			

Share of taxes paid by the bottom 30%	0.013	-0.035	-0.139	0.045		-0.16	0.04	-0.389	-0.251
x TS	-0.162	-0.072	0.009	-0.242			-0.23	-0.401	-0.411
Share of benefits received by the bottom 30%	-1.592	-0.813	-0.584	-1.312		-3.247***	-1.73	-2.105***	-2.833***
x TS	0.015	0.104	0.045	0.123			-0.612	0.526	0.04
Size of benefits x share of benefits received by the bottom 30%						-0.249			
Size of taxes x share of taxes received by the bottom 30%						-0.196			
Cash transfers to families	0.208	0.569	0.719	0.267	0.186	0.581			
x TS	0.151	0.187	0.202	0.051	0.466	0.233			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							0.961		
x TS (lagged 9-11 years)							1.496*		
Cash transfers to families, ages 6-11 (lagged 4-6years)								0.508	
x TS (lagged 4-6 years)								1.145	
In-cash spending on families, ages 12-17									0.067
x TS									-0.094
Total social expenditure per capita (logged)	-0.952	0.361	0.44	-0.61	-1.048	-0.024	0.625	-2.227	-2.037
Primary education spending (logged, lagged 7-9 years)	0.431	0.604	1.678	0.148	1.108	-0.149	1.296	0.691	-0.821
Secondary education spending (logged, lagged 2-4 years)	-0.162	0.858	1.552	-0.555	0.212	1.513	1.148	-2.895	-1.89
Mean poverty gap	-0.259***	-0.223**	-0.247**	-0.252***	-0.298***	-0.241**	-0.132	-0.255***	-0.338***
Mean years of schooling	-0.999	-1.005	-0.835	-0.917	-1.149	-1.284*	0.581	-1.133	-1.048
Adjusted R^2	0.358	0.461	0.486	0.352	0.307	0.352	0.638	0.5	0.431
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.4. PISA high achievers among middle-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	1.068	0.647	0.533	1.254	1.344*	1.257	0.568	1.213	0.73
x TS (lagged 3 years)	0.635	0.669	0.556	0.625	0.821	0.606	1.183	1.138*	0.804
ECEC enrolment 0-2 (lagged 13-15 years)		0.307	0.607						
x TS (lagged 13-15 years)		0.324	0.24						
ECEC enrolment 3-5 (lagged 9-11 years)		1.678	2.257*						
x TS (lagged 9-11 years)		0.576	0.3						
Spending on ECEC (lagged 11-15 years)	0.472		-0.863	0.615	0.944	0.55	-0.661	0.658	0.31
x TS (lagged 11-15 years)	1.049**		0.256	1.092**	0.804	0.82	1.115	0.012	0.351
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			0.027						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			1.938**						
Spending on health services	1.285	3.111***	2.116**		1.115	1.637	5.943***	2.255**	2.477*
x TS	1.092	1.456**	1.63*		0.604	0.664	0.97	1.045	-0.674
Spending on preventive health services (lagged 2-4 years)				-0.309					
x TS (lagged 2-4 years)				0.297					
Spending on non-preventive health services				1.118					
x TS				0.715					
Other social spending in kind	-1.435	-0.671	-1.492	-1.28	-2.478**	-1.061	-2.409**	-2.95**	-2.462
x TS	0.666	0.706	0.656	0.552	0.194	-0.027	1.132	1.374	1.885
Volume of redistribution	0.688	0.796	0.485	0.894			-0.045	0.692	0.846
x TS	0.906**	0.618	0.969**	0.88*			1.201*	0.82*	1.046
Size of benefits					2.005**	-0.013			
Size of taxes					-1.147	-0.404			
Share of taxes paid by the bottom 30%	0.192	0.182	-0.361	0.199		0.086	-1.263	-0.955	-0.071
x TS	-0.386	-0.272	-0.183	-0.49			-0.639	-0.741*	-0.513
Share of benefits received by the bottom 30%	-4.181**	-2.722	-1.998	-4.141**		-6.154***	-0.726	-4.413***	-6.028***
x TS	-0.454	0.227	0.063	-0.129			-0.407	0.124	-0.391
Size of benefits x share of benefits received by the bottom 30%						-0.189			

Size of taxes x share of taxes received by the bottom 30%						-0.358			
Cash transfers to families	0.933	1.648*	1.986**	1.044	0.645	1.299**			
x TS	0.632	0.573	0.62	0.469	1.155**	0.665			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							0.824		
x TS (lagged 9-11 years)							1.18		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								1.183	
x TS (lagged 4-6 years)								2.486**	
In-cash spending on families, ages 12-17									1.05
x TS									0.042
Total social expenditure per capita (logged)	2.374	3.573	4.107	2.875	1.504	3.694	11.267***	1.873	0.016
Primary education spending (logged, lagged 7-9 years)	-0.447	-0.009	2.697	-0.435	1.565	-0.844	0.725	0.605	-0.346
Secondary education spending (logged, lagged 2-4 years)	-3.605	-1.086	-1.254	-4.45	-3.439	-1.664	2.476	-6.019	-3.447
Mean poverty gap	-0.272***	-0.181	-0.22	-0.264***	-0.385***	-0.284**	-0.193**	-0.251***	-0.389***
Mean years of schooling	-1.14	-1.266	-0.867	-1.135	-1.603	-1.592	0.006	-1.106	-0.748
Adjusted R^2	0.403	0.461	0.552	0.409	0.327	0.415	0.595	0.553	0.509
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.5. PISA high achievers among high-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	1.994	1.355	1.66	1.815	2.291	2.375	-0.974	1.621	1.639
x TS (lagged 3 years)	0.464	0.697	0.79	0.596	0.863	0.62	0.966	0.984	0.711
ECEC enrolment 0-2 (lagged 13-15 years)		-1.417	-1.248						
x TS (lagged 13-15 years)		-0.371	-0.502						
ECEC enrolment 3-5 (lagged 9-11 years)		2.774	2.862						
x TS (lagged 9-11 years)		1.023	0.141						
Spending on ECEC (lagged 11-15 years)	-0.219		0.215	-0.279	0.187	-0.248	-3.142**	-1.265	-0.629
x TS (lagged 11-15 years)	0.859		1.941	1.025	0.418	0.484	2.369	0.07	-0.222
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			-1.102						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			1.666						
Spending on health services	0.776	2.315	1.658		-0.371	0.072	4.902	1.583	1.699
x TS	2.023	3.036**	3.486**		1.775	1.82	2.253	2.158	0.508
Spending on preventive health services (lagged 2-4 years)				-0.639					
x TS (lagged 2-4 years)				-1.453					
Spending on non-preventive health services				0.091					
x TS				1.752					
Other social spending in kind	-3.449*	-3.469*	-4.599**	-3.103	-4.529***	-3.558**	-4.838**	-5.392***	-3.27
x TS	3.33**	3.293*	3.699***	2.98**	2.869**	2.412*	2.823	5.068***	5.767**
Volume of redistribution	0.03	0.965	0.022	-0.138			1.807	0.271	0.088
x TS	0.313	0.559	0.863	0.632			1.696	-0.693	-1.377
Size of benefits					0.718	-0.869			
Size of taxes					-2.519*	-1.657			
Share of taxes paid by the bottom 30%	-1.192	-1.292	-2.9	-1.33		-0.831	-1.374	-2.137	-1.027
x TS	-0.681	-0.635	-1.021	-0.584			-1.032	-0.737	-0.291
Share of benefits received by the bottom 30%	-3.127	-1.527	-0.993	-3.874		-5.217*	-0.544	-4.231	-7.097**
x TS	-1.349	0.169	0.068	-1.43			-0.954	-0.832	-0.873
Size of benefits x share of benefits received by the bottom 30%						-0.192			
Size of taxes x share of taxes received by the bottom 30%						-0.7			

Cash transfers to families	1.011	1.967*	1.927*	0.773	0.512	1.193			
x TS	0.622	0.368	0.258	0.415	0.89	0.404			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							2.854**		
x TS (lagged 9-11 years)							2.598*		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								3.688**	
x TS (lagged 4-6 years)								2.543	
In-cash spending on families, ages 12-17									2.978**
x TS									-0.071
Total social expenditure per capita (logged)	4.127	2.093	6.094	3.224	2.645	4.103	15.146**	4.169	3.456
Primary education spending (logged, lagged 7-9 years)	0.963	1.937	3.564	2.262	3.391	2.18	4.168	6.334	3.644
Secondary education spending (logged, lagged 2-4 years)	-6.223	-1.733	-4.77	-5.711	-4.811	-3.278	8.6	-7.165	-6.952
Mean poverty gap	-0.278*	-0.131	-0.161	-0.287	-0.289	-0.19	-0.074	-0.289*	-0.438**
Mean years of schooling	-0.479	-0.097	-0.16	-0.404	-0.277	-0.36	0.638	-0.027	0.037
Adjusted R^2	0.251	0.333	0.409	0.265	0.256	0.291	0.566	0.385	0.396
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.6. PISA low achievers, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	**-1.165**	-1.477	-1.463	-1.261	-1.443	-1.476	-3.207***	-1.832**	-0.353
x TS (lagged 3 years)	**-1.502**	-2.423**	-1.827*	-1.581	-1.775*	-1.658	-1.876*	-2.388***	-2.043**
ECEC enrolment 0-2 (lagged 13-15 years)		**-0.036**	-0.103						
x TS (lagged 13-15 years)		**2.286***	1.837						
ECEC enrolment 3-5 (lagged 9-11 years)		**-1.724**	-3.484**						
x TS (lagged 9-11 years)		**-0.487**	0.206						
Spending on ECEC (lagged 11-15 years)	**1.353**		2.482*	1.267	1.062	1.032	1.161	0.351	1.27
x TS (lagged 11-15 years)	**-0.226**		0.073	-0.272	-0.046	-0.249	0.803	0.574	0.105
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			1.21						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			-3.209***						
Spending on health services	**-1.278**	-1.081	-0.716		-1.705	-1.827	-1.649	-2.165	-3.348**
x TS	**0.749**	0.512	1.177		1.47*	1.03	0.412	0.623	3.634***
Spending on preventive health services (lagged 2-4 years)				**-1.086**					
x TS (lagged 2-4 years)				**-0.888**					
Spending on non-preventive health services				**-1.751**					
x TS				**1.206***					
Other social spending in kind	**2.446**	3.449***	4.788***	2.272	2.993**	2.344	5.168***	3.301***	1.138
x TS	**-1.524**	-1.698	-2.498**	-1.4	-0.984	-1.025	-0.475	-1.282	-0.688
Volume of redistribution	**0.563**	-0.29	0.136	0.621			-3.569***	-0.19	0.389
x TS	**-0.396**	-0.397	-0.519	-0.452			-0.601	-0.492	0.715
Size of benefits					-1.189	-0.967			
Size of taxes					0.261	-0.152			
Share of taxes paid by the bottom 30%	**0.011**	0.992	1.613	0.193		-0.043	0.639	1.08	0.276
x TS	**0.375**	0.369	0.31	0.415			0.442	0.874	0.961
Share of benefits received by the bottom 30%	**2.408**	1.009	0.412	2.589		2.583	-0.307	3.243*	5.778**
x TS	**0.988**	-0.008	0.146	0.347			-0.196	-0.703	-0.242
Size of benefits x share of benefits received by the bottom 30%						-0.688			
Size of taxes x share of taxes received by the bottom 30%						0.312			

