How Reliable Are Social Safety Nets in Situations of Acute Economic Need? Extended Estimates for 14 OECD Countries

Abstract

We present an empirical assessment of the accessibility and levels of 'safety-net' benefits. Complementing existing studies, which often adopt an institutional focus or compare legal entitlement rules, it employs a people-centred perspective, using data on cash support that people receive in practice. The approach is illustrated by comparing minimum-income benefits (MIB) and other non-contributory transfers across 14 OECD countries in Asia, Europe, North America and Oceania. Accessibility differs widely across countries and family circumstances. When out of work and in the bottom income decile, more than 4 out of 5 single-person households reported receiving MIB in Australia, France, and the United Kingdom, compared to 1 in 3 in Italy. In some countries, even very low earnings made benefit receipt unlikely, weakening financial work incentives. Typical benefit payouts to low-income claimants amounted to 15% of median household incomes or less in Greece, Korea, and the United States, but exceeded 40% in Belgium and the United Kingdom. Support from non-contributory transfers varied across groups, with countries variously focusing support on people with health problems (Italy) or on families with children (Germany, Greece, United States).

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How Reliable Are Social Safety Nets in Situations of Acute Economic Need? Extended Estimates for 14 OECD Countries

1. Introduction

Social protection systems employ a broad range of entitlement criteria. Workers in many OECD countries earn entitlements to first-tier earnings-replacement benefits through social contributions. Some groups, e.g., families with children or retirees, receive support regardless of income or past employment in some countries (universal benefits). In addition, households with limited resources may have access to means-tested minimum-income benefits (MIB). As "safety-net" benefits, a principal objective of MIB and other non-contributory transfers, is to prevent extreme hardship by establishing an income "floor" for those in situations of acute economic need. The accessibility of these benefits, and their levels, shape economic security and the well-being of the least-well off in society, and they are therefore key parameters of social policy.

Recent labour-market trends and international crises are reinforcing attention to MIB in the policy and research communities. The Future of Work debate has highlighted that some social protection systems and social insurance provisions are not well prepared for the faster pace of job reallocation that may accompany the adoption of new production technologies. For instance, in a majority of OECD countries, less than one third of jobseekers received unemployment benefits prior to the COVID-19 crisis (OECD, 2018[2]). In contributory support systems, support gaps not only represent an inequitable, and possibly regressive, treatment of workers based on their employment status and earnings capacity, but also challenge the financial sustainability of social protection provisions (OECD, 2019[4]). The COVID-19 pandemic and cost-of-living crisis have also further accentuated structural challenges facing social protection policies, including difficulties in maintaining adequate support levels during periods of high inflation (OECD, 2020[5]; Denk and Königs, 2022[6]; OECD, 2022[7]).

As non-contributory benefits, safety-net benefits are not linked to past employment or contribution patterns. MIB employ an income criterion as a central entitlement condition. They are means-tested and received by households with no other income sources. But they can also top up incomes of workers and recipients of other benefits, and sometimes provide (reduced) support to non-poor families. Examples are non-contributory cash transfers that cover specific expenses (notably means-tested housing benefits), or that are intended for specific groups (low-paid workers, lone parents, the sick or disabled, jobseekers with no or patchy past employment, pensioners). The overall support package that is available to low-income groups can therefore include numerous different programmes, often with different purposes, legal rules and claiming procedures. Programmes also differ markedly in terms of structure, administration, and delivery of income support (Gough et al., 1997[7]; Whiteford and Bradshaw, 2025[8]).

Although MIB are occasionally characterised as a minimum-income "guarantees", not all low-income individuals receive support, and the impact of existing benefit provisions on family incomes (and on poverty, inequality and work incentives) therefore depends crucially on their accessibility in practice (Immervoll, 2010[8]). In a context of volatile and uncertain labour markets and household incomes, careful and continuous monitoring of the effectiveness and reach of safety-net provisions is a necessary input into an evidence-based policy process. Legal provisions, such as statutory benefit levels, provide important policy indicators, but they are not sufficient for assessing whether last-resort benefits meet their objectives. Entitlement conditions, such as the strictness of income and asset tests, may preclude access for some households with

support needs. In addition, stigma, information gaps, low benefit amounts, the complexity of claiming process and behavioural requirements, such as active job search, may make otherwise eligible households less likely to apply for support in the first place (Bargain, Immervoll and Viitamäki, 2010[9]; Ko and Moffitt, 2024[10]; OECD, 2024[11]; Immervoll and Knotz, 2018[12]). The implementation of legal regulations or government guidelines also vary over time and across countries, regions and groups of claimants (e.g. if budgetary or administrative constraints hinder a timely assessment of benefit claims). Finally, observed patterns of benefit receipt depend on support needs and on other characteristics of low-resource households, and these vary across countries as well as over time.

This paper implements an empirical method for monitoring and comparing the accessibility and levels of non-contributory transfers using data on de-facto benefit receipt. It focuses on working-age individuals and their families ("working-age households") and reports both the likelihood of benefit receipt and the expected benefit amounts. The results are comparable indicators of benefit accessibility and payment levels for specific policy-relevant household types (or "vignettes"). They translate empirically observed patterns of benefit receipt into quantitative indicators of de-facto benefit receipt in different household circumstances. As such, the approach consolidates the full heterogeneity of available household-level data into consistent metrics of benefit accessibility and levels. However, it is descriptive and does not seek to establish causality between household characteristics, behaviour, and benefit receipt.[1]

The study covers fourteen OECD countries on four continents, with very different social-protection architectures, and for which good-quality household data were available: Austria, Australia, Belgium, Czech Republic, France, Germany, Greece, Italy, Korea, Portugal, Slovak Republic, Spain, the United Kingdom and the United States. It adopts the perspective of households facing economic difficulties, with no or very limited access to market incomes or to contributory benefits. A 'people-centred' approach based on granular micro-data complements related studies of safety-net programmes and MIB that provide comparisons of selected "model" families, spending levels, legal parameters or broader institutional and political mechanisms (Bahle, Hubl and Pfeifer, 2011[14]; Immervoll, 2012[15]; Marchal and Marx, 2024[16]; Gough et al., 1997[7]; Whiteford and Bradshaw, 2025[8]).

The paper proceeds as follows. Section 2 provides an overview of the reach of MIB and situates non-contributory safety nets in the context of counties' broader support provisions for working-age individuals and their families. Section 3 presents a statistical model that allows quantifying and comparing benefit accessibility and generosity across populations and over time. Section 4 presents results for selected household circumstances. Section 5 concludes.

2. Income assistance in practice – support needs, targeting, benefit receipt

As context for a comparative empirical study of MIB receipt patterns, this section compares poverty risks among working-age households, the incidence of support payments across income groups, and the overall reach of MIB in terms of total recipient numbers.

Who is facing situations of acute economic need?

In a comparative setting, commonly used measures of relative poverty are a necessary backdrop to discussions of acute economic need and of the potential role of MIB in relieving it. According to one commonly used measure, one in ten people living in working-age households may be

[1] Being descriptive, it also sidesteps the methodological challenges of feedback mechanisms ("endogeneity") between benefit receipt and household behaviour.

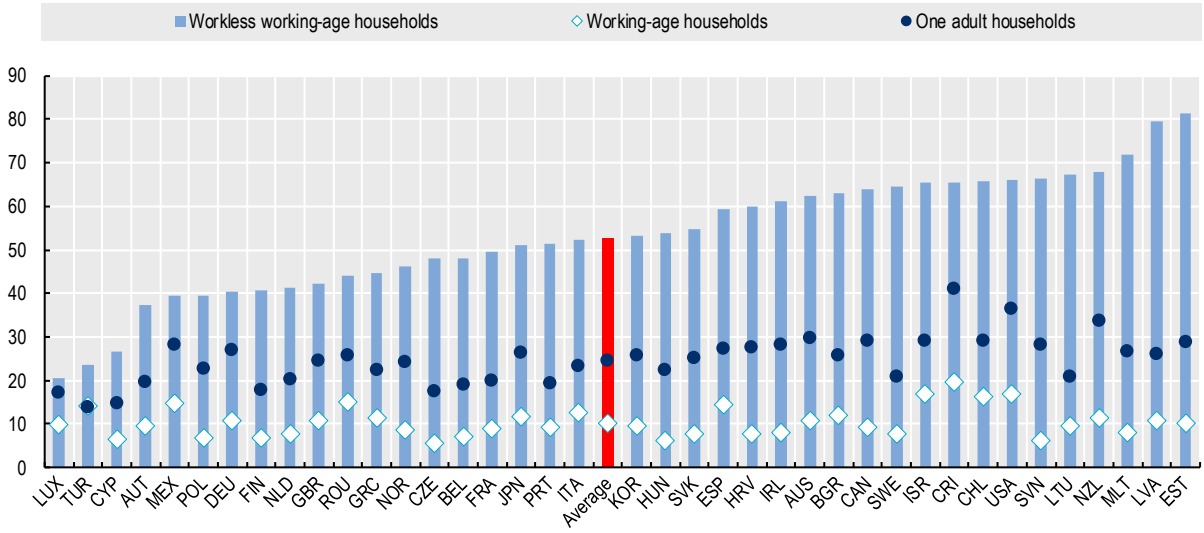
classified as income-poor across OECD countries on average, with disposable income below half the national median (Figure 1).

Poverty risks are much higher for some household types, such as one-adult households, including lone parents (poverty rates of just under 30% on average across OECD countries), and especially workless households (51%). Such high rates of economic hardship suggest that, for some groups, benefits may be very low or entirely inaccessible. Indeed, despite well-developed unemployment insurance and other out-of-work benefits in many countries, jobless people may lack the necessary contribution history, may have exhausted their entitlements or they may not be eligible for other reasons (such as strict job-search obligations or related activation requirements). Across 24 OECD countries, only one in three jobseekers received unemployment benefits prior to the COVID pandemic (OECD, 2023[3]; OECD, 2018[16]).