Cash transfers to families	**0.552**	0.267	-0.004	0.135	0.713	0.685			
x TS	**-1.33***	-0.085	-0.02	-1.376*	-1.641***	-1.31**			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							**-1.477**		
x TS (lagged 9-11 years)							**-3.315*****		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								**0.7**	
x TS (lagged 4-6 years)								**-3.692*****	
In-cash spending on families, ages 12-17									**-1.664**
x TS									**-0.984**
Total social expenditure per capita (logged)	1.715	4.104	1.724	0.476	1.64	0.168	-0.658	1.459	4.858
Primary education spending (logged, lagged 7-9 years)	-1.629	-3.076	-4.881	-1.659	-2.975	-2.089	-2.336	-2.109	-3.506
Secondary education spending (logged, lagged 2-4 years)	2.657	4.531	3.484	3.358	2.665	2	1.842	11.601**	7.556
Mean poverty gap	0.265**	0.116	0.129	0.244*	0.357**	0.34**	0.045	0.237**	0.361**
Mean years of schooling	-1.842	-3.169**	-3.898***	-1.681	-1.599	-1.697	-5.092***	-1.068	-1.287
Adjusted R^2	0.269	0.357	0.429	0.274	0.267	0.286	0.654	0.449	0.455
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	336	275	275	335	335	335	182	289	239
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.7. PISA low achievers, DOLS estimations with time fixed effects only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	-6.295***	-6.505***	-6.826***	-5.304***	-6.666***	-5.829***	-5.576***	-4.924***	-4.716***
x TS (lagged 3 years)	3.787**	4.147***	4.036***	2.335**	2.949*	3.659***	3.518**	2.9**	3.269**
ECEC enrolment 0-2 (lagged 13-15 years)		2.207	2.475						
x TS (lagged 13-15 years)		0.724	1.26						
ECEC enrolment 3-5 (lagged 9-11 years)		-0.869	-1.778						
x TS (lagged 9-11 years)		-1.284*	-1.091						
Spending on ECEC (lagged 11-15 years)	1.18		1.397	0.595	1.662	1.885*	3.437***	1.769	2.853**
x TS (lagged 11-15 years)	-0.295		-1.323	-0.55	-1.406	-0.623	-3.187**	-3.524**	-4.269***
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			1.364						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			-0.843						
Spending on health services	-2.629	-3.555	-3.516		-3.983*	-2.284	3.187*	2.646*	2.822
x TS	3.803	3.845*	4.087		4.46**	3.016	-1.391	-2.208	-1.423
Spending on preventive health services (lagged 2-4 years)				-2.838***					
x TS (lagged 2-4 years)				2.639					
Spending on non-preventive health services				0.953					
x TS				0.159					
Other social spending in kind	0.906	1.243	1.073	2.751**	-0.884	0.455	0.649	0.538	0.616
x TS	2.041	1.286	1.04	0.673	3.181*	1.37	1.116	2.633**	2.264
Volume of redistribution	-0.668	-1.226	-1.151	-0.736			-1.354	-1.993	-2.014
x TS	0.223	0.622	1.153	0.095			1.218	2.64*	2.559*
Size of benefits					2.273	-4.983***			
Size of taxes					0.599	1.095			
Share of taxes paid by the bottom 30%	1.765**	2.535***	2.464***	2.175***		2.585***	2.234**	2.999***	2.973***
x TS	2.003**	0.948	1.086	1.303*			0.334	-1.025	-0.78
Share of benefits received by the bottom 30%	-3.61**	-3.264*	-3.343	-3.445**		-7.703***	-6.306***	-4.539***	-4.089***
x TS	-2.395	-3.921*	-2.947	-2.663*			2.145	-0.373	-0.837
Size of benefits x share of benefits received by the bottom 30%						0.65			
Size of taxes x share of taxes received by the bottom 30%						1.426			

Cash transfers to families	-1.923**	-2.779***	-2.699***	-1.41	-1.152	-0.212			
x TS	1.47	1.62	1.806	0.314	1.74	1.662			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							-0.6		
x TS (lagged 9-11 years)							0.881		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								-0.065	
x TS (lagged 4-6 years)								-2.026	
In-cash spending on families, ages 12-17									-0.251
x TS									-0.986
Total social expenditure per capita (logged)	2.635*	1.334	0.599	2.139	-0.609	3.937**	1.645	0.265	-1.715
Primary education spending (logged, lagged 7-9 years)	-6.067***	-7.113***	-7.316***	-5.726***	-4.878**	-5.042***	-4.656**	-3.131*	-3.421**
Secondary education spending (logged, lagged 2-4 years)	-2.421	-1.798	0.185	-1.861	1.973	-3.038	-1.182	-0.077	0.45
Mean poverty gap	0.248**	0.319**	0.304**	0.253**	-0.206	0.513***	0.218**	0.064	0.076
Mean years of schooling	-0.915	-0.736	-0.961	-1.167**	-1.028	-0.943*	-0.048	-0.826	-1.126
Adjusted R^2	0.693	0.752	0.756	0.739	0.525	0.701	0.786	0.759	0.764
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	336	275	275	335	335	335	182	289	239
Country fixed effects	No	No	No	No	No	No	No	No	No
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.8. PISA low achievers among low-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	0.729	-0.279	0.066	0.305	0.416	0.683	-2.655*	-0.641	1.576
x TS (lagged 3 years)	-1.931*	-3.537***	-2.604*	-1.785	-2.166*	-2.121*	-1.097	-2.728***	-2.239*
ECEC enrolment 0-2 (lagged 13-15 years)		-1.085	-1.287						
x TS (lagged 13-15 years)		3.602*	2.992						
ECEC enrolment 3-5 (lagged 9-11 years)		-1.695	-3.303						
x TS (lagged 9-11 years)		0.226	0.933						
Spending on ECEC (lagged 11-15 years)	3.739*		4.293**	3.573*	3.112	3.226	2.409**	1.173	3.125*
x TS (lagged 11-15 years)	0.403		0.44	0.52	0.678	0.335	3.457***	2.036**	1.05
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			0.858						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			-2.676*						
Spending on health services	-1.752	-0.826	-1.066		-1.083	-1.698	-1.586	-2.468	-4.633**
x TS	2.017*	0.981	2.079		2.358*	1.777	1.856	1.204	4.582***
Spending on preventive health services (lagged 2-4 years)				-0.872					
x TS (lagged 2-4 years)				-1.95					
Spending on non-preventive health services				-2.624					
x TS				2.456**					
Other social spending in kind	1.377	1.982	3.142	1.608	2.643	1.157	5.583***	2.626	1.152
x TS	-0.721	-1.021	-2.07	-0.918	-0.319	-0.536	-1.159	-0.428	-0.314
Volume of redistribution	1.055	-0.498	0.675	0.751			-6.209***	0.011	1.619
x TS	-1.238	-0.93	-1.071	-0.951			-0.464	-1.603	-1.012
Size of benefits					-0.664	0.789			
Size of taxes					0.019	-0.687			
Share of taxes paid by the bottom 30%	0.05	1.211	1.808	0.125		0.091	0.248	0.995	0.129
x TS	0.508	0.536	0.411	0.722			0.565	1.067	0.789
Share of benefits received by the bottom 30%	4.541	2.196	2.721	3.882		5.876*	-1.432	5.762**	8.824***
x TS	0.211	-1.122	-1.097	-0.434			0.46	-2.357	-2.008
Size of benefits x share of benefits received by the bottom 30%						-1.003			
Size of taxes x share of taxes received by the bottom 30%						-0.202			

Cash transfers to families	0.886	0.546	0.298	0.296	1.151	0.857			
x TS	-1.46	-0.161	-0.025	-1.49	-2.166**	-1.733*			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							-1.27		
x TS (lagged 9-11 years)							-5.1***		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								2.38	
x TS (lagged 4-6 years)								-5.463***	
In-cash spending on families, ages 12-17									-0.137
x TS									-0.915
Total social expenditure per capita (logged)	3.41	7.213	2.626	1.679	4.138	1.025	5.644	3.24	5.087
Primary education spending (logged, lagged 7-9 years)	-2.032	-2.218	-3.907	-0.983	-3.726	-1.399	-1.679	1.401	0.511
Secondary education spending (logged, lagged 2-4 years)	-1.261	6.571	4.487	0.189	-1.898	-3.814	2.386	13.813**	7.347
Mean poverty gap	0.427**	0.198	0.225	0.399**	0.48*	0.43*	0.028	0.379**	0.572***
Mean years of schooling	-1.413	-2.767	-3.508	-1.413	-1.108	-1.088	-6.28***	0.282	-0.02
Adjusted R^2	0.275	0.321	0.372	0.284	0.263	0.307	0.656	0.483	0.462
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.9. PISA low achievers among middle-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	-1.772	-2.012*	-2.063**	-1.779	-1.995	-2.109*	-3.795***	-2.315***	-0.899
x TS (lagged 3 years)	-1.303	-1.841*	-1.45	-1.454	-1.7	-1.481	-1.823*	-2.19**	-1.895**
ECEC enrolment 0-2 (lagged 13-15 years)		0.273	0.043						
x TS (lagged 13-15 years)		2.09*	1.69						
ECEC enrolment 3-5 (lagged 9-11 years)		-1.947	-3.487***						
x TS (lagged 9-11 years)		-0.411	0.16						
Spending on ECEC (lagged 11-15 years)	0.567		1.651	0.476	0.319	0.232	0.575	-0.238	0.532
x TS (lagged 11-15 years)	-0.789		-0.425	-0.87	-0.671	-0.822	-0.461	-0.124	-0.354
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			1.387						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			-3.444***						
Spending on health services	-0.642	-0.769	0.21		-1.342	-1.291	-1.593	-1.969	-2.715
x TS	0.348	0.57	0.74		1.234	0.752	-0.322	0.484	3.504**
Spending on preventive health services (lagged 2-4 years)				-1.527					
x TS (lagged 2-4 years)				-0.958					
Spending on non-preventive health services				-1.128					
x TS				0.866					
Other social spending in kind	2.981*	4.043***	5.538***	2.703	3.522**	2.772*	5.469***	3.857***	1.238
x TS	-1.37	-1.958	-2.429**	-1.232	-0.425	-0.595	-0.368	-1.178	-0.143
Volume of redistribution	0.674	-0.094	0.238	0.827			-2.932***	0.054	0.535
x TS	-0.251	-0.175	-0.411	-0.347			-0.572	-0.346	0.986
Size of benefits					-1.171	-1.336			
Size of taxes					0.122	-0.195			
Share of taxes paid by the bottom 30%	-0.736	-0.141	0.619	-0.512		-0.88	-0.057	0.341	-0.563
x TS	0.312	0.241	0.218	0.305			0.2	0.806	1.05
Share of benefits received by the bottom 30%	2.334	1.693	0.46	2.707		2.178	-0.09	3.315	6.049**
x TS	1.47	0.239	0.589	0.809			-0.108	-0.239	0.296
Size of benefits x share of benefits received by the bottom 30%						-0.795			
Size of taxes x share of taxes received by the bottom 30%						0.516			

Cash transfers to families	0.493	0.515	0.137	0.06	0.47	0.63			
x TS	-1.31*	0.291	0.326	-1.435**	-1.604**	-1.229**			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							-1.329		
x TS (lagged 9-11 years)							-3.25***		
								0.78	
Cash transfers to families, ages 6-11 (lagged 4-6 years)									
x TS (lagged 4-6 years)								-3.379**	
In-cash spending on families, ages 12-17									-2.214*
x TS									-1.177
Total social expenditure per capita (logged)	1.376	2.534	1.286	0.154	1.498	-0.087	-3.406	0.455	5.271
Primary education spending (logged, lagged 7-9 years)	-1.123	-1.321	-4.121	-1.291	-2.949	-1.89	-0.389	-0.837	-2.656
Secondary education spending (logged, lagged 2-4 years)	3.174	4.413	3.532	3.753	3.369	3.057	3.427	10.747**	7.606
Mean poverty gap	0.301**	0.112	0.155	0.278**	0.386**	0.38**	0.052	0.289**	0.431***
Mean years of schooling	-2.054*	-3.462**	-4.039***	-1.735	-1.7	-2.024	-5.045***	-1.123	-1.501
Adjusted R^2	0.314	0.41	0.498	0.327	0.298	0.324	0.671	0.478	0.506
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.10. PISA low achievers among high-SES students, DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on ALMP (lagged 3 years)	-1.545	-1.52*	-1.722*	-1.218	-1.682	-1.819	-1.546**	-1.608*	-1.131
x TS (lagged 3 years)	-0.826	-1.56*	-0.949	-1.111	-1.005	-0.914	-1.903**	-1.526**	-1.231*
ECEC enrolment 0-2 (lagged 13-15 years)		-0.271	-0.386						
x TS (lagged 13-15 years)		1.306*	0.989						
ECEC enrolment 3-5 (lagged 9-11 years)		-2.689**	-4.659***						
x TS (lagged 9-11 years)		-1.163	-0.283						
Spending on ECEC (lagged 11-15 years)	0.392		1.2	0.468	0.264	0.437	0.214	0.301	0.302
x TS (lagged 11-15 years)	0.138		0.816	-0.035	0.248	0.153	-0.199	0.452	0.786
ECEC enrolment 0-2 (lagged 13-15 years) x spending on ECEC (lagged 11-15 years)			0.564						
ECEC enrolment 3-5 (lagged 9-10 years) x spending on ECEC (lagged 11-15 years)			-2.653***						
Spending on health services	-1.817*	-1.559	-1.917		-1.79	-2.043*	-3.561**	-1.835*	-2.332**
x TS	0.483	-0.221	0.672		0.786	0.835	0.422	0.407	2.296***
Spending on preventive health services (lagged 2-4 years)				-0.82					
x TS (lagged 2-4 years)				1.063					
Spending on non-preventive health services				-1.758*					
x TS				0.716					
Other social spending in kind	1.047	2.227**	2.881***	0.53	1.27	1.287	2.097***	1.411	-1.028
x TS	-2.335**	-1.458	-2.377**	-1.777*	-2.474***	-2.182**	0.026	-2.165*	-1.117
Volume of redistribution	0.298	-0.414	-0.285	0.842			-2.719**	-0.31	-0.241
x TS	0.396	0.109	0.264	-0.054			0.219	0.681	1.916*
Size of benefits					-0.664	-0.252			
Size of taxes					0.617	0.229			
Share of taxes paid by the bottom 30%	1.291	2.427*	2.753**	1.589		1.161	1.449*	1.941*	1.227
x TS	0.347	0.288	0.288	0.212			0.517	0.662	0.739
Share of benefits received by the bottom 30%	1.013	-1.337	-1.428	2.078		1.251	1.181	1.486	2.863
x TS	0.62	0.345	0.148	0.221			-0.714	-0.074	0.025
Size of benefits x share of benefits received by the bottom 30%						0.139			
Size of taxes x share of taxes received by the bottom 30%						0.313			

Cash transfers to families	0.193	0.033	-0.205	0.081	0.65	0.326			
x TS	-0.796	-0.25	-0.128	-0.813	-0.741	-0.591			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							-1.136		
x TS (lagged 9-11 years)							-1.504		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								-1.527	
x TS (lagged 4-6 years)								-1.703	
In-cash spending on families, ages 12-17									-2.471***
x TS									-0.741
Total social expenditure per capita (logged)	-0.705	2.655	0.347	-0.776	-1.183	-1.243	-3.776	0.152	3.593
Primary education spending (logged, lagged 7-9 years)	-2.214	-6.046*	-5.86	-3.408	-2.217	-2.58	-3.475	-5.798	-5.429
Secondary education spending (logged, lagged 2-4 years)	2.836	-1.756	-1.429	2.35	2.974	2.785	-3.801	6.834	7.074
Mean poverty gap	0.011	0	-0.066	0.009	0.072	0.041	0.05	0.014	0.029
Mean years of schooling	-1.302	-2.494**	-2.891***	-1.136	-1.292	-1.24	-2.254*	-1.309	-0.968
Adjusted R^2	0.199	0.312	0.395	0.217	0.183	0.199	0.649	0.284	0.341
Number of countries	32	32	32	32	32	32	27	28	28
Number of observations	333	272	272	332	332	332	181	286	236
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.11. 15-29 year-olds neither in employment nor education or training (NEETs), DOLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spending on ALMP (lagged 3 years)	**0.278**	0.904	0.856	0.248	0.263	0.271	0.248	0.177
x TS (lagged 3 years)	**-0.255**	0.516	0.321	-0.352	-0.362	-0.357	-0.465	-0.074
ECEC enrolment 3-5 (lagged 16-18 years)			**0.368**					
x TS (lagged 16-18 years)			**0.375**					
Spending on ECEC (lagged 16-18 years)		**1.153**						
x TS (lagged 16-18 years)		**0.196**						
Spending on health services	**-1.943****	-1.104	-0.487		-2.218**	-2.208**	-2.234***	-1.392
x TS	**0.846***	0.787	0.856		1.015**	0.918*	1.234**	0.318
Spending on preventive health services (lagged 2-4 years)				**0.467**				
x TS (lagged 2-4 years)				**0.495**				
Spending on non-preventive health services				**-2.346*****				
x TS				**0.823**				
Other social spending in kind	**-2.158****	-1.797	-0.609	-2.368***	-2.038**	-1.916**	-2.1**	-2.48***
x TS	**2.097****	0.795	-0.163	2.389***	2.179***	1.953**	2.417***	2.165**
Volume of redistribution	**0.343**	0.096	-0.203	0.142				0.155
x TS	**0.218**	-0.035	-0.14	0.226				-0.275
Size of benefits					0.519	0.426	0.972	
Size of taxes					-0.634	-0.605	-0.749	
Share of taxes paid by the bottom 30%	**-0.815**	-0.086	0.088	-0.811	-0.646	-0.647		-1.28*
x TS	**-0.237**	-0.53	-0.082	-0.188				-0.596
Share of benefits received by the bottom 30%	**-0.957**	-3.07*	-4.651**	-0.871	-0.743	-0.796		-1.021
x TS	**0.599**	1.357	1.452*	0.761				0.761
Size of benefits x share of benefits received by the bottom 30%						-0.293		
Size of taxes x share of taxes received by the bottom 30%						-0.044		
Cash transfers to families (lagged 4-6 years)	**-0.34**	-1.497	-1.84	-0.052	-0.503	-0.394	-0.485	
x TS (lagged 4-6 years)	**-1.412****	-1.328	-0.933	-1.649***	-1.485**	-1.508**	-1.672***	
Cash transfers to families, ages 12-17 (lagged 7-9 years)								**-0.333**
x TS (lagged 7-9 years)								**-0.516**

Total social expenditure per capita (logged)	2.196	0.402	2.586	2.37	1.448	1.576	1.537	2.785*
Primary education spending (logged, lagged 13-15 years)	-1.239	2.598	5.832	-0.718	-1.412	-1.655	-1.705	0.172
Secondary education spending (logged, lagged 4-6 years)	-2.814	-0.765	-0.385	-2.791	-2.607	-2.79	-3.114	-2.47
Mean poverty gap	0.212***	0.186*	0.179**	0.217***	0.205**	0.208**	0.168*	0.196**
Mean years of schooling	0.389	0.019	0.62	0.421	0.294	0.267	0.222	-0.324
Adjusted R^2	0.553	0.477	0.489	0.559	0.567	0.567	0.565	0.586
Number of countries	30	30	30	30	30	30	30	26
Number of observations	253	171	175	253	253	253	253	218
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.12. 15-29 year-olds neither in employment nor education or training (NEETs), DOLS estimations with time fixed effects only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Spending on ALMP (lagged 3 years)	-1.147	-0.523	-0.771	-1.519*	-0.994	0.125	-1.353*	-1.56*
x TS (lagged 3 years)	0.914	1.257*	0.98	1.829**	0.814	0.81	0.82	1.544**
ECEC enrolment 3-5 (lagged 16-18 years)			0.014					
x TS (lagged 16-18 years)			-0.967					
Spending on ECEC (lagged 16-18 years)		0.866						
x TS (lagged 16-18 years)		0.245						
Spending on health services	0.865	0.577	0.095		0.118	1.257	-0.154	0.734
x TS	-0.467	-0.165	-0.09		0.644	-0.655	1.352	0.102
Spending on preventive health services (lagged 2-4 years)				2.081***				
x TS (lagged 2-4 years)				-1.207				
Spending on non-preventive health services				-1.865				
x TS				1.691				
Other social spending in kind	2.429*	1.844	1.562	0.927	1.598	1.623	1.259	3.318*
x TS	-2.205	-2.756**	-2.007	-0.899	-0.988	-1.649	-0.821	-3.176
Volume of redistribution	1.636*	0.832	1.42	1.426*				1.854**
x TS	-0.993	-0.436	-0.669	-0.528				-1.308
Size of benefits					1.291	1.099	2.509*	
Size of taxes					-0.995	-1.344**	-1.356*	
Share of taxes paid by the bottom 30%	-0.616	-0.593	-0.517	-0.836	-0.674	-0.836*		-0.619
x TS	-0.804	-0.697	-0.885	-0.202				-0.164
Share of benefits received by the bottom 30%	-3.136***	-3.486***	-2.85**	-3.042***	-1.77	-2.316**		-3.912***
x TS	1.481	2.036*	1.399	0.947				1.758
Size of benefits x share of benefits received by the bottom 30%						-1.67***		
Size of taxes x share of taxes received by the bottom 30%						0.275		
Cash transfers to families (lagged 4-6 years)	-0.859	-1.069	-1.182	-1.159**	-0.967	-0.93*	-0.859	
x TS (lagged 4-6 years)	0.043	0.975	0.807	0.14	-0.258	-0.732	-0.114	
Cash transfers to families, ages 12-17 (lagged 7-9 years)								-1.328
x TS (lagged 7-9 years)								1.085
Total social expenditure per capita (logged)	-0.59	-1.439	-1.119	-0.044	-0.556	1.012	-1.201	-0.1

Primary education spending (logged, lagged 13-15 years)	-5.609*	-3.854	-7.105**	-7.083***	-5.81*	-7.645***	-4.021	-8.87***
Secondary education spending (logged, lagged 4-6 years)	2.599*	1.796	3.074*	2.405**	1.734	2.126*	1.401	3.458**
Mean poverty gap	0.186**	0.147	0.208	0.21***	0.166	0.204***	0.032	0.322***
Mean years of schooling	-0.698	0.19	0.084	-0.296	-0.74	-0.26	-1.286*	-0.565
Adjusted R^2	0.707	0.71	0.698	0.77	0.701	0.78	0.679	0.765
Number of countries	30	30	30	30	30	30	30	26
Number of observations	253	171	175	253	253	253	253	218
Country fixed effects	No	No	No	No	No	No	No	No
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Health outcomes