For those with reduced work capacity due to longer-term health problems, access to disability benefits can be limited as well. For instance, across 26 EU countries, 55% of those with a severe chronic illness that hampers their daily activities did not receive disability related benefits in 2018 (MacDonald, Prinz and Immervoll, 2020[17]). For some recipients of such transfers, e.g., those living in larger households, entitlements may not be sufficient to prevent relative income poverty. In all these situations, safety-net benefits have a crucial role in maintaining socially acceptable living standards, either as a primary income source, or as a complementary support measure that tops up low incomes from employment or from social insurance programmes.

Figure 1. Relative poverty rates after taxes and transfers

Working-age households, by household type, in %, early 2020s



Note: Share of persons living in working-age households with equivalised disposable income below 50% of the national median. Workless households are those without any income from employment or self-employment throughout the year. One-adult households include lone parents. Categories are not exclusive. Reference periods are as follows. Latest data: 2020 (AUS, DEU, NZL), 2021 (AUT, BEL, BGR, CAN, CYP, CZE, ESP, EST, FRA, GBR, GRC, HRV, HUN, IRL, ISR, ITA, JPN, LTU, LUX, MLT, POL, PRT, ROU, SVK, SVN, TUR); 2022 (CHL, FIN, KOR, LVA, MEX, NLD, NOR, SWE, USA); 2023 (CRI). Pre-COVID: 2017 (ISL); 2019 (DNK). Poverty rates among working-age households for years prior to the COVID-19 pandemic (not shown) are very close to those for the early 2020s.
Source: OECD Income Distribution Database, version 11th of July 2024, http://oe.cd/idd.

What systems are in place to help those in urgent need?

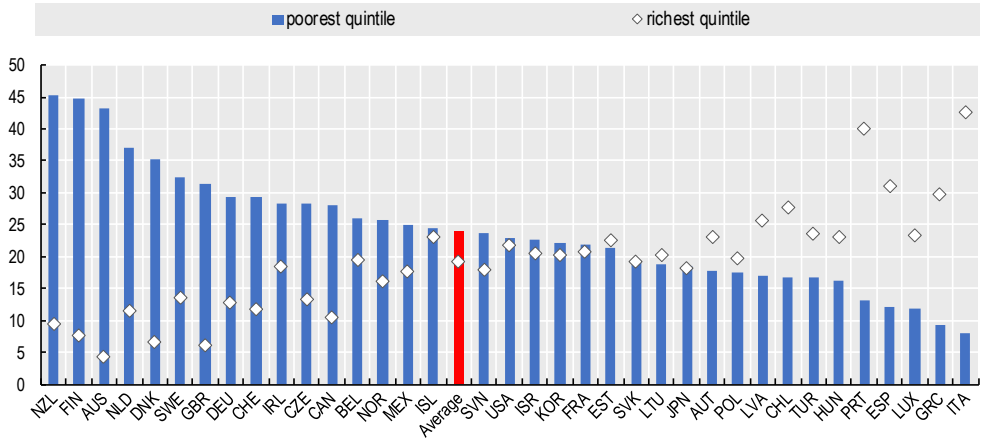
Income-support strategies and policy setups differ significantly across countries. This reflects policy institutions and traditions, but also different choices for balancing the various objectives of social protection – such as risk sharing, income smoothing over time, inequality reduction and poverty alleviation. Some countries rely strongly on means-tested benefits for working-age support. With tightly income-targeted transfers in New Zealand and Australia, households with income in the bottom 20% received well above 40% of total working-age transfers, while less than 10% went to the top quintile (Figure 2). The share of cash transfers going to low-income families was also high in Ireland, the United Kingdom, as well as in Nordic countries and in some parts of continental Europe.

In other countries, low-income households received much smaller shares of overall transfer spending. In fact, in several OECD countries, transfer spending in the top quintile was *higher* than in the bottom quintile group. In Italy, as much as 43% of all working age benefits went to the top 20%, and only 8% to the bottom income quintile. Incomplete coverage is one reason for low shares of support going to low-income groups in southern European countries. In addition, not all social transfers are primarily designed to redistribute from rich to poor. Significant benefit receipt among higher-income groups reflects entitlements to earnings-related transfers that redistribute little or not at all (including early retirement benefits, see figure notes), and that require contribution histories that low-income groups often do not achieve.

For several countries, Figure 2 points to remarkably similar shares of benefit payments going to low-income and high-income groups (e.g. Estonia, France, Iceland, Israel, Japan, Korea, Lithuania, Slovak Republic, United States). These countries use "layered" systems that combine insurance-based out-of-work benefits, with MIB as lower-level safety nets, and sometimes with universal support for families with children.

Figure 2. Benefit coverage can be patchy and support is not always targeted to the poor

Share of total cash transfers received by working-age persons in low and high-income households, pre-COVID (at or before 2019)



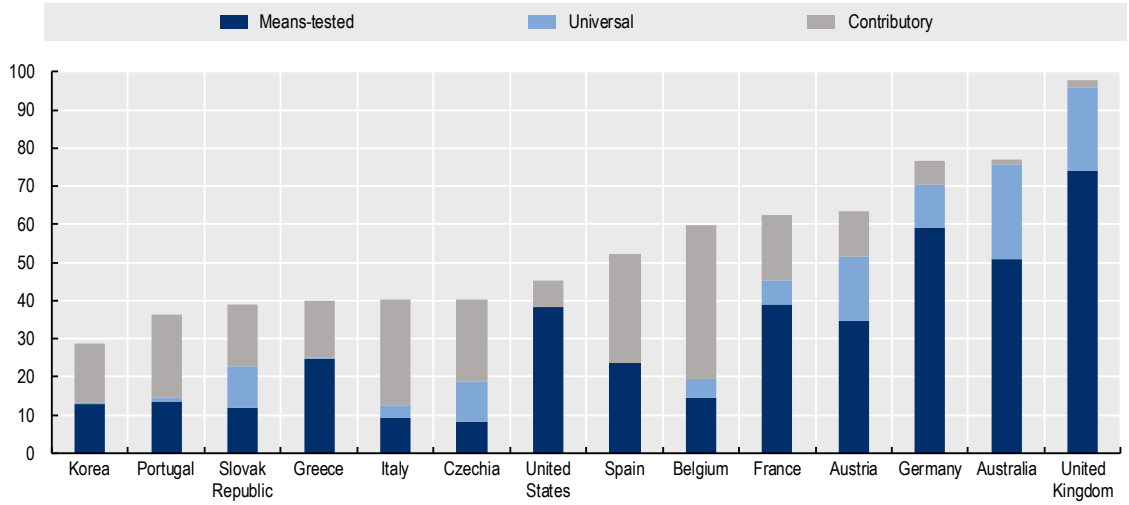
Note: All individuals living in working-age households, defined here as those headed by somebody aged 64 or below. In some countries, transfers therefore include significant amounts early retirement benefits paid to under-65s, and equivalent transfers that can act as de-facto early-retirement benefits for some groups, such as long-term unemployment or incapacity benefits. Income quintiles refer to income before benefit payments and taxes.
Source: Calculations based on the OECD Income Distribution Database, adapted from (OECD, 2012[18]) and (OECD, 2017[19]).

The relative importance of the *insurance* and the *assistance* functions in a country's social protection system shapes the circumstances of households seeking support. Where insurance-based programmes provide significant income support for many low-income households (e.g. Belgium, Spain), MIB are likely to be narrowly targeted to comparatively small numbers of disadvantaged households (such as long-term unemployed, including those who do not qualify for unemployment insurance benefits in the first place). In countries where insurance benefits play less of a role (e.g. Australia or the United Kingdom), MIB can be expected to reach a much larger share of out-of-work individuals, including also short-term unemployed with comparatively good re-employment prospects.

The resulting entitlement patterns are illustrated in Figure 3. In Austria, Belgium and France, public benefits made up around 60% of the total incomes of households in the bottom income decile (deciles measured before benefits). The underlying targeting mechanisms are very different, however. The support package in Austria (ca. 80%) and France (ca. 70%) consisted mostly of means-tested and universal support. By contrast, in Belgium contributory benefits accounted for two thirds of the support package available to households in the bottom income group. Public benefit payments in the United Kingdom made up nearly 100% of the income in the bottom income decile. Insurance-based benefits were quantitatively negligible in the United Kingdom, and in Australia. In the United States, various last-resort benefits make up the bulk of benefit spending on the poorest households, implying that many do not have the contribution history to qualify for insurance programmes, notably unemployment compensation.[2] Means-tested benefits in the United States, and also in Germany and Greece, made up a relatively small share of total transfer spending (see Annex A), but they nevertheless dominated support going to the lowest-income households.

Figure 3. In some countries, low-income groups depend on safety-net benefits for most of their income

Share of benefits in total household incomes in the bottom income decile, by entitlement criterion, pre-COVID (at or before 2019)



[2] See (OECD, 2023[35]), Figure 1.2, for breakdowns by programme. The main ones are nutritional assistance (Supplemental Nutrition Assistance Program, SNAP, and Special Supplemental Assistance Program for Women, Infants and Children, WIC), as well as disability benefit Supplemental Security Income (SSI), state-level General Assistance (GA), and Temporary Assistance for Needy Families, TANF.

Note: Working-age households. Income decile refers to income before benefit payments. Countries are ranked by the share of working-age benefits in total gross household incomes. Benefits that are both contributory and means-tested (e.g. the *Notstandshilfe* unemployment assistance programme in Austria) are classified as contributory.
Source: EU-SILC (EU statistics on income and living conditions, 2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (German Socio-Economic Panel, 2018 wave) for Germany, KLIPS (Korean Labor and Income Panel Study, 2019 wave) for Korea, HILDA (The Household, Income and Labour Dynamics in Australia Survey, 2018 wave) for Australia and SIPP (Survey of Income and Program Participation, 2020 wave) for the United States.

How many people receive minimum-income benefits?

In recent years, and on average across countries, less than one third of "working-age" households with income below a relative poverty line received support from programmes classified as MIB. Figure 4 shows the number of households who received payments from the main MIB programme in 2018, expressed in percent of the number of poor households in each country.[3] For the reasons discussed above, and although MIB are targeted to low-income households, not all income-poor households receive support. At the same time, MIB may be available to non-poor households. For some claimant groups means tests may, by design, permit incomes somewhat above commonly used poverty thresholds. For instance, benefits are sometimes, but not always, phased out gradually against income to strengthen work incentives. In addition, some families experience short spells of poverty, such that their incomes are below the poverty line while they receive an MIB but not when considering incomes over the year as a whole. Such simple ratios of recipient totals and the size of a population group (such as the poor) therefore do not correspond fully to the coverage rate of that population group, and they are sometimes referred to as "pseudo" coverage rates.