Annex Table 4.C.13. 15-year-olds reporting "excellent health", OLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	**3.751*** **	3.89**	3.891***	3.325***	3.298***	3.265**	4.201***	3.575**	2.195*
x TS (lagged 2-4 years)	**4.188****	4.548**	3.875*	3.376*	3.543*	3.235*	3.98*	5.188**	1.879
Spending on non-preventive health services	**0.387**	-0.249	-0.325	-0.512	-0.369	-1.021	-0.341	-0.24	-2.152
x TS	**-0.414**	-0.594	-0.679	0.246	0.098	0.265	-0.613	-0.243	-1.032
ECEC enrolment 0-2 (lagged 13-15 years)		**-1.104**	-1.266						
x TS (lagged 13-15 years)		**1.245**	-0.043						
ECEC enrolment 3-5 (lagged 9-11 years)		**-0.649**	0.675						
x TS (lagged 9-11 years)		**-0.216**	-0.488						
Spending on ECEC (lagged 11-15 years)	**-0.021**		-0.942	-0.064	-0.098	0.116	-0.302	0.409	2.128
x TS (lagged 11-15 years)	**2.574*****		1.639	2.757***	2.595***	2.65***	3.769***	2.824**	1.724*
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			0.621						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			1.49						
Other social spending in kind	**-4.263*****	-3.752**	-4.419***	-5.282***	-4.95***	-5.24***	-3.346***	-3.766***	-2.918***
x TS	**5.544*****	4.172***	5.56***	6.814***	6.347***	6.873***	4.515***	5.023***	3.332***
Spending on ALMP (lagged 3 years)	**1.758*****	1.215*	1.369*	1.699***	1.741***	1.667***	1.991***	2.254***	1.313**
x TS (lagged 3 years)	**2.707*****	1.37	2.333**	2.524***	2.461***	2.653***	2.689***	2.767**	1.923*
Volume of redistribution	**0.117**	0.147	-0.14				0.049	0.315	-0.89
x TS	**-0.854**	-1.035	-0.608				-0.555	-0.625	0.595
Size of taxes				-0.639	-0.76	-0.776			
Size of benefits				-0.245	-0.473	-0.21			
Share of taxes paid by the bottom 30%	**-0.782****	-0.536	-0.587	-0.853**	-0.833**		-0.634*	-0.565*	-0.873**
x TS	**-0.006**	0.127	0.163				-0.052	-0.337	-0.822
Share of benefits received by the bottom 30%	**0.009**	-0.306	-0.239	0.372	0.114		-0.713	-1.307*	-1.514**
x TS	**1.835**	2.089	1.971				1.868	2.751**	1.192
Size of taxes x share of taxes received by the bottom 30%					-0.157				

Size of benefits x share of benefits received by the bottom 30%					-0.357				
Cash transfers to families	**0.319**	0.167	0.289	-0.174	-0.107	-0.256			
x TS	**1.935****	1.44	1.588	1.953**	1.774**	2.02**			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							**0.839**		
x TS (lagged 9-11 years)							**2.471*****		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								**2.03***	
x TS (lagged 4-6 years)								**-0.264**	
In-cash spending on families, ages 12-17									**-1.086*****
x TS									**-1.458****
Total social expenditure per capita (logged)	5.522	1.851	4.815	4.416	4.384	3.588	3.534	3.871	-0.503
Mean poverty gap	-0.133	-0.105	-0.161**	-0.118	-0.096	-0.12	-0.149*	-0.163**	-0.074
Adjusted R^2	0.455	0.359	0.472	0.444	0.446	0.427	0.503	0.492	0.46
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.14. 15-year-olds reporting "excellent health", OLS estimations with time fixed effects only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	-5.864***	-5.166***	-5.185***	-6.228***	-6.642***	-6.081***	-5.341***	-6.91***	-7.024***
x TS (lagged 2-4 years)	0.371	0.582	0.652	0.022	-0.263	0.522	0.168	3.03	2.528
Spending on non-preventive health services	6.808***	6.055***	2.293	6.266***	8.015***	5.08**	6.844***	4.318**	6.378**
x TS	-3.054	-4.767	-4.791*	-2.205	-4.276	-1.865	-8.111***	-4.616	-4.562
ECEC enrolment 0-2 (lagged 13-15 years)		0.97	-0.279						
x TS (lagged 13-15 years)		-4.292**	-3.726**						
ECEC enrolment 3-5 (lagged 9-11 years)		0.142	5.179**						
x TS (lagged 9-11 years)		0.362	-0.235						
Spending on ECEC (lagged 11-15 years)	0.613		-1.498	0.385	1.471*	0.523	-2.405*	-1.745*	-1.024
x TS (lagged 11-15 years)	-1.532		-3.679	-1.84	-1.544	-1.934	2.375	0.029	-2.761*
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			0.336						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			5.906**						
Other social spending in kind	1.357	0.731	-0.518	1.838	1.672	1.269	9.089***	2.473	4.013**
x TS	0.866	0.485	1.354	0.456	-2.081	-0.243	-10.926***	0.095	-1.095
Spending on ALMP (lagged 3 years)	-1.801	-1.531	-1.395	-2.164	-0.464	-2.237	-2.836***	-2.62**	-2.525*
x TS (lagged 3 years)	2.004	2.494	2.257	2.074	2.49*	2.495	6.23***	3.576***	3.742**
Volume of redistribution	-2.141	-0.429	-0.049				-0.945	-0.193	-0.268
x TS	2.669*	1.307	0.772				1.465	1.813	2.016
Size of taxes				1.579	1.65	1.032			
Size of benefits				0.282	-0.846	1.684			
Share of taxes paid by the bottom 30%	-0.941	-0.212	-0.942	-1.123	-1.574*		-0.955**	-1.486**	-1.523*
x TS	1.174	1.159	0.485				0.659	1.481	2.188
Share of benefits received by the bottom 30%	-3.248	-2.628	1.556	-2.166	-2.04		-7.48***	-4.715***	-5.409***
x TS	1.37	1.656	-0.399				7.438***	1.641	2.545
Size of taxes x share of taxes received by the bottom 30%					2.22*				
Size of benefits x share of benefits received by the bottom 30%					-2.171**				
Cash transfers to families	-0.762	1.03	-0.055	-0.973	-0.133	-1.391			
x TS	-1.597	-2.286	-1.961	-1.214	-0.932	-0.138			

Cash transfers to families, ages 0-5 (lagged 9-11 years)							0.912		
x TS (lagged 9-11 years)							0.666		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								4.68***	
x TS (lagged 4-6 years)								-6.743***	
In-cash spending on families, ages 12-17									1.661
x TS									-4.949**
Total social expenditure per capita (logged)	2.423	0.283	-4.48	1.378	1.378	0.388	0.69	5.215**	2.807
Mean poverty gap	-0.07	-0.088	-0.18	-0.155	-0.161	-0.243*	-0.414**	-0.292**	-0.093
Adjusted R^2	0.467	0.507	0.581	0.45	0.525	0.423	0.698	0.675	0.609
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	No	No	No	No	No	No	No	No	No
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.15. 15-year-olds reporting "poor or fair health", OLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	**-1.251**	-1.543	-1.552	-1.305	-1.201	-1.202	-1.302	-1.168	-0.608
x TS (lagged 2-4 years)	**-1.578**	-2.627	-2.278	-1.109	-1.222	-0.859	-2.881	-2.81	-0.283
Spending on non-preventive health services	**-0.608**	-0.86	-0.688	-0.501	-0.842	0.42	0.119	0.441	0.846
x TS	**-1.705**	-1.901	-1.871	-1.937	-1.726	-1.895	-1.258	-1.831	-2.227
ECEC enrolment 0-2 (lagged 13-15 years)		**1.27**	1.384						
x TS (lagged 13-15 years)		**-1.756**	-0.955						
ECEC enrolment 3-5 (lagged 9-11 years)		**1.777**	0.887						
x TS (lagged 9-11 years)		**-1.494***	-1.245						
Spending on ECEC (lagged 11-15 years)	**0.158**		0.646	0.161	0.388	-0.121	0.894	-0.016	0.219
x TS (lagged 11-15 years)	**-1.924****		-0.501	-1.907**	-1.781**	-1.718*	-3.13*	-1.892*	-1.97**
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			-1.011						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			-0.919						
Other social spending in kind	**3.363*****	2.669*	2.996**	3.538***	3.313**	3.418***	3.717***	4.134***	4.529***
x TS	**-4.342*****	-3.412**	-4.116***	-4.597***	-4.256***	-4.711***	-4.813***	-4.988***	-4.771***
Spending on ALMP (lagged 3 years)	**-1.551****	-0.513	-0.531	-1.576**	-1.578**	-1.527**	-0.941*	-1.394**	-0.152
x TS (lagged 3 years)	**-1.476***	-1.252**	-1.752**	-1.578*	-1.521*	-1.793*	-2.279***	-2.352***	-2.89***
Volume of redistribution	**-0.353**	-0.564	-0.366				-1.14	-0.866	1.122
x TS	**1.005**	0.593	0.269				0.913	0.615	-1.584
Size of taxes				0.607	0.749	0.827			
Size of benefits				-0.4	-0.325	-0.302			
Share of taxes paid by the bottom 30%	**1.645*****	1.296***	1.26***	1.447***	1.389***		1.408***	1.459***	1.21*
x TS	**0.652**	0.362	0.273				0.672	0.713	1.205
Share of benefits received by the bottom 30%	**-1.068**	-1.353	-1.434	-1.106	-0.815		-0.9	-0.599	0.238
x TS	**0.042**	0.41	0.441				0.579	0.017	0.539
Size of taxes x share of taxes received by the bottom 30%					0.671				
Size of benefits x share of benefits received by the bottom 30%					0.213				

Cash transfers to families	**-0.222**	-0.789	-0.821	-0.004	-0.104	0.08			
x TS	**-0.438**	0.023	-0.031	-0.443	-0.411	-0.525			
Cash transfers to families, ages 0-5 (lagged 9-11 years)							**-1.507****		
x TS (lagged 9-11 years)							**-1.599**		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								**0.5**	
x TS (lagged 4-6 years)								**-0.917**	
In-cash spending on families, ages 12-17									**0.533**
x TS									**0.644**
Total social expenditure per capita (logged)	-1.862	-2.531	-4.186	-1.356	-1.358	0.1	-1.267	-0.547	-1.928
Mean poverty gap	-0.014	-0.013	0.023	-0.014	-0.042	-0.013	0.007	0.017	-0.006
Adjusted R^2	0.317	0.365	0.418	0.316	0.323	0.248	0.429	0.411	0.464
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.16. 15-year-olds reporting "poor or fair health", OLS estimations with time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	1.27	1.306*	1.604**	1.205	2.243***	1.205	0.043	0.982	0.464
x TS (lagged 2-4 years)	0.441	0.428	-0.391	0.319	1.194	1.453	0.305	-1.765	-0.073
Spending on non-preventive health services	-0.644	-1.119	0.144	-1.687	-3.958***	-0.963	-2.643	-1.441	-1.3
x TS	-2.522	-1.003	-1.036	-1.709	-0.242	-1.954	2.444	-0.738	-1.899
ECEC enrolment 0-2 (lagged 13-15 years)		2.137***	3.241***						
x TS (lagged 13-15 years)		2.045**	1.897**						
ECEC enrolment 3-5 (lagged 9-11 years)		-0.633	-2.982***						
x TS (lagged 9-11 years)		-0.472	0.052						
Spending on ECEC (lagged 11-15 years)	0.025		0.147	-0.635	-1.545**	-0.45	1.254	0.928	1.369***
x TS (lagged 11-15 years)	0.004		-0.018	0.239	-0.105	0.599	-2.549**	-0.308	0.732
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			0.728						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			-2.814**						
Other social spending in kind	1.235	1.416	2.492**	1.406	1.105	1.538	-3.577**	-1.135	-0.627
x TS	-3.987**	-4.764***	-5.195***	-4.157**	-2.453	-3.692**	3.544*	-1.657	-2.019
Spending on ALMP (lagged 3 years)	1.054	1.358*	1.016	1.212	0.1	1.329	1.498**	1.567**	1.027
x TS (lagged 3 years)	-2.709**	-3.088***	-3.134***	-2.354*	-2.627**	-2.143	-5.041***	-3.915***	-4.711***
Volume of redistribution	-0.83	-1.337	-1.394				-0.986	-0.532	0.821
x TS	-0.011	-0.415	0.179				0.41	-0.847	-2.081***
Size of taxes				1.393*	1.322*	1.194			
Size of benefits				1.002	1.762**	-0.98			
Share of taxes paid by the bottom 30%	-0.211	-0.33	-0.016	-0.323	-0.095		0.318	0.183	-0.658
x TS	-0.817	-1.171*	-0.901				-0.705	-1.343**	-0.494
Share of benefits received by the bottom 30%	-0.286	-0.111	-1.968	2.667*	2.837**		3.091**	1.755**	1.553**
x TS	3.384**	1.954	3.124*				-1.139	2.162**	3.1***
Size of taxes x share of taxes received by the bottom 30%					0.557				
Size of benefits x share of benefits received by the bottom 30%					2.294***				
Cash transfers to families	2.832***	2.582***	2.85***	1.619**	0.589	2.033***			
x TS	0.468	1.437	0.648	0.324	1.001	-0.363			