Recipient numbers in the Netherlands were close to the number of income-poor households and they exceeded them in Germany, Japan, France, Finland, United States and Slovenia. The primary MIB programmes in these countries are therefore sizeable and cover a large part of the population. For instance, following reforms that started in the late 1990s and which increased income ceilings in many states, the Supplemental Nutrition Assistance Program (SNAP, previously "Food Stamps") programme grew substantially and covered around 1/8 of the US population prior to the COVID-19 pandemic (Schanzenbach, 2023[20]; Giefer, King and Roth, 2022[21]), as well as post-pandemic.[4]

In other countries, the ratios are 60% or lower, and below 20% in Latvia, Estonia and Israel. Italy extended minimum-income support in 2019.[5] Spain introduced a national minimum income programme in June 2020 (*Ingreso Mínimo Vital*) but the 2018 data reported in Figure 4 relates mostly to pre-reform *Rentas Mínimas* programme, which is provided by regions, with varying entitlement rules and benefit amounts.

[3] In most countries, the main MIB programme was either the main social assistance benefit (e.g. the *Bedarfsorientierte Mindestsicherung* in Austria), or a jobseeker benefit that is means-tested and not contingent on past employment histories (e.g. *Newstart* in Australia, or the Unemployment Benefit II in Germany. In some countries, these benefits also top up low incomes from work or other (insurance-based or universal) benefits, e.g. Unemployment Benefit II in Germany. In Spain, the *Ingreso Mínimo Vital* was introduced in 2020 and is not part of this analysis.

[4] According to USDA data, SNAP served an average of more than 42 million participants in fiscal year 2023, accounting for more than 12% of U.S. residents, with 40% of benefits for children under age 18. The headline recipient total in the United States comprises a significant share with very low benefit entitlements, however, including those with some income from other sources (Han, 2020[63]).

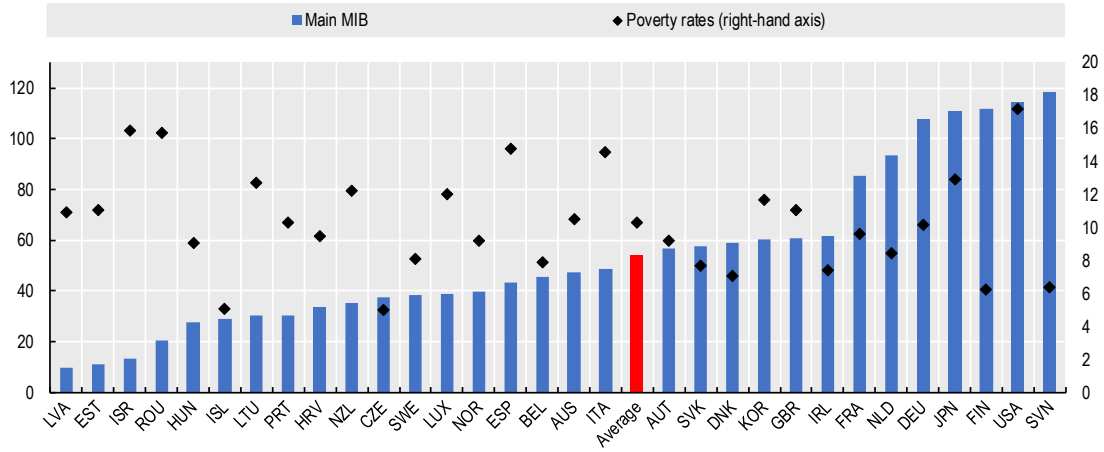
[5] On recent reforms in Greece and Italy, see Bulman et al., (2019[52]) and OECD (2020[40]).

Core MIB programmes, such as those shown in Figure 4, provide income support based on households' overall socio-economic situations, with means-testing a principal entitlement criterion. They may or may not include support payments that cover specific additional needs of low-income households, for example support for specific groups (such as families with children, lone parents, people with disabilities), allowances for working MIB claimants, additional payments to cover housing costs, or other income support provided in the form of non-contributory supplements. Where the main MIB programme does not include such support, it may nevertheless be available in the form of separate means-tested or universal programmes, such as family, disability, in-work or housing benefits.[6]

To be informative, comparisons of MIB support packages across countries therefore require a broader look at the overall benefit packages that are available to those in acute economic need, accounting for the full range of safety-net programmes. The next section presents an approach for comparing and monitoring overall support packages based on detailed household micro-data.

Figure 4. Minimum-income benefits: What role in poverty-alleviation strategies?

MIB recipients, in % of income-poor working-age households, 2018



Note: "Income poor" refers to households with income below 50% of the national median. Recipient numbers refer to the "main" MIB in each country plus specific lone-parent benefits (in Ireland, New Zealand, Norway, and the United Kingdom) and non-contributory unemployment benefits (in Australia, Denmark, Germany, Ireland, Spain and the United Kingdom). Internationally comparable recipient numbers were not available for Canada, Greece, Poland, Mexico and Switzerland. National minimum-income programmes in several countries saw considerable reforms after the reference year shown in the figure, see also footnote 5. The denominator for Australia and Ireland is poor working-age individuals, as main MIBs are awarded at individual level. The ratio of benefit recipients to income-poor households can exceed 100% if recipients include large numbers of non-poor households. Lump-sum payments, grants, supplements and refundable tax credits are not included.
Source: OECD SOCR database (www.oecd.org/social/recipients) and OECD Income Distribution Database (http://oe.cd/idd).

3. A statistical model of benefit accessibility and support levels

This section develops a simple statistical model of benefit receipt. Its aim is to summarise the complex patterns of observed benefit receipt using straightforward indicators of support *accessibility* and *generosity*. To make the resulting metrics informative and transparent in a

[6] For example, in the United States more than 70% of families receiving SNAP benefits also received support from at least one other transfer programme (Moffitt, 2015[62]).

comparative setting, the model accounts for key policy levers and the characteristics of low-income households, which both vary substantially across countries.

In a nutshell, the approach seeks to quantify the support that households receive in specific policy-relevant circumstances (e.g., for a certain income level, labour-market situation and family structure). It proceeds in two stages. A first step estimates the probability of receiving safety-net benefits at the household level, and, conditional on receipt, the expected size of the benefit package. In a second step, the estimated statistical relationships are then used for inference on benefit receipt in concrete household circumstances ("vignettes").

The approach can be implemented using data across different periods, e.g., to monitor the accessibility and levels of safety-net benefits over time. In this paper, all results refer to 2018 incomes (2015 in Belgium and the United Kingdom, 2017 in Australia and 2019 in Korea and the United States) and therefore do not account for any reforms implemented in later periods. The data are from the 2019 waves of the European Union Statistics of Income and Living Conditions (EU SILC) for eight EU countries and 2016 wave for Belgium and the United Kingdom, the German Socioeconomic Panel (GSOEP, 2018 wave), the University of Melbourne Household Income and Labour Dynamics Australia survey (HILDA, 2018 wave) for Australia, the Korean Labour and Income Panel Study of the Korean Labour Institute (KLIPS, 2020 wave) for Korea, and the Survey of Income and Program Participation (SIPP, 2020 wave) for the United States.[7]

The main variable of interest is the value of households' *total package of non-contributory cash benefits*. This corresponds to the right-hand column in Table 1 and includes MIB and other non-contributory transfers (e.g. social assistance, in-work, housing and other means-tested benefits that do not depend on past employment) and any universal transfers (in practice child benefits). "Near-cash" benefits are included in the United States, where food-assistance vouchers form a crucial and sizeable element of social safety nets (see footnote 2). Available household data do not systematically record the value of in-kind benefits, however, and they are therefore not part of the analysis.[8] As noted above, the broad definition reflects the fact that countries provide support for low-income families through a number of different channels and programmes. To arrive at the total package of non-contributory benefits for each household, we either categorise the different benefit programmes by entitlement criteria (such as means-testing) according to applicable statutory rules (Australia, Germany and Korea and the United States), or adopted categories (such as "means-tested" or "contributory") that micro-data sources provide for benefit variables (all other countries). See Annex B for details.

[7] For Korea, KLIPS was chosen because its content and structure is broadly comparable with the data sources for other countries, and because it has been the dataset of choice for numerous studies relating to low-income households. An interesting alternative data sources for future work is the Korea Welfare Panel Study (KOWEPS), which strongly oversamples low-income households.

[8] In-kind benefits, such as subsidised housing, or the public provision of child- or healthcare significantly contribute to poverty alleviation and redistribution in many countries (see, e.g., Förster and Verbist (2012[58]) but information on the receipt of in-kind transfers is not systematically recorded in the survey data used in this paper and, where it is, converting in-kind benefits into a cash-based metric that is comparable across countries is difficult and can be arbitrary.

Table 1. Working-age benefits by entitlement criterion

	Conditional on past contributions or past employment	Available irrespective of past contributions or past employment
Means-tested	E.g. Unemployment assistance in Austria	E.g. social assistance, in-work benefits, housing benefits, but also some unemployment assistance programmes (Australia, Germany, UK) and means-tested incapacity, family and lone-parent benefits
Not means-tested	E.g. Unemployment insurance benefits, disability pensions, sickness benefits	Universal benefits, in practice: child benefits

Source: Adapted from (Immervoll, Jenkins and Königs, 2015[22]).

Step 1: Regression models for benefit receipt and entitlements

The dependent ("left-hand") variable is total non-contributory cash benefits *received over the course of an entire year* (net of any old age and survivors' benefits) by households with at least one non-retired working-age member (age group 18 to 64 years old, "working-age household").[9] It therefore accounts for both the average monthly benefit level and the duration of receipt during a 12-month period. A notable advantage of using a broader benefit concept (all non-contributory cash benefits) and a longer time period (12 months) is that this reduces the scope of known measurement errors in surveys, such as misclassification, recall bias or "forward telescoping" bias (Bruckmeier, Riphahn and Wiemers, 2020[23]).

Independent ("right-hand") variables include the following key determinants of benefit receipt: family composition (one-adult household, couple with children etc.), household income (other than non-contributory benefits), expressed in decile groups of the national income distribution), work intensity and volatility during the year, housing tenure and rent paid (important for housing benefits, as they tend to support rent payments), as well as health status.[10] Information on household assets is incomplete and unreliable in most of the survey data used and is therefore not systematically part of the estimates. The model does, however, allow to control for homeownership (through the housing-tenure variable).

Separate models are estimated for *benefit receipt* (yes/no, stage-1 regression) and *benefit amounts* (estimated only on observations with positive benefits, stage-2 regression). We use a generalized Hurdle approach, as the process that determines whether a person receives social benefits is not necessarily the same as the process that determines the amount received (Wooldridge, 2010[24]; Cragg, 1971[25]).

Effective sample sizes range from about 4,000 households in Australia, Austria, Belgium and Slovak Republic to more than 13,000 in Italy and the United States. Annex A presents further information about the selected samples, while Annex B contains details on model selection and a full list of independent variables.

[9] Non-contributory social transfers in the United Kingdom (recorded in the data) and the United States (partly imputed, see notes to Figure 5) include significant tax credits that are partly refundable and therefore available to low-income groups. Tax credits are unlikely to be reported as social transfers in other countries (see Annex B), or there is evidence of underreporting (see footnote 13 for Korea).

[10] Household income before any non-contributory cash benefits includes: gross labour income, unearned income (capital income, rents etc.), contributory benefits, and all old-age and survivors' benefits.

Step 2: Inference about benefit receipt in specific circumstances ("vignettes")

For several reasons, the coefficients of the model estimates in Step 1 are difficult to compare and interpret across countries.[11] To facilitate like-with-like comparisons, and identification of relevant policy mechanisms, we define a range of "vignettes", i.e. combinations of characteristics and circumstances of hypothetical but policy-relevant households (e.g. a workless adult living alone, a couple with children with low work intensity etc.). Vignettes are created by fixing values of one or several independent variables, while allowing other variables to assume the sample mean. For each vignette, marginal effects are then computed at the resulting vector of independent variables. This allows summarising the entire vector of estimated parameters into a single value using the same metric as the dependent variable (in this case, the probability of receipt and the benefit amount respectively).

Presenting benefit entitlements in this way has similarities with traditional "model-family" approaches, pioneered by (OECD, 1998[26]; 2007[27]), (Immervoll et al., 2001[28]) and (Bradshaw and Finch, 2002[29]), and frequently used in comparative research and policy analysis. However, model-family calculations and tax-benefit microsimulation typically apply statutory benefit rules for specific family circumstances, resulting in theoretical entitlements. By contrast, the results presented here are estimates of de-facto entitlements, derived from a statistical model and detailed survey information on reported benefit receipt.

Each vignette yields two key results: A probability of receiving non-contributory benefits (stage one) and the expected benefit amount for households receiving benefits (stage two), along with measures of statistical significance to facilitate the interpretation of observed gaps.

Scope and interpretation of model results

Several points are important to note when interpreting results from the estimated models. First, the characteristics of the benefit system itself may influence household circumstances and behaviour, e.g. through work incentives. As these effects vary across countries, they shape the population of households in urgent need to some extent. The aim of the indicators presented here is to capture how well safety-net benefits protect households "in acute economic need", irrespective of the mechanisms that shape the circumstances of this population.

Second, and more generally, the approach is entirely descriptive and does not claim or seek to establish causality. Results are indicators of the probability of benefit receipt given certain observable household characteristics that typically affect benefit entitlement. They therefore do not rely on the interpretation of individual parameters, but on the joint correlation of the independent variables with benefit receipt. For individual households, benefit receipt may well be driven by unobservable characteristics that are correlated with independent variables in this model – e.g. for single parents, a lack of affordable childcare may simultaneously "cause" reduced work-intensity and an MIB claim.

Third, in the context of this paper, the explanatory power of the model's independent variables is strong, suggesting that it does include the most important drivers of benefit receipt (see Annex B). Nevertheless, omitted variable bias can be an issue with any regression model, potentially biasing model predictions (e.g., if the relevance of omitted variables varies across countries).

Finally, as for any comparison across different samples, estimated variance and, therefore, statistical significance, depends on the empirical distribution. This has consequences for the interpretation of observed gaps between different vignettes. The variance of marginal effects

[11] A direct interpretation of the estimated coefficients is complicated by interaction effects, categorical variables and other nonlinear functional forms. Significant interpretation difficulties arise also in nonlinear models such as logistic regression and the raw coefficients are often not of immediate interest.

increases as observation numbers for the vignette decline. The estimated receipt probabilities of two vignettes are statistically significant from each other if their chosen confidence intervals (e.g. 90%) do not overlap. In practice, estimated expected values (in receipt probabilities or in benefit amounts) may differ quite substantially between two vignettes, but for countries and vignettes with smaller observation numbers, these differences may remain statistically insignificant.

4. Results

This section discusses patterns of benefit accessibility and generosity for situations of acute economic need, focusing on household situations that tend to be associated with elevated poverty risks (see Section 2). As a baseline, it first presents results for a workless adult living alone with very low income (the bottom 10%) from market sources and contributory social benefits. The characteristics of this baseline vignette are then changed one at a time, to explore how accessibility and benefit levels vary across specific groups, such as individuals with health problems, low-wage part-time workers, and families with children.

Baseline results: workless, able-bodied, low-income individual living alone

The simple case of a workless low-income adult living alone is a useful starting point for the cross-country comparison.[12] Indeed, with no access to incomes from partners or other adults, workless single-person households face considerable poverty risks, as shown in Section 2, and they are therefore an important target group for safety-net programmes. "Workless" is defined as work intensities under 10% of potential working hours (consistent with working up to four hours per week throughout the year, or up to six weeks of full-time work). "Low-income" is defined as the bottom 10% of the income distribution before accounting for any non-contributory benefits. These households often live well below poverty thresholds that are commonly used in comparative policy analysis, including the poverty threshold used by the OECD (50% of median household income). It is worth keeping in mind, though, that not all of them necessarily suffer from material deprivation (EUROSTAT, 2023[30]).

Across the 14 countries in the sample, workless, low-income households in Italy and Portugal were least likely to receive non-contributory benefits, with receipt probabilities below 40% (Figure 5, Panel A, left-hand figure). For Italy, this share was up significantly from 2016 (Hyee et al., 2020[1]) before the introduction of the *Reddito di cittadinanza* in 2019 (see also footnote 5). But this MIB programme is now slated to be abolished in 2023 (Jessoula, Natili and Raitano, 2019[31]; Baldini and Toso, 2023[32]). At around 20% of median incomes, the means test of the MIB in Portugal operates one of the lowest income ceilings for single-person households in the OECD area (see Annex C). Even with very low incomes, some households are not eligible as a result. In addition, social benefits are very fragmented in Portugal, making them difficult to understand for potential claimants and contributing to low take-up: More than 20 different working-age programmes co-exist, often with very different entitlement rules and application procedures (OECD, 2024[33]).

For Belgium, results point to coverage rates for single-person households higher than in most of the fourteen countries, but considerably lower than, e.g., Germany. Additional analysis (not reported) shows roughly half of Belgian one-adult households in the poorest decile have incomes above the applicable eligibility ceiling for social assistance receipt. This reflects a comparatively wide reach of unemployment benefits, which jobseekers may, in principle, receive indefinitely.

[12] In practice, we define, "workless" as a work-intensity of under 10% of potential working hours – this is consistent with working up to four hours per week throughout the year, or up to six weeks of full-time work.

The "space" for MIB to operate is therefore narrower than in other countries, consisting of groups who fall "through the cracks" of social insurance transfers (see Figure 3, (OECD, 2023[34])). These are often households in complex socio-economic circumstances (e.g., with multiple barriers), whose claims may be difficult to assess, and who may be less likely to actively engage with benefit bureaucracies in the first place.

The patterns and mechanisms contrast with estimated safety-net coverage among low-income households in the United States, which is notably higher than in some other countries, despite comparatively low overall spending on social benefits. The implied coverage rate of just under 60% is estimated with a high degree of statistical significance and reflects entitlement extensions since the late 1990s (see Section 2). But it also reflects the limited reach of income support programmes other than targeted safety nets. Indeed, means-tested transfers, including notably the SNAP programme, account for nearly half of household income in the bottom income decile (Figure 3). By contrast, prior to the COVID pandemic, contribution-based unemployment benefits were received by only 12% of all US jobseekers, much lower than in other OECD countries, e.g. about 30% in the United Kingdom, Spain or Australia, and 60% or more in Austria and Germany (OECD, 2023[35]).

The central estimate of receipt probabilities is close to 50% in Korea and Spain. In Korea, the means-test for the main MIB programme (National Basic Livelihood Security, NBLS) included a support obligation for parents and children of claimants even if they did not live in the same household, resulting in low recipient numbers (Sohn, 2019[36]). This support obligation was gradually phased out between 2017 and 2021 (OECD, 2023[37]). While this was associated with a notable 55% rise in the number of benefit recipients, the increase was mainly driven by elderly recipients, who are outside the "working-age" scope of the present paper (Joint Ministries, 2023[38]).[13] For Spain, results do not capture the introduction of the new national MIB in 2020 (OECD, 2022[39]). Prior to that reform, social assistance recipient numbers in Spain were low, but there is significant regional variation; for instance, not all regions operate housing benefits (OECD, 2020[40]).

At around 90%, MIB receipt probabilities for the single-person vignette were highest in France, followed by United Kingdom and, with significant overlap of confidence intervals, Australia, Austria, and Germany. The continental European countries in this group all provide "layered" benefit systems that combine insurance-based support with last-resort benefits, while Australia and the United Kingdom both use low income as the central entitlement criterion. The results illustrate that, while the underlying policy setups are very different, they can achieve equally high MIB receipt probabilities in the bottom income decile.