Cash transfers to families, ages 0-5 (lagged 9-11 years)							0.967		
x TS (lagged 9-11 years)							-0.181		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								1.149	
x TS (lagged 4-6 years)								1.746*	
In-cash spending on families, ages 12-17									1.588***
x TS									2.379**
Total social expenditure per capita (logged)	-1.46	-2.004*	-1.254	-3.928***	-4.383***	-1.779	-1.165	-3.336*	-1.565
Mean poverty gap	-0.106	-0.037	0.001	-0.171	-0.119	0.012	0.126	-0.082	-0.057
Adjusted R^2	0.498	0.554	0.588	0.46	0.55	0.432	0.562	0.576	0.618
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	No	No	No	No	No	No	No	No	No
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.17. 15-year-olds reporting "multiple subjective health complaints", OLS estimations with country and time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	**-1.062**	-1.273	-1.037	-0.145	-0.017	-0.135	0.221	-0.389	-0.012
x TS (lagged 2-4 years)	**0.085**	-1.494	-0.028	2.239	1.333	2.283	3.312	1.324	0.229
Spending on non-preventive health services	**-2.88**	-2.707	-2.894	-0.475	-1.052	-0.305	3.91*	3.691	-1.25
x TS	**2.011**	1.481	2.019	0.454	1.425	0.576	-0.939	-0.043	-2.597
ECEC enrolment 0-2 (lagged 13-15 years)		**-0.269**	0.023						
x TS (lagged 13-15 years)		**-3.731****	-2.919						
ECEC enrolment 3-5 (lagged 9-11 years)		**0.211**	-1.597						
x TS (lagged 9-11 years)		**-1.089**	-0.855						
Spending on ECEC (lagged 11-15 years)	**1.477**		2.755	1.666	1.617	1.689	1.242	0.303	2.141
x TS (lagged 11-15 years)	**-2.969***		-3.573*	-3.699**	-2.876**	-3.663**	-5.778***	-4.39***	-2.963**
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			3.202						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			-3.314*						
Other social spending in kind	**3.084**	1.461	3.408	5.717*	3.827	5.625*	4.255**	4.666**	4.23***
x TS	**-8.473*****	-6.813**	-9.408***	-11.907***	-9.235***	-11.928***	-8.995***	-10.033***	-5.942***
Spending on ALMP (lagged 3 years)	**-0.533**	-0.088	-0.172	-0.362	-0.665	-0.357	-1.002	-0.981	0.105
x TS (lagged 3 years)	**-2.299***	-1.945	-2.465	-2.06	-1.757	-2.061	-4.37***	-4.598***	-2.112***
Volume of redistribution	**1.635**	1.292	1.567				5.296***	5.027***	1.189
x TS	**1.169**	0.399	0.156				-2.509*	-1.335	-1.452
Size of taxes				-1.117	-0.447	-1.118			
Size of benefits				0.694	1.978	0.948			
Share of taxes paid by the bottom 30%	**-0.187**	-0.687	-0.335	0.112	-0.029		0.088	0	0.619
x TS	**0.205**	-0.189	0.126				0.573	0.414	1.743*
Share of benefits received by the bottom 30%	**1.434**	0.704	0.974	-0.828	0.296		1.906	1.298	0.649
x TS	**-5.858****	-5	-4.65				-4.573*	-4.813**	-0.326
Size of taxes x share of taxes received by the bottom 30%					0.453				
Size of benefits x share of benefits received by the bottom 30%					2.144**				
Cash transfers to families	**-1.577***	-1.712	-2.368*	-0.178	-0.458	-0.262			
x TS	**-1.597**	-1.941	-2.289	-2.199	-1.081	-2.159			

Cash transfers to families, ages 0-5 (lagged 9-11 years)							**1.097**		
x TS (lagged 9-11 years)							**0.064**		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								**-0.498**	
x TS (lagged 4-6 years)								**-2.133**	
In-cash spending on families, ages 12-17									**0.198**
x TS									**1.353**
Total social expenditure per capita (logged)	-13.694**	-14.225**	-18.031***	-11.015*	-10.988*	-10.791*	-7.459	-6.191	-6.812
Mean poverty gap	0.18	0.15	0.207	0.193	0.092	0.19	0.312**	0.286**	0.063
Adjusted R^2	0.258	0.259	0.309	0.199	0.233	0.204	0.33	0.331	0.367
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Annex Table 4.C.18. 15-year-olds reporting "multiple subjective health complaints", OLS estimations with time fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Spending on preventive health services (lagged 2-4 years)	0.65	0.603	0.813	0.599	1.53**	0.601	-0.77	0.555	0.702
x TS (lagged 2-4 years)	1.394	1.061	0.889	1.359	2.149	1.837	3.416	-0.307	-0.339
Spending on non-preventive health services	-1.163	-1.294	-1.113	-1.615*	-3.622***	-1.325	-3.698***	-1.846*	-1.778
x TS	-0.968	-0.023	-0.168	-0.64	0.622	-0.742	4.534***	0.403	-1.366
ECEC enrolment 0-2 (lagged 13-15 years)		1.997***	2.358***						
x TS (lagged 13-15 years)		2.045***	2.055***						
ECEC enrolment 3-5 (lagged 9-11 years)		-1.309**	-1.931*						
x TS (lagged 9-11 years)		-0.074	0.079						
Spending on ECEC (lagged 11-15 years)	0.242		0.158	-0.059	-0.849	0.019	2.095*	0.996	1.676***
x TS (lagged 11-15 years)	0.533		-0.449	0.584	0.282	0.737	-2.567**	0.043	0.59
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 0-2 (lagged 13-15 years)			0.602						
Spending on ECEC (lagged 11-15 years) x ECEC enrolment 3-5 (lagged 9-11 years)			-0.762						
Other social spending in kind	1.789	2.727***	2.987**	1.976	1.694	2.026	-3.326**	0.211	-0.741
x TS	-3.458**	-4.368***	-4.591***	-3.686**	-2.224	-3.501**	4.211**	-1.786	-2.139*
Spending on ALMP (lagged 3 years)	0.34	0.519	0.414	0.393	-0.559	0.439	0.386	0.284	0.76
x TS (lagged 3 years)	-1.919**	-2.358***	-2.398**	-1.779*	-2.013**	-1.683*	-3.392***	-2.326**	-3.98***
Volume of redistribution	-0.629	-1.205*	-1.144				-0.803	-0.276	0.193
x TS	0.274	-0.006	0.323				0.972	-0.307	-1.187
Size of taxes				0.841	0.777	0.747			
Size of benefits				0.636	1.286	-0.184			
Share of taxes paid by the bottom 30%	-0.012	-0.406	-0.336	-0.15	0.042		0.398	0.306	-0.453
x TS	-0.397	-0.572	-0.44				0.326	-0.678	-0.475
Share of benefits received by the bottom 30%	-0.418	-0.541	-1.004	1.097	1.256		2.504***	0.905	1.56*
x TS	1.594	-0.291	0.247				-2.751	0.77	2.836**
Size of taxes x share of taxes received by the bottom 30%					0.592				
Size of benefits x share of benefits received by the bottom 30%					2.012***				
Cash transfers to families	2.265***	1.75***	1.788**	1.7***	0.791	1.868***			
x TS	0.819	0.719	0.51	0.831	1.459*	0.558			

Cash transfers to families, ages 0-5 (lagged 9-11 years)							1.518*		
x TS (lagged 9-11 years)							-0.167		
Cash transfers to families, ages 6-11 (lagged 4-6 years)								1.072	
x TS (lagged 4-6 years)								1.421	
In-cash spending on families, ages 12-17									1.384**
x TS									2.507***
Total social expenditure per capita (logged)	-1.444	-2.17*	-2.197	-2.749**	-3.162**	-1.856	-0.148	-3.104**	-2.137
Mean poverty gap	-0.015	0.084	0.096	-0.058	-0.01	0.018	0.267***	0.01	-0.05
Adjusted R^2	0.389	0.443	0.437	0.389	0.458	0.387	0.393	0.332	0.598
Number of countries	29	29	29	29	29	29	24	25	27
Number of observations	249	247	247	249	249	249	214	217	171
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	No	No	No	No	No	No	No	No	No

Note: “x” signifies an interaction between two variables. “x TS” means the interaction between the policy variable in the line above and the log of per capita total social spending. The log of total social spending per capita is standardised along with the policy variables to facilitate the interpretation of results.