The visibility of MIB as a central benefit programme in Australia and the UK, and the fact that low-income households there have little other income to draw on, is also consistent with findings of comparatively low rates of MIB non-take-up (Ko and Moffitt, 2024[10]). For instance, the Department for Work and Pensions estimates that in 2017/18, 87% of entitled households claimed housing benefits, and 88% claimed means-tested lone-parent and disability benefits

[13] Means-tested tax credits for low-income working households in Korea (Earned Income Tax Credit, EITC and Child Tax Credit, CTC) also increased substantially in both recipient numbers and expenditures, following the easing of age and income requirements in 2019 (OECD, 2021[60]). As in other countries, receipt of in-work tax credits in Korea may be somewhat underestimated in the survey data. There is in fact significant evidence of under-reporting of tax credits in the KLIPS data overall, e.g. KLIPS reports 706,146 households in receipt of these tax credits in 2019, compared to 4,946,410 reported by the National Tax Service, see also (Nam, 2017[56]). The effect of this on the measure of total MIB is difficult to assess, but it may be limited for single-person households in the first income decile (CTC are not relevant for them, while EITC entitlements are small or zero for the lowest-income groups as 63% of single-person households in the first decile do not have any in-work earnings).

(Department for Work and Pensions, 2020[41]).[14] For other countries, take-up rates of 60% below are not uncommon, e.g. for Social Assistance in Finland (50-60%, late 1990s to early 2000s), France (36%, 2010), or Slovak Republic (21%, 2009). See also Bargain, Immervoll and Viitamäki (2010[9]), (OECD, 2024[11])and Eurofound (2015[42]).

In all countries, average benefit *levels* were significantly lower than commonly-used relative poverty thresholds. For those receiving support, expected safety-net benefit amounts for single-person households ranged from 7% of median household income in the United States, to 40% or more in Belgium and the United Kingdom (Figure 5, Panel A, right-hand figure). Across countries, we find no evidence of a major trade-off between accessibility and generosity. In Germany, receipt probabilities were relatively high, while benefit amounts were close to the country average. In the United States, benefit accessibility was in line with the country average, but benefit levels were the lowest. Other countries combined broad access with higher benefit levels (the United Kingdom, Austria and France). In Italy, Korea and Portugal, receipt probabilities and benefit amounts were both low.

Empirically observed benefit amounts are the result of the interplay between legal entitlement rules, the implementation of these rules, and the circumstances and behaviours of households claiming support. Maximum legal entitlements for households without any other resources differ across countries and frequently also vary sub-nationally between regions (see Annex C for a summary of statutory benefit amounts, drawing on the OECD Tax-Benefit model TaxBEN). In practice, and in addition to statutory rules, numerous other factors affect the size of benefit pay-outs: The implementation of statutory rules can differ between countries as well as regionally, e.g., if legal provisions leave some room for discretion, or if the claiming process is time consuming, resulting in delays and a possible timing mismatch between household need and subsequent receipt of support. Benefit sanctions (e.g. if claimants do not comply with job-search requirements) can also reduce empirically observed benefit amounts (Immervoll and Knotz, 2018[12]).

And importantly, even among the poorest 10% of the population, not all families will have the same *need* for support. Some households may claim benefits for only part of the year (e.g. if claimants move onto MIB after exhausting their entitlement to first-tier benefits, or if time lags delay entitlements for those experiencing low-income spells). Others may receive support during the entire year but use it to top up modest or occasional incomes from other sources (such as sporadic, part-time employment). Even for those without any other cash incomes, needs (and resulting entitlement to cash support) may be reduced if they receive in-kind support (e.g. social housing).

Closer inspection suggests that, for many low-income households, benefit pay-outs below maximum statutory entitlements are indeed often a direct result of applicable means tests and associated benefit reductions. In Austria, Czechia, France, Portugal, Spain and the United States, about half of all households in the bottom decile have some labour income during the course of the year. Australia and the United Kingdom show a lower incidence of in-work earnings among the bottom decile, at about one third (see Annex A).[15]

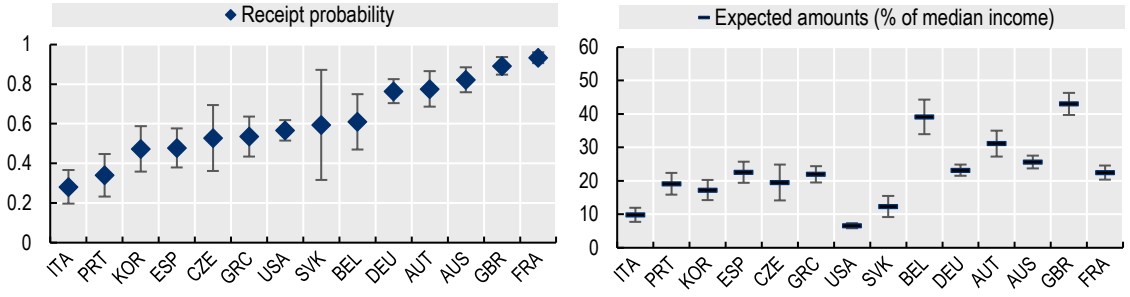
[14] Adjusting for the underreporting of benefit receipt leads to even higher take-up rates (Resolution Foundation, 2018[54]). At the time of writing, take-up statistics for the Universal Credit were not published by the Department of Work and Pensions. The same is true for income-tested Job-seeker's Allowance payments that continue to operate alongside the Universal Credit during the roll-out phase.

[15] Lower expected benefit levels in Australia as compared to the United Kingdom are at least partly a result of lower statutory entitlements in Australia, see Annex C.

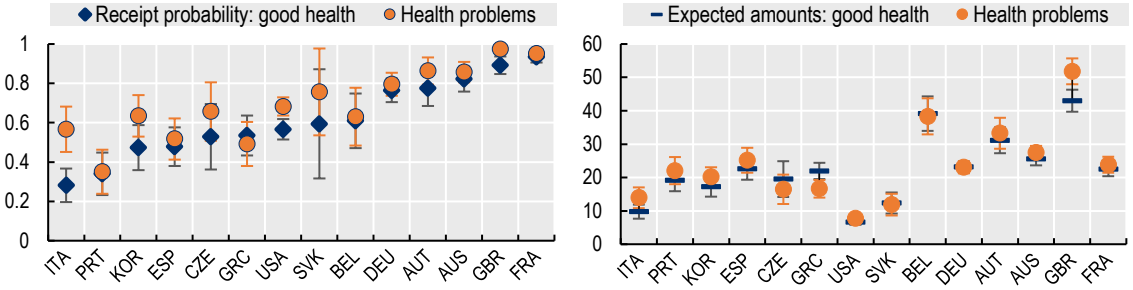
MIB claimants may also receive some insurance-based benefits that enter applicable means tests and lower MIB entitlements. This is likely to play a role in Belgium (50% of households in the bottom income decile receive some insurance benefits), Austria (42%) and France (30%), see Annex A. MIB in Austria and France therefore frequently function as a top-up, with just under two thirds of household incomes from other sources, even among the poorest 10% of the population (see Figure 3 above). By contrast, MIB in the United Kingdom, are frequently the *main* source of income for low-income households, accounting for some three quarters of household incomes in the bottom 10%. As a result, reduced entitlements due to means-tests are less likely and the estimated de-facto benefit amounts are relatively close to the (maximum) theoretical MBI entitlements for somebody without any other resources.

Figure 5. Accessibility and value of non-contributory benefits: One-person households, at or before 2019

A. Workless low-income adult living alone



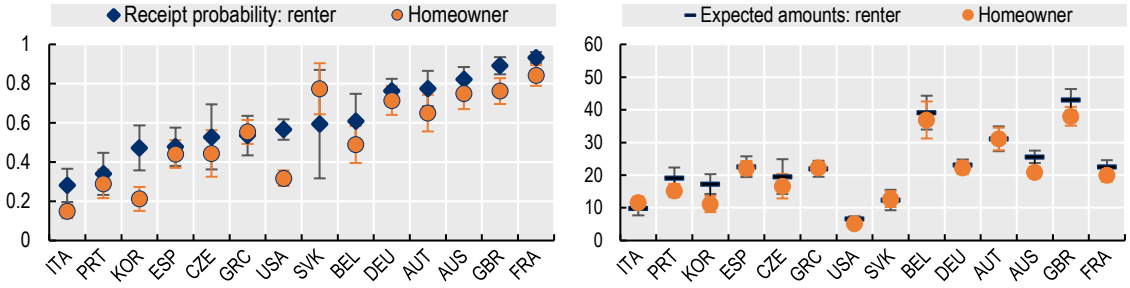
B. Workless low-income adult living alone, health problems



C. Part-time / part-year worker on low pay living alone



D. Workless low-income homeowner living alone



Notes: Predicted non-contributory benefits for different "vignettes" of low-income individuals. Countries ranked by probability of receiving non-contributory benefits for a workless low-income adult living alone enjoying good health (*baseline*). Bars indicate 90% confidence intervals. See Table 1 for definition of non-contributory benefits. In Korea, United Kingdom, benefits include refundable means-tested tax credits. The value of Earned Income Tax Credits (EITC) in the United States is imputed for individuals who report receipt, see Annex B. "Workless": having worked less than 10% of potential full-time hours during the reference period (i.e. less than one month of full-time work during the entire year). "Low income": bottom decile of the distribution of income from market sources and contributory benefits (workless situation) or second-lowest decile (low-pay situation). **Panel A**: Low-income working-age adults reporting "good" or "fair" health and living in privately rented accommodation paying a "low" rent (bottom quintile of the national rent distribution). **Panel B**: Same as Panel A, but reporting "poor" or "bad" health. **Panel C**: worked 10-30% of potential full-time hours during the year (e.g., between 1.2 and 4 months full-time work, or between 4 and 12 hours a week part-time work during an entire year, or a combination of part-year and part-time work).
Source: Estimates based on EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Safety nets and labour income: Low work intensity and low pay

Do benefit systems support partial and low-paid employment? Income gains from taking up low-paid work can be limited if benefits are withdrawn quickly against labour income, and the resulting poverty "traps" complicate governments' efforts to tackle in-work poverty. Compared to the baseline vignette, part-time or part-year employment indeed makes benefit receipt significantly less likely, even at low pay or very low pay. Results for workers in these situations are shown in Panel C of Figure 5, accounting for the particular incidence of employment and pay among low-income households in each country (see figure notes for the definition of "low pay"). The estimates indicate that a gradual phase-out of MIB (as in Austria, Australia, France, Germany) or the availability of in-work benefits (as in France, United Kingdom) can provide continued support to low-paid workers or those in short-duration or intermittent employment, strengthening work incentives (Figure 5, left-hand figure of Panel C). In most other countries, low-paid workers living alone were comparatively unlikely to receive any safety-net support. As discussed further below, significant in-work benefits may be available for families with children, however, e.g., in the United States.

In all countries, expected benefit amounts are lower for those with some labour income (Figure 5, right-hand figure of Panel C). This is for two reasons. First, the gaps reflect the pace at which benefits are withdrawn against labour income in periods when claimants concurrently receive benefits and earnings. Second, those with low labour income during the year may alternate between working and not working and, hence, receive benefits only for part of the year.

Asset holdings: Homeowners

In addition to income, asset holdings are also an important element of household resources and can influence entitlements to means-tested benefits. While good-quality data on total assets – movable and real property, financial assets etc. – are not available across the household surveys

used here, information on homeownership was available in all of them, and was included in the empirical model to distinguish receipt patterns for renters and homeowners.[16]

Many countries exempt the family home from asset tests (Marchal et al., 2020[43]). For some of them, receipt probabilities for homeowners and tenants typically do not differ significantly (Czechia, Germany, the Slovak Republic, see Figure 5, left-hand figure of Panel D). But even where the main home does not enter the means test, receipt probabilities can be lower for homeowners as homeownership correlates strongly with ownership of other assets that do disqualify from MIB receipt. This effect tends to dominate in countries with high rates of homeownership, such as United Kingdom and United States. In Belgium, homeownership also does not affect MIB entitlements directly, but it does generate imputed rents, which count towards the income test; predicted differences in receipt probabilities are nonetheless statistically insignificant.

As in the United States, receipt probabilities in Korea are also significantly lower for homeowners, as the means test for the main MIB programme effectively considers monetary values of privately owned properties. Expected receipt probabilities are also lower for homeowners in other countries, though the differences are not statistically significant or only marginally so. In Australia, the main residence is generally exempt from asset tests, but the asset allowance for homeowners is significantly lower than for non-homeowners (OECD, 2020[40]). In Austria, all types of significant assets generally disqualify from MIB receipt, and the social welfare authority may launch a claim against the property after six months of benefit receipt. France does not operate a routine asset test, but assets can be taken into account if there is a large "discrepancy" between the observed lifestyle of a household and its declared circumstances (Marchal et al., 2020[43]).

Families with children

Minimum-income benefit entitlements vary by household size and number of children. In addition, in several countries, families with qualifying children receive separate family or child benefits, which may or may not vary with income. Child benefits in Austria, Belgium, France, Germany, Slovak Republic are paid regardless of household income and income limits for family payments are high in the United Kingdom, making them available to most families with children. In these countries, practically all low-income families with dependent children received at least some non-contributory benefits in these countries (Figure 6).[17]

Australia operates a means-tested family tax benefit, that achieved near-universal coverage among workless low-income families. In Greece, several means-tested family benefits meant that almost all low-income families without work received at least some support in the period covered in the Greek data (2018) (Ziomas et al., 2018[44]). Since 2019, Korean families with children under the age of seven receive a child allowance. In addition, child tax credits, which were previously not accessible to MIB recipient households, became available for this group in 2019 (Ministry of Health and Welfare, 2024[45]). [18] Portugal operates two child-benefit

[16] Note that homeownership is likely to be correlated with other unobservable characteristics that also influence benefit receipt. The indicator on receipt probability does not propose a causal relationship between homeownership and benefit receipt.

[17] Cross-country patterns of benefit receipt for workless lone parents are mostly similar and not reported here. Lone-parent households are typically less numerous in the data than couples with children, precluding statistically meaningful estimates for part-time, low-income lone parents in particular, see also OECD (2020[53]).

[18] From 2022, the child allowance employs a slightly higher age limit of 8 years (Ministry of Health and Welfare, 2024[61]).

programmes that can be received simultaneously. Both of them are income-tested and one of them is targeted towards families with very low income. In Spain, a means-tested child allowance provided support to most, but not all, low-income families.

In Belgium, the low probability of families with children receiving means-tested benefits is likely connected to widespread receipt of insurance-based benefits, which narrows the "space" for income-tested benefits for this group (see Figure 3). The main working-age, means-tested minimum income benefit in Belgium, the integration income (*Revenue d'Integration* or *Leefloon),* was paid out to 147,000 recipients in June 2019, and only 29% of whom had children (Government Service for Social integration, 2020[46]).

As was the case for one-person households, benefit payments to recipients with children were highest in the United Kingdom, with an expected amount close to a relative poverty threshold (50% of median household income). The results for the UK relate to an earlier year than those of other countries, however. Reforms since then, notably the so-called "two-child limit" have lowered entitlements for larger households in particular, as did partial freezing of some benefit parameters (notably the household benefit cap) in nominal terms (Henry and Wernham, 2024[47]). Non-contributory support for low-income recipient families were less generous in Australia, Austria, Germany and France (about 30% of median household income, including any universal child benefit). In countries operating both means-tested and universal support, benefit amounts for recipients vary markedly between families, as all of them receive the (typically lower) universal payments but not the (typically higher) means-tested ones. In Figure 6, this variation produced the large confidence intervals seen for Austria and some other countries. In Italy, Korea and Greece, expected benefit levels were only around 10% of median household income.[19]

Several countries have introduced additional reforms during the pandemic. They are not yet reflected in the survey waves used for estimation and were often temporary. Italy replaced five previous family benefits with a new universal transfer for all families with children under 21. The new integrated benefit also includes a means-tested component that aims to tackle high levels of child poverty. In addition, the new benefit will provide new support to families of self-employed and long term unemployed (Pavolini, 2021[48]).

The United States provides a further notable example of temporary pandemic-related increases in child-related support that occurred after the reference period covered in this paper. Between 2021 and 2022, child tax credits in the United States saw a large increase (a yearly maximum of USD 3,600 per child). Importantly, they were also made fully refundable for families who pay little to no income tax. As with similar tax credits in other countries the child tax credit is not included in the results reported here, as information is missing from underlying household data, including the US SIPP and typically the EU-SILC (see Annex B and note to Figure 6). In terms of measurement error, this was less of a problem before the reform (and, again, after its expiry in 2022), as amounts were lower (up to USD 2,000 per child), the lowest-income groups without any earnings were not eligible, and those with modest earnings received a reduced amount.[20] [21]

[19] See footnote 13**Error! Bookmark not defined.** for measurement challenges that may influence the results for Korea.

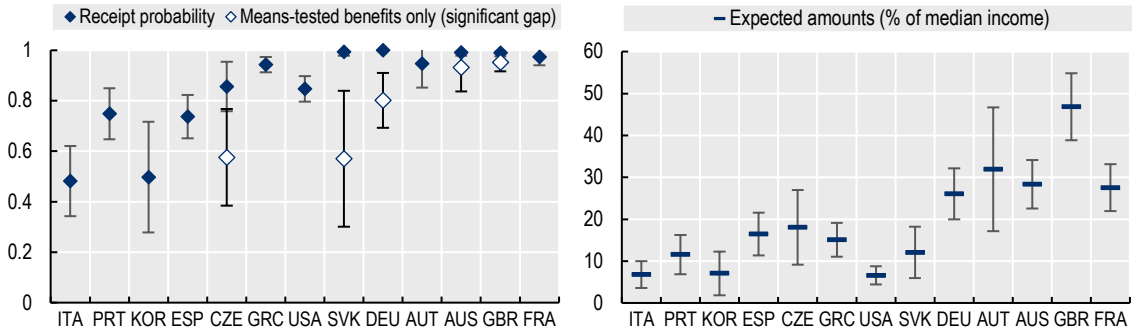
[20] See, e.g., (Congressional Research Service, 2021[64]).

[21] But even before the reform, the US child tax credit was an important element of support for low-income families, and the exclusion of such tax credits affects the comparability of results between countries that operate them (United States but also, e.g., Austria) and those that do not. It is therefore a limitation of the comparison of child-related support in the present study, and in other analyses that rely on available microdata. For Austria, see (Fink and Rocha-Akis, 2021[65]) on the exclusion from EU-SILC of tax credits

Without accounting for child tax credits, low-income two-parent families with children had access to the nutritional assistance programme SNAP and the earned-income tax credit, which achieved high coverage. But expected payments were very low (right-hand panel of Figure 6). The modest support levels arguably point to the importance of the child tax credit as an income source for families, and as a crucial instrument for tackling child poverty. In addition, the means-tested Temporary Assistance for Needy Families provides benefits to some low-income families, but it has low and declining recipient numbers, driven in part by restrictions on payment durations and funding (OECD, 2023[35]).