Total social expenditure

Annex Table 4.C.19. Per capita social expenditure growth equations, DOLS estimations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Spending on ALMP (lagged 3 years)	**-0.035**	-0.034	-0.033	-0.043**	-0.032	-0.017	-0.01	-0.017	-0.015	-0.016
x GDP (lagged 3 years)	**-0.046***	-0.051**	-0.041**	-0.04**	-0.043**	-0.044**	-0.045**	-0.022	-0.026	-0.023
ECEC enrolment 0-2	**0.047**		0.03	0.046	0.05	0.059*	0.041	-0.001	-0.004	-0.001
x GDP	**-0.047*****		-0.038***	-0.043***	-0.034**	-0.045***	-0.043***	-0.02	-0.027**	-0.03**
ECEC enrolment 3-5	**-0.022**		-0.009	-0.015	-0.015	-0.046**	-0.054***	-0.02	-0.029	-0.026
x GDP	**0.02**		0.017	0.015	0.008	-0.001	0.001	0.015	0.016	0.016
Spending on ECEC		**-0.022**	-0.022							
x GDP		**0.016**	0.007							
Spending on ECEC x ECEC enrolment 0-2			0.007							
Spending on ECEC x ECEC enrolment 3-5			0.007							
Spending on health services				**-0.11*****						
x GDP				**-0.014**						
Spending on preventive health services (lagged 2-4 years)					**0.017**					
x GDP					**-0.049****					
Spending on non-preventive health services					**-0.087*****					
x GDP					**-0.004**					
Other social spending in kind	**0.058****	0.064**	0.06**	0.03	0.039*	0.033	0.016	0.062***	0.067***	0.069***
x GDP	**-0.004**	-0.026	-0.016	-0.015	-0.011	-0.003	0.008	-0.083***	-0.083***	-0.085***
Volume of redistribution	**0.029**	0.014	0.015	0.045*	0.034			0.061***	0.056***	0.056***
x GDP	**-0.046*****	-0.029	-0.032*	-0.065***	-0.062***			-0.067***	-0.056***	-0.059***
Size of taxes						0.105***	0.133***			
Size of benefits						-0.048**	-0.03			
Share of taxes paid by the bottom 30%	**-0.029**	-0.026	-0.023	-0.018	-0.011		-0.027	0.005	0.003	0.003
x GDP	**0.002**	0.015	0.015	0.008	0.006			0.029**	0.027*	0.026*
Share of benefits received by the bottom 30%	**0.001**	0.006	0.004	0.017	-0.013		0.059	0.086*	0.087*	0.082*
x GDP	**-0.051*****	-0.036**	-0.033*	-0.056**	-0.065***			-0.047***	-0.038**	-0.037**

Size of taxes x share of taxes received by the bottom 30%							0.026**			
Size of benefits x share of benefits received by the bottom 30%							-0.014			
Cash transfers to families	**0.062*** **	0.057***	0.062***	0.033	0.032	0.031	0.03			
x GDP	**-0.002**	0.017	0.006	0.007	-0.003	-0.018	-0.013			
Cash transfers to families, ages 0-5								**0.014**		
x GDP								**-0.001**		
Cash transfers to families, ages 6-11									**-0.003**	
x GDP									**-0.032**	
In-cash spending on families, ages 12-17										**0.004**
x GDP										**-0.032**
GDP per capita (logged)	0.178***	0.178***	0.172***	0.229***	0.199***	0.264***	0.274***	0.08	0.091*	0.094*
Life expectancy (logged)	0.38	0.238	-0.111	-0.948	-1.094	0.875	0.604	2.278	2.222	2.219
Dependency ratio	-0.008	-0.006	-0.008	-0.003	-0.002	-0.002	-0.003	-0.006	-0.007	-0.007
Adjusted R^2	0.619	0.636	0.652	0.658	0.686	0.657	0.675	0.616	0.632	0.627
Number of countries	32	32	32	32	32	32	32	28	28	28
Number of observations	482	482	482	482	478	478	478	333	333	333
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Leads and lags for core and policy variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

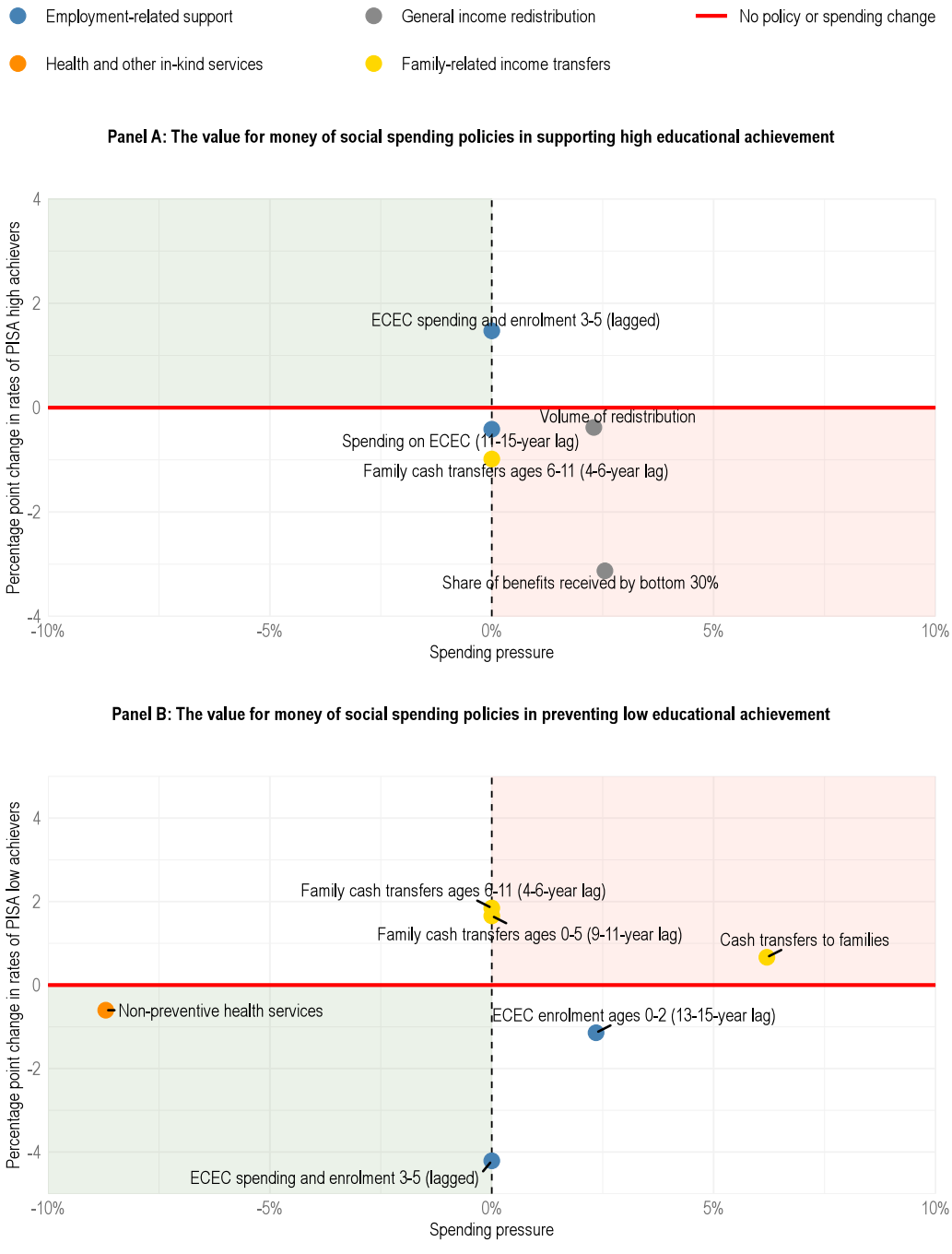
Note: Coefficients in bold are the ones used for the value for money calculations. “x” signifies an interaction between two variables. “x GDP” means the interaction between the policy variable in the line above and the log of GDP per capita. The log of GDP per capita is standardised along with the policy variables to facilitate the interpretation of results.

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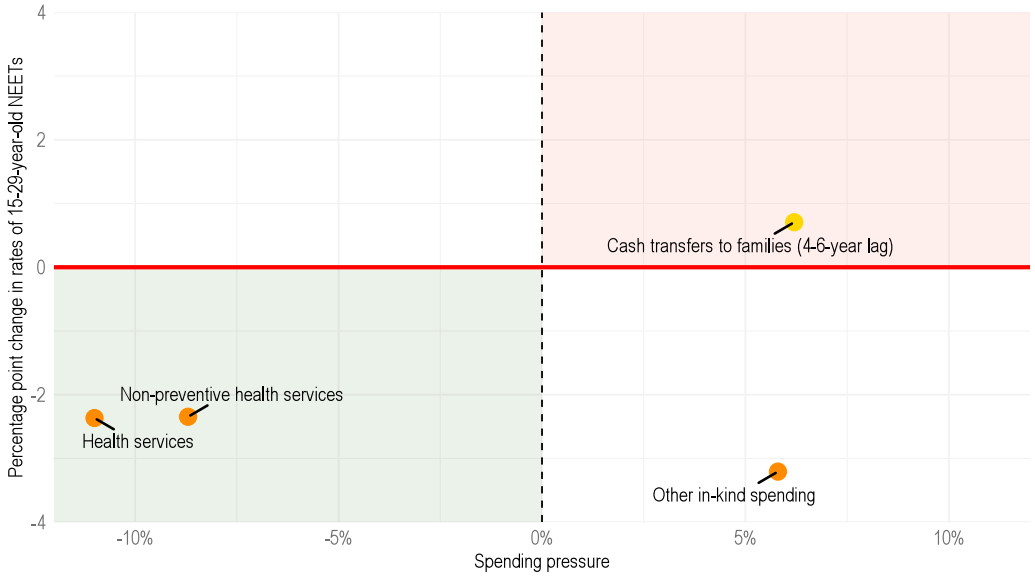
Annex 4.D. Value for money at different levels of social expenditure and GDP

Educational outcomes

Annex Figure 4.D.1. The value for money of social policies for educational outcomes, for a hypothetical country with relatively low levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in reducing NEETs rates



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with low levels of logged per capita social spending and logged GDP per capita (both one standard deviation below the sample average), and average policy settings.

How to read the figure: The vertical axis indicates the p.p. difference in educational outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving youths' educational outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where educational outcomes would be without any change in policy nor an increase in logged per capita social expenditure.

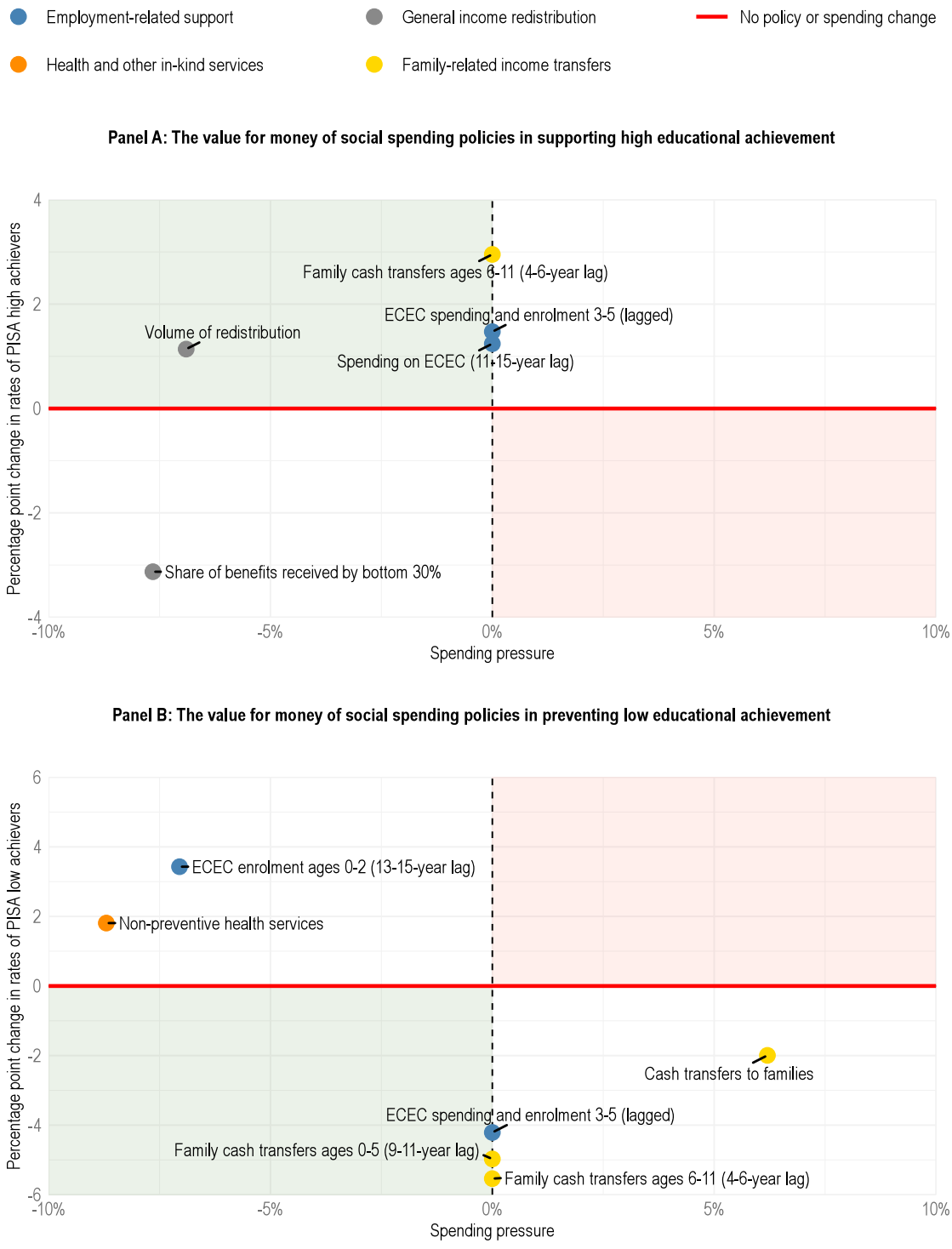
Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.

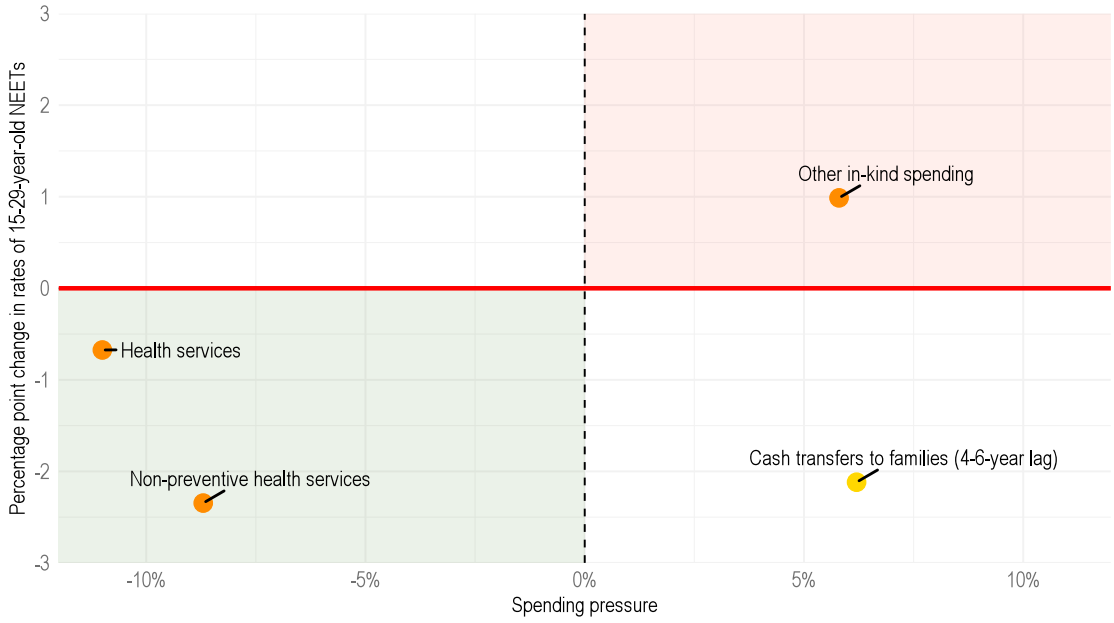
Example: Increasing the share of social expenditure dedicated to cash benefits for families with children aged 6 to 11 by one standard deviation (+1.2 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation below its average level is predicted to lower the overall social spending effectiveness in raising the share of high achievers in the PISA test by one p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). The same scenario is further associated with a decline in the share of PISA low performers by 1.8 p.p. compared to the effect of raising social spending levels without any change in policy (no impact). At the same time, such an increase in the share of social expenditure dedicated families with children aged 6 to 11 is not predicted to change spending pressures (0% change) from the expected increase by 8.9% that is associated on average with an increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically).

Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations.

Annex Figure 4.D.2. The value for money of social policies for educational outcomes, for a hypothetical country with relatively high levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in reducing NEETs rates



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with high levels of logged per capita social spending and logged GDP per capita (both one standard deviation above the sample average), and average policy settings.

How to read the figure: The vertical axis indicates the p.p. difference in educational outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving youths' educational outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where educational outcomes would be without any change in policy nor an increase in logged per capita social expenditure.

Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation).

Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.

Example: Increasing the share of social expenditure dedicated to cash benefits for families with children aged 6 to 11 by one standard deviation (+1.2 p.p. of social expenditure) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation above its average level is predicted to enhance the overall social spending effectiveness in raising the share of high achievers in the PISA test by 3 p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). The same scenario is further associated with a decline in the share of PISA low performers by 5.5 p.p. compared to the effect of raising social spending levels without any change in policy (no impact). At the same time, such an increase in the share of social expenditure dedicated families with children aged 6 to 11 is not predicted to change spending pressures (0% change) from the expected increase by 8.9% that is associated on average with an increase in logged per capita GDP over time (by 0.5 standard deviations from its average level; equivalent to approximately 11 years of growth, historically).

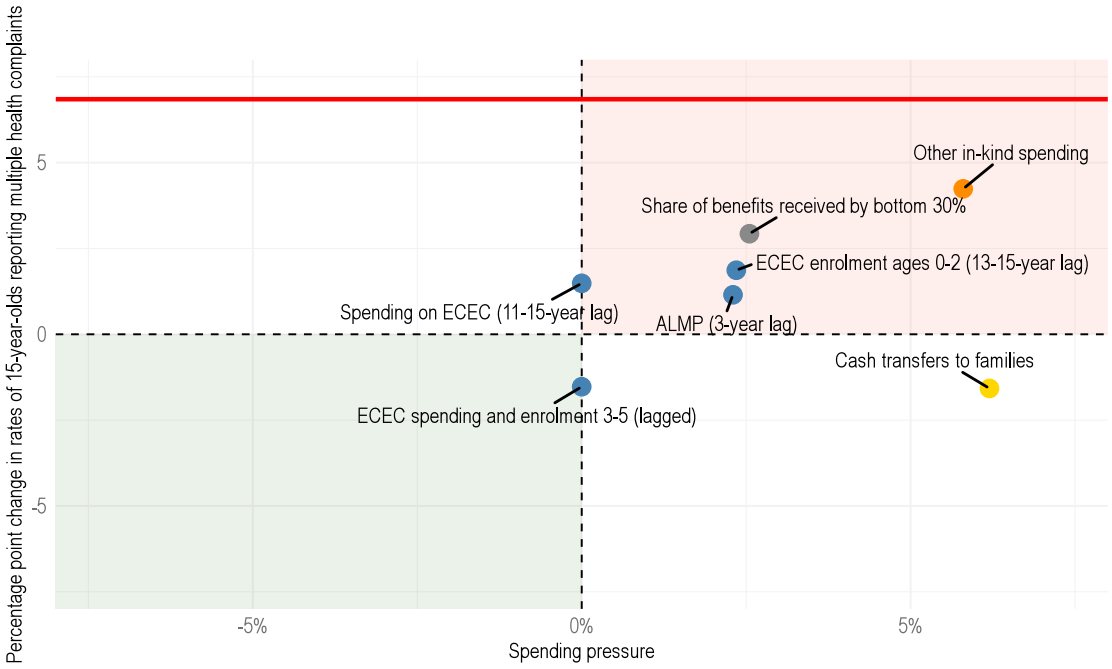
Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations.

Health outcomes

Annex Figure 4.D.3. The value for money of social policies for health outcomes, for a hypothetical country with relatively low levels of per capita social expenditure and GDP per capita

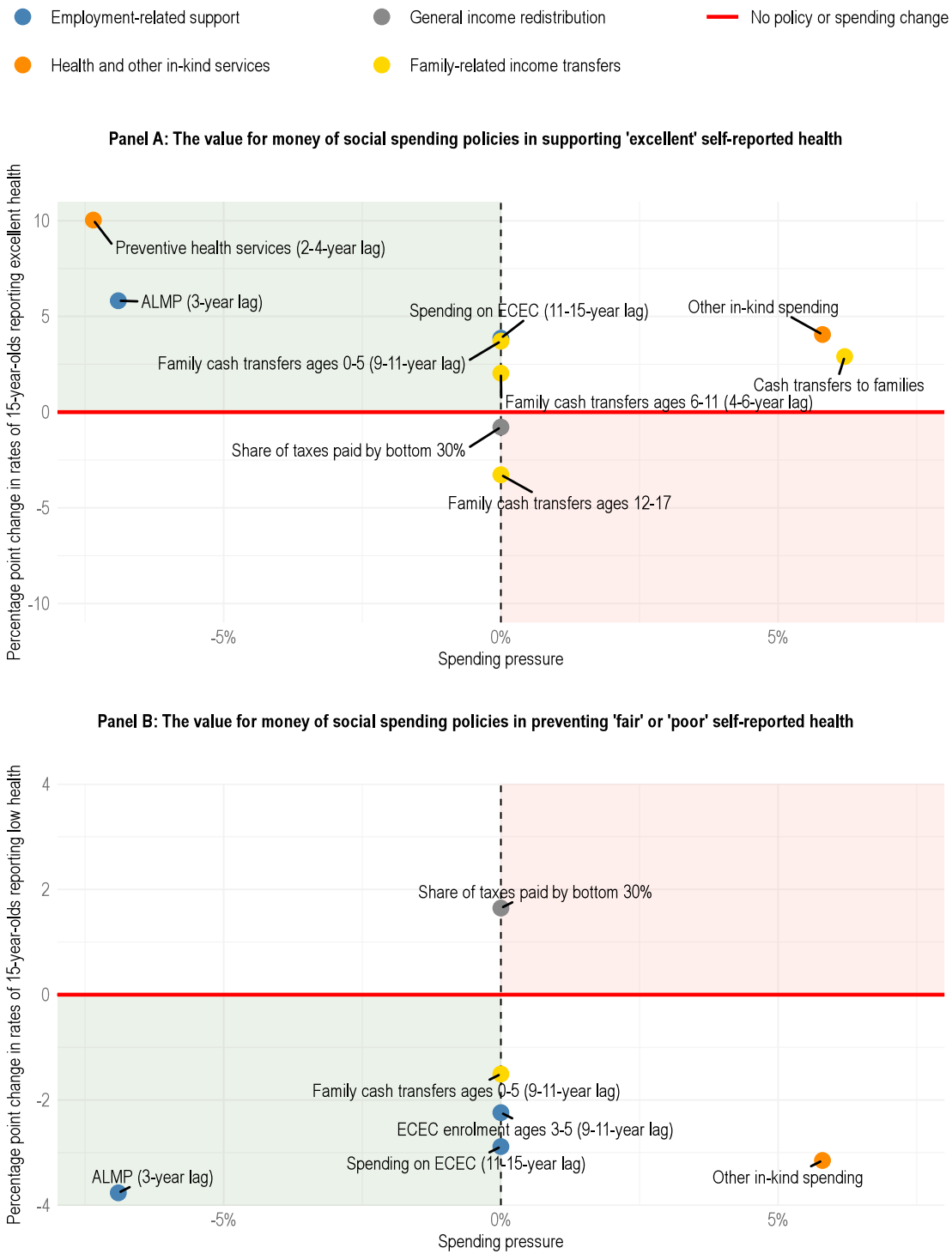


Panel C: The value for money of social spending policies in preventing multiple subjective health complaints