Figure 6. Accessibility and value of non-contributory benefits (means-tested and universal): Workless couple with children, at or before 2019

Left panel: probability of receipt (means-tested benefits only, plus all non-contributory benefits)
Right panel: expected amounts for recipients (all non-contributory benefits, incl. any universal child benefits)



Notes: See notes to Figure 5. Children are aged between 4 and 17 – results therefore do not reflect receipt of maternity benefits and one-off birth grants. The left-hand panel shows the probability of receiving any non-contributory benefit (dark markers). For countries that operate universal child benefits, probabilities of receiving means-tested benefits only are shown separately (light marker) if there is a statistically significant difference (90% confidence interval) between the receipt probabilities for non-contributory and means-tested. Since 2017, universal child allowance payments in Belgium are no longer reported separately from contributory payments; results for Belgium are therefore not included. Calculations for the United States and other countries do not include refundable child tax credits, as these are typically not reported in the underlying household micro-data. See main text for details.
Source: Estimates based on EU-SILC (2016 wave for the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Figure 7 shows the probability of receiving means-tested benefits for low-paid working parents with "low" work intensity (10-30% of potential full-time hours) and "moderate" work intensity (30-60% of potential full-time hours). Compared to working single-person benefit claimants without children, benefit amounts and income ceilings are higher for working families, and benefit withdrawals tend to be more gradual (see Annex C). These two factors explain why receipt probabilities for means-tested benefits often differ little between workless families and those with marginal low-paid employment (Figure 7, left-hand panel: only Spain shows a difference that is statistically significant). Central estimates for support *levels* (not reported) are lower for working families in most countries, but they differences are also not statistically significant. This result is consistent with countries employing gradual benefit phase-outs that enable low-earning families to retain support from means-tested benefits. It also highlights that

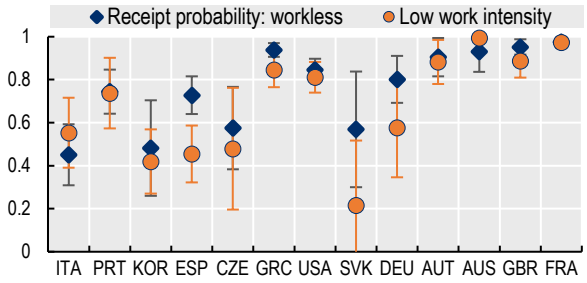
in Austria. The OECD Family Database (http://oe.cd/fdb) and tax benefit policy database (http://oe.cd/TaxBEN) provide country-by-country information on cash transfers and tax credits for families with children.

means-tested support does not only provide out-of-work support but often acts as a "top-up" for those with limited income from other sources.

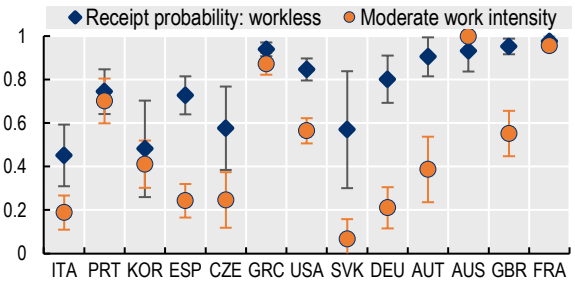
Do MIBs also support families who may not be in acute economic need, but still have low incomes? The right-hand panel of Figure 7 shows results for a couple with children in the second-lowest decile of the income distribution. This is an income level that puts families close to and sometimes just above commonly used relative poverty thresholds.[22] In Australia and France, practically all families at these somewhat higher income levels (and the other characteristics chosen for this vignette, such as two children) still received means-tested benefits (in Australia likely means-tested child benefits, in France in-work benefits and housing assistance). In both countries, estimated benefit amounts for recipients (not reported) are however clearly lower than for workless families or those with "low" earnings. In Korea, a parental-leave / parental-care allowance for some children (up to age 8) was available without means-test, along with a quasi-universal child allowance (universal since 2019).[23] Low-income Korean families can also receive refundable tax credits (CTC and the EITC in-work benefit). In-work benefits contributed to the high receipt rate in the United Kingdom and the United States. In Greece, low-income working families were likely to receive means-tested family benefits. In some other countries, housing benefits may be the only means-tested support available to families at or marginally above the poverty line. They are, for instance, common for this family situation in Austria and the Czech Republic.

Figure 7. Accessibility of means-tested benefits in low-paid work: Couple with children, at or before 2019

A. Low work intensity (10-30% of FTE)



B. Moderate work intensity (30-60% of FTE)



Notes: See notes to Figure 6. Means-tested families only, i.e., without accounting for universal child benefits. Family income in the second decile. FTE: full-time equivalent. 10-30% of potential full-time hours during the reference year is, e.g., consistent with one adult working part-time, full-year, while the other adult does not work. 30-60% is consistent with one adult working full-time, full-year, while the other adult does not work.
Source: Estimates based on EU-SILC (2016 wave for the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

5. Conclusion

All EU and OECD countries operate Minimum Income Benefit (MIB) programmes for working-age individuals, either as lower-tier programmes alongside primary income replacement benefits, or as a principal instrument for delivering social protection. These benefits typically

[22] https://www.oecd.org/social/income-distribution-database.htm.

[23] The child allowance was initially introduced for children under the age of 6 living in the bottom 90% of income distribution in September 2018. Currently, all children aged under 7 are eligible to the allowance since the means-testing was eliminated since April 2019.

employ a low-income criterion to target households with no or limited access to other resources. As benefits of last resort, MIB play a vital role in alleviating poverty and social exclusion for those with inadequate market incomes and no or limited entitlements to insurance-based benefits.

In the context of economic crises, including the COVID-19 pandemic and the cost-of-living crisis, safety-net benefits provide a crucial income cushion for eligible households. They continue to play an important role when crisis-response measures and related reinforcements to first-tier support programmes are withdrawn, at a time when disadvantaged households do not yet benefit from a sustained recovery. MIB may also be the only, or the main, means of support for non-standard workers or those with intermittent work who lack access to first-tier benefits, and they are a crucial income source for jobseekers in weak labour-market positions, e.g. the long-term unemployed or those with no or patchy past work history. Past crises have shown that MIB often do not readily respond to growing support needs, however. For instance, there is often no systematic link between benefit values and changes in the cost of living: Adjustments are typically partial or delayed, leading to sizeable fluctuations in living standards among the least well-off in times of high inflation.

Ensuring that MIB programmes work as intended requires careful policy monitoring and benchmarking at the national and international levels. Monitoring the effectiveness of MIB also promotes the transmission of good practices as policymakers test novel approaches in a changing economic environment. This paper shows that the accessibility and levels of MIB and other non-contributory transfers have differed enormously across the fourteen OECD countries for which suitable data were available. For instance, prior to the COVID emergency, more than four out of five workless one-person households with low incomes received MIB in Australia, France, and the United Kingdom, compared to only one in three in Italy. Results indicate that accessibility does not hinge on one specific social protection strategy but is achievable with different policy configurations. For instance, receipt probabilities are high in countries that rely heavily on means-testing and direct large parts of benefit spending towards the bottom of the income distribution (such as the United Kingdom and Australia), but also in countries that complement insurance-based support with last-resort safety net benefits (such as France, Germany, or Austria). However, MIB appear to be comparatively difficult to access in countries that mainly rely on insurance-based benefits such as Italy and Portugal, and to a lesser extent Korea and Spain. These and other countries have in fact taken steps to analyse coverage gaps and some of them introduce new MIB or reinforced some aspects of safety-net benefits after the period covered in this paper.

Results highlight the need for employing a range of methods in comparative policy analysis. Legal entitlements are crucial determinants of the support that households receive when facing situations of acute economic need. But the *de-facto accessibility* of MIB programmes is also shaped by numerous other factors. These include the complexity and duration of claims procedures, the administrative capacity for processing benefit claims in a timely fashion (especially during periods of high demand), any social stigma attached to the claiming process or to benefit receipt, the administration of income and asset tests, and enforcement of behavioural conditions, such as job-search requirements. Importantly, the needs and characteristics of low-income households differ between populations and over time, and this affects observed patterns of benefit receipt.

For monitoring purposes, it is therefore desirable to complement *policy indicators* on statutory provisions with people-centred *outcome indicators* of the support that households in need do receive in practice. Together, these two monitoring instruments provide a rich basis for assessing the effectiveness of MIB and poverty alleviation strategies, for identifying policy challenges and successes, and for promoting policy learning. Continued monitoring of outcome indicators is

crucial for assessing the reliability of safety nets in the face of rapidly changing economic conditions and in the context of heightened reform activity.

The statistical method in the paper seeks to facilitate comparisons over time or between countries by referring to specific, policy-relevant household circumstances or "vignettes". These vignettes control for household characteristics that shape MIB claims and entitlements (e.g., incomes, employment status, and household composition). Yet, available data do not allow controlling for all relevant claimant characteristics. As a consequence, country differences remain partly shaped by the composition and characteristics of the low-income population. Survey data typically also do not record tax concessions that are akin to cash benefits (notably tax credits) and this can affect the comparability, including in the present paper, of estimated total support packages that are available to households.

Building on the results of the present analysis, future work could undertake more granular analyses at the country level to examine more explicitly the role of statutory rules, their implementation and the characteristics of claimant households that are driving MIB receipt in national contexts. Methodological extensions could further develop the accessibility and generosity indicators (e.g., by examining gendered patterns of benefit receipt). Future work could also explore additional or alternative data sources, such as harmonised income data with wider country coverage (such as the Luxembourg Income Study), or household data that make use of information from administrative sources, and which are becoming available in some countries, e.g. the Austrian Socio-Economic Panel.