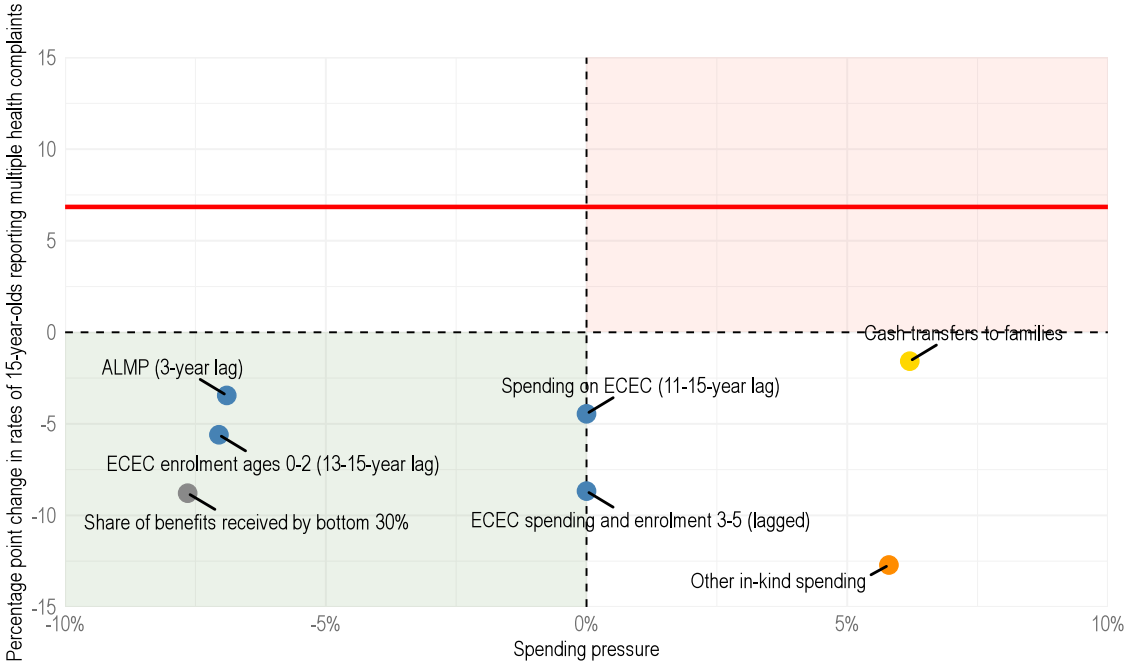


Note: The figures show the impact of simulated policy changes over time for a hypothetical country with low levels of logged per capita social spending and logged GDP per capita (both one standard deviation below the sample average), and policy settings.
How to read the figure: The vertical axis indicates the p.p. difference in 15-year-olds' health outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving adolescent health outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where health outcomes would be without any change in policy nor an increase in logged per capita social expenditure. Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation). Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.
Example: Increasing the share of taxes that are paid by the bottom 30% by one standard deviation (+3.5 p.p.) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation below its average level is predicted to reduce the share of children reporting excellent health by 0.8 p.p. and to increase the share of children reporting "fair" or "poor" health by 1.6 p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). At the same time, such an increase in the relative tax burden of the poorest 30% alongside GDP growth is not associated any change in social spending pressure compared to the typically spending increase that accompanies a half-standard-deviation increase in logged GDP per capita (8.9%).
Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations.

Annex Figure 4.D.4. The value for money of social policies for health outcomes, for a hypothetical country with relatively high levels of per capita social expenditure and GDP per capita



Panel C: The value for money of social spending policies in preventing multiple subjective health complaints



Note: The figures show the impact of simulated policy changes over time for a hypothetical country with high levels of logged per capita social spending and logged GDP per capita (both one standard deviation above the sample average), and average policy settings.
How to read the figure: The vertical axis indicates the p.p. difference in 15-year-olds' health outcomes related to a one-standard-deviation increase in the policy alongside a half-standard deviation increase in logged per capita social expenditure (approximately 11 years, based on past trends), compared to the same increase in social spending without any change to the policies. In other words, it shows the incremental, long-run effect of an increase in the policy on the effectiveness of total social expenditure in improving adolescent health outcomes, under the assumption that per capita total social spending increases over time. Negative values (below the horizontal 0-line) indicate that the policy reduces the outcome over time compared to what would be achieved if per capita social expenditure increased and all policies remained at their average level. Positive values suggest that the policy expansion is associated with relatively higher levels over time compared to an increase in spending without any policy change. The horizontal red line indicates where health outcomes would be without any change in policy nor an increase in logged per capita social expenditure. Similarly, the horizontal axis displays the per cent difference in additional projected spending resulting from a one-standard-deviation increase in the policy as logged GDP per capita increases by half a standard deviation over time (approximately 11 years, based on past trends), compared to the same increase in logged GDP per capita without any policy change. Points to the right of the vertical axis indicate that the policy expansion is projected to increase per capita social spending levels beyond the average expected upward trajectory related to GDP growth (adding spending pressure), while points to the left of the vertical axis show policy expansions that are associated with lower-than-average spending growth (exhibiting spending moderation). Statistically insignificant coefficients at the 10% level ($p > 0.1$) enter the calculations as 0s and only policies with at least one significant coefficient in the child outcome regression are displayed.
Example: Increasing the share of taxes that are paid by the bottom 30% by one standard deviation (+3.5 p.p.) from the sample average when logged per capita social spending rises by 0.5 standard deviations from one standard deviation above its average level is predicted to reduce the share of children reporting excellent health by 0.8 p.p. and to increase the share of children reporting "fair" or "poor" health by 1.6 p.p. compared to the effect of raising social spending levels under the unchanged, average policy mix (no impact). At the same time, such an increase in the relative tax burden of the poorest 30% alongside GDP growth is not associated with any change in social spending pressure compared to the typically spending increase that accompanies a half-standard-deviation increase in logged GDP per capita (8.9%).
Source: OECD Secretariat calculations from regression estimates on pooled OECD countries; see Sections 4.2 and 3.3 "Assessing value for money" for a description of the methodology and Annex 4.C for the regression coefficients used in the calculations

Notes

[1] NEETs data are not available by socio-economic status.

[2] The indicators include spending on active labour market programmes (ALMP), ECEC enrolment among children aged 0-2 and 3-5, spending on ECEC, spending on health services, preventive and non-preventive healthcare spending, and other social spending provided in kind. Definitions of these indicators are provided in Chapter 3. Where relevant to the timing of the expected effects, the variables are lagged: ALMP spending is lagged by three years to reflect the time required for programmes to translate into employment outcomes; ECEC enrolment and spending variables are lagged to match the previous enrolment of the cohorts considered; and preventive healthcare spending is lagged by two to four years to reflect the time required for effects on adolescent health outcomes to materialise. Other social spending in kind refers to in-kind spending across incapacity-related, housing and other social policy areas.

[3] The indicators include the *volume of redistribution*, measured as equivalised net benefits received from public transfers (benefits net of taxes paid) by the average individual living in a working-age household, expressed as a percentage of GDP per capita; the *share of benefits received by the bottom 30%*, measuring public social security cash benefits received by working-age individuals in the bottom 30% of the post-transfer, equivalised household income distribution, per equivalent household member, as a share of benefits received by all working-age individuals; the *share of taxes paid by the bottom 30%*, defined analogously as the share of taxes paid by working-age individuals in the bottom 30% of the post-transfer, equivalised household income distribution; and the *share of cash transfers to families*, measured as the share of total social expenditure allocated in cash to families. Cash transfers to families are lagged by five years when the outcome is the NEET rate, reflecting the time elapsed since many of the individuals concerned were eligible for such benefits. Three additional indicators capture the share of total social expenditure provided in cash to children and their families during *early childhood (ages 0-5), middle childhood (ages 6-11) and adolescence (ages 12-17)*. Spending during early and middle childhood is lagged to capture exposure to benefits in previous years, while spending during adolescence is similarly lagged when estimating the NEET rate. For the benefit and tax distribution indicators, households are ranked according to their post-transfer equivalised income because of data availability. This may underestimate the redistributive effect of benefits or taxes where these themselves cause individuals to move into or out of the bottom 30% of the income distribution. [4] The tables in Annex 4.C display the regression estimates from the country-level panel analysis on educational outcomes as laid out in the previous section. In addition to time fixed effects, results are shown both with and without country fixed effects to analyse within-country associations as well as differences in levels across countries.

[5] In our sample, the between-country variance of the average logged primary education expenditure per student is nearly four times larger than the within-country variance and it is nearly ten times larger for logged secondary education expenditure per student.

[6] Annex 4.D provides complementary simulations that illustrate the value for money of social policies in supporting children's educational outcomes for countries at different levels of per capita social expenditure and GDP per capita.

[7] Results for the rates of NEETs among 15-29 year-olds yield no significant associations with the provision of ECEC 16 to 18 years ago, neither for enrolment rates at ages 3-5 nor spending shares on ECEC services. This may be a consequence of the large cohort of NEETs under consideration and the limited

available time series data on ECEC, which restricts the possibility to match youth outcomes to the characteristics of ECEC services these individuals might have experienced during their early years.

[8] A possible explanation of the absence of association found between spending on ALMPs and academic performance at age 15 and NEETs rates could be that ALMPs operate through improvements in parental employment and income stability, which help reduce severe material deprivation by alleviating immediate financial constraints and improving living conditions. However, these gains may not be sufficient on their own to translate into measurable improvements in more distal outcomes such as PISA performance, which are shaped by a broader set of factors and accumulate over a longer period. Educational outcomes depend not only on parents' labour market attachment, but also on the quality of schooling, family relationships, and the continuity and timing of support received throughout childhood. As a result, while ALMPs appear effective in reducing material hardship (see Chapter 3), their contribution to adolescent educational outcomes may be more indirect, gradual and difficult to detect empirically.

[9] These results are available on request.

[10] The impact of earlier cash benefits was not tested to due limitations in the available time series data, which prevent the construction of sufficiently long lags.

[11] Annex 4.D provides complementary simulations that illustrate the value for money of social policies in supporting children's health outcomes for countries at different levels of per capita social expenditure and GDP per capita.

Spending Better for Children through Social Policy

Spending better for children is a social imperative and a smart economic choice. Children growing up in poverty or disadvantage face poorer health, educational and labour-market outcomes over the life course, with costs for individuals and society that may add to existing pressures on public finances. The policy challenge is not simply how much to spend, but how to allocate and design social spending to improve child well-being while supporting fiscal sustainability.

Using a value-for-money framework, this report examines how the level, allocation and design of social spending affect child poverty, material deprivation, educational achievement and health, while considering implications for long-term social expenditure. It highlights the importance of coherent policy mixes rather than individual interventions. Employment-oriented policies, including Early Childhood Education and Care (ECEC), work-family reconciliation measures and Active Labour Market Policies (ALMPs), can strengthen family incomes and support children's development. Adequate and predictable income support remains essential, appearing particularly valuable when combined with accessible health, housing, education and childcare services that address broader sources of disadvantage. Sustained support throughout childhood is also important, from early intervention to continued investment in middle childhood and adolescence. Overall, better value for money comes from policy packages combining effectiveness, equity and fiscal sustainability.

PRINT ISBN 978-92-64-55183-1
PDF ISBN 978-92-64-45023-3