References

Bahle, T., V. Hubl and M. Pfeifer (2011), *The Last Safety Net*, Bristol University Press, https://doi.org/10.46692/9781847427267. [13]

Baldini, M. and S. Toso (2023), *L'eredità del Reddito di cittadinanza*, https://lavoce.info/archives/101788/leredita-del-reddito-di-cittadinanza/. [32]

Bargain, O., H. Immervoll and H. Viitamäki (2010), "No claim, no pain. Measuring the non-take-up of social assistance using register data", *The Journal of Economic Inequality*, Vol. 10/3, pp. 375-395, https://doi.org/10.1007/s10888-010-9158-8. [9]

Bartfeld J, G. (ed.) (2015), *Multiple program participation and the SNAP program*, Stanford University Press. [62]

Bradshaw, J. and N. Finch (2002), "A Comparison of Child Benefit Packages in 22 Countries", *Department of Work and Pensions Research Report*, Vol. 174. [29]

Bruckmeier, K., R. Riphahn and J. Wiemers (2020), "Misreporting of program take-up in survey data and its consequences for measuring non-take-up: new evidence from linked administrative and survey data", *Empirical Economics*, https://doi.org/10.1007/s00181-020-01921-4. [23]

Bulman, T. et al. (2019), *Tax and benefit reforms to support employment and inclusiveness and address poverty in Italy*. [52]

Congressional Research Service (2021), *The Child Tax Credit: Temporary expansion for 2021 under the American Rescue Plan Act of 2021 (ARPA; P.L. 117-2)*. [64]

Cragg, J. (1971), "Some Statistical Models for Limited Dependent Variables with Application to the Demand for Durable Goods", *Econometrica*, Vol. 39/5, p. 829. [25]

Denk, O. and S. Königs (2022), "Supporting jobs and incomes: An update on the policy response to the COVID-19 crisis", in *OECD Employment Outlook 2022: Building Back More Inclusive Labour Markets*, OECD Publishing, Paris, https://doi.org/10.1787/06cfa2e6-en. [6]

Department for Work and Pensions (2020), *Income Related Benefits: Estimates of Take-up. Data for financial year 2017/18*, https://www.gov.uk/government/collections/income-related-benefits-estimates-of-take-up--2. [41]

Eurofund (2015), *Access to social benefits: Reducing non-take-up*, Publications Office of the European Union, https://doi.org/10.2806/7077. [42]

EUROSTAT (2023), "Living conditions in Europe - material deprivation and economic strain", *Statistics explained*, https://ec.europa.eu/eurostat/statistics-explained. [30]

Fink, M. and S. Rocha-Akis (2021), *Monetäre Familienleistungen für unterschiedliche Haushaltskonstellationen*. [65]

Förster, M. and G. Verbist (2012), "Money or Kindergarten? Distributive Effects of Cash Versus In-Kind Family Transfers for Young Children", *OECD Social, Employment and Migration Working Papers*, Vol. 135, https://doi.org/10.1787/5k92vxbgpmnt-en. [58]

Giefer, K., M. King and V. Roth (2022), "SNAP Receipt in SIPP: Using Administrative Records to Evaluate Data Quality", *SIPP Working Paper #305*, https://www.census.gov/programs-surveys/sipp/library/working-papers.html. [21]

Gough, I. et al. (1997), "Social Assistance in Oecd Countries", *Journal of European Social Policy*, Vol. 7/1, pp. 17-43, https://doi.org/10.1177/095892879700700102. [2]

Government Service for Social integration (2020), *https://www.mi-is.be/nl/studies-publicaties-statistieken/*, https://www.mi-is.be/nl/studies-publicaties-statistieken/overzicht-van-het-aantal-begunstigden-van-het-equivalent-leefloon (accessed on 11 November 2020). [46]

Han, J. (2020), "SNAP EXPANSIONS AND PARTICIPATION IN GOVERNMENT SAFETY NET PROGRAMS", *Economic Inquiry*, Vol. 58/4, pp. 1929-1948, https://doi.org/10.1111/ecin.12909. [63]

Henry, A. and T. Wernham (2024), "Child poverty: trends and policy option", *IFS Report R335*, https://ifs.org.uk/sites/default/files/2024-10/Child-poverty-trends-and-policy-options_1.pdf. [47]

Hyee, R. et al. (2020), "How reliable are social safety nets?: Value and accessibility in situations of acute economic need", *OECD Social, Employment and Migration Working Papers*, No. 252, OECD Publishing, Paris, https://doi.org/10.1787/65a269a3-en. [1]

Immervoll, H. (2012), *Minimum-Income Benefits in OECD Countries*, Oxford University Press. [14]

Immervoll, H. (2010), *Minimum Income Benefits in OECD Countries: Policy Design, Effectiveness and Challenges*. [8]

Immervoll, H. et al. (2001), "The Impact of Tax-Benefit Systems on Poverty Rates in the Benelux Countries. A Simulation Approach Using Synthetic Datasets", *Journal of Applied Social Science Studies (Schmollers Jahrbuch)*, Vol. 121/3, pp. 313-52. [28]

Immervoll, H., S. Jenkins and S. Königs (2015), "Are Recipients of Social Assistance 'Benefit Dependent'?: Concepts, Measurement and Results for Selected Countries", *OECD Social, Employment and Migration Working Papers*, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/5jxrcmgpc6mn-en. [22]

Immervoll, H. and C. Knotz (2018), "How demanding are activation requirements for jobseekers", *OECD Social, Employment and Migration Working Papers*, No. 215, OECD Publishing, Paris, https://doi.org/10.1787/2bdfecca-en. [12]

Jessoula, M., M. Natili and M. Raitano (2019), "Italy: Implementing the new minimum income scheme", *ESPN Flash Report*, Vol. 35. [31]

Joint Ministries (2023), *제3 차 기초생활보장 종합계획(2024-2026) [The 3rd Basic Livelihood Security Comprehensive Plan (2024-2026)]*, https://www.korea.kr/briefing/policyBriefingView.do?newsId=156591066. [38]

Joint Ministries (2020), *제2 차 기초생활보장 종합계획(2021-2023) [The 2nd Basic Livelihood Security Comprehensive Plan (2021-2023)]*. [55]

Ko, W. and R. Moffitt (2024), "Take-Up of Social Benefits", in *Handbook of Labor, Human Resources and Population Economics*, Springer International Publishing, Cham, https://doi.org/10.1007/978-3-319-57365-6_372-3. [10]

MacDonald, D., C. Prinz and H. Immervoll (2020), "Can disability benefits promote (re)employment? Considerations on effective disability benefit design", *OECD Social, Employment and Migration Working Papers* 253. [17]

Marchal, S. et al. (2020), "Singling out the truly needy: the role of asset testing in European minimum income schemes", *EUROMOD Working Papers*. [43]

Marchal, S. et al. (forthcoming), "The impact of asset tests in Europe: an application to minimum income schemes in Belgium and Germany", *CSB Working Paper*, http://www.centrumvoorsociaalbeleid.be/. [51]

Marchal, S. and I. Marx (2024), *Zero Poverty Society*, Oxford University PressOxford, https://doi.org/10.1093/9780191967771.001.0001. [15]

Ministry of Health and Welfare (2024), *2024 국민기초생활보장 사업안내 [2024 National Basic Livelihood Security guideline]*, https://www.mohw.go.kr/board.es?mid=a10402000000&bid=0009&act=view&list_no=1479897. [45]

Ministry of Health and Welfare (2024), *2024 아동수당 사업안내 지침 [2024 Child allowance guideline]*, https://www.mohw.go.kr/board.es?mid=a10411010100&bid=0019. [61]

Nam, J. (2017), *근로장려세제의 성과 연구 [Research on the effectiveness of Earned Income Tax Credit]*, Korea Labor Institute, https://www.kli.re.kr/downloadEngPblFile.do?atchmnflNo=20961. [56]

OECD (2024), *Benefits and wages*, https://www.oecd.org/els/soc/benefits-and-wages/. [33]

OECD (2024), *Modernising access to social protection: Strategies, technologies and data advances in OECD countries*, OECD publishing, https://doi.org/10.1787/af31746d-en. [11]

OECD (2023), *Benefit Reforms for Inclusive Societies in the United States: Income Security During Joblessness*, OECD Publishing, Paris, https://doi.org/10.1787/32d8f005-en. [35]

OECD (2023), *Evaluation of Belgium's COVID-19 Responses: Fostering Trust for a More Resilient Society*, OECD Publishing, Paris, https://doi.org/10.1787/990b14aa-en. [34]

OECD (2023), *Income support for jobseekers: Trade-offs and current reforms*, OECD Publishing, Paris, https://doi.org/10.1787/405ed506-en. [3]

OECD (2022), *Coping with the cost-of-living crisis: Income support for working-age individuals and their families*, OECD, https://www.oecd.org/social/Income-support-for-working-age-individuals-and-their-families.pdf. [7]

OECD (2022), *The new work incentive for Spain's national Minimum Income Benefit. Policy issues and incentives in the international comparison*, https://www.oecd.org/social/benefits-and-wages/Note-on-the-new-work-incentive-Spain.pdf. [39]

OECD (2021), *Inclusive Growth Review of Korea: Creating Opportunities for All*, OECD Publishing, https://doi.org/10.1787/4f713390-en. [60]

OECD (2020), *Indicator LMF2.3: Patterns of employment and the distribution of working hoursfor single parents*. [53]

OECD (2020), *OECD TaxBEN country policy descriptions*, http://www.oecd.org/els/soc/benefits-and-wages-country-specific-information.htm. [40]

OECD (2020), "Supporting livelihoods during the COVID-19 crisis: closing the gaps in safety nets", *ELS Policy Brief on the Policy Response to the COVID-19 Crisis*, http://oe.cd/il/covid19briefsupport. [5]

OECD (2019), *Left on your own? Social protection when labour markets are in flux*, OECD publishing. [4]

OECD (2019), *OECD Social Expenditure database*, https://doi.org/www.oecd.org/social/expenditure.htm. [57]

OECD (2018), *Unemployment-benefit coverage: Recent trends and their drivers*, OECD Publishing. [16]

OECD (2017), *Basic income as a policy option: Can it add up?*, OECD Publishing Paris, https://www.oecd.org/els/emp/Basic-Income-Policy-Option-2017.pdf. [19]

OECD (2012), *Reinforcing Latvia's active social policies*, OECD Publishing, https://doi.org/10.1787/9789264250505-8-en. [18]

OECD (2007), *Benefits and Wages 2007: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/ben_wages-2007-en. [27]

OECD (1998), *Benefit Systems and Work Incentives 1998*, OECD Publishing, Paris, https://doi.org/10.1787/benwork_incent-1998-en. [26]

Paris (ed.) (2023), *Benefit Reforms for Inclusive Societies in Korea: Income Security During Joblessness*, OECD Publishing, https://doi.org/10.1787/96b7fd64-en. [37]

Pavolini, E. (2021), "A new comprehensive approach to policies in view for households with children in Italy", *ESPN Flash Report*, Vol. 2021/40. [48]

Resolution Foundation (2018), *The Living Standards Audit 2018*, Resolution Foundation, https://www.resolutionfoundation.org/publications/the-living-standards-audit-2018/. [54]

Schanzenbach, D. (2023), "Understanding SNAP: An overview of recent research", *Food Policy*, Vol. 114, p. 102397, https://doi.org/10.1016/j.foodpol.2022.102397. [20]

Sohn, B. (2019), "부양의무자 기준의 한계와 개선 방안 [The Family Support Obligation Rule in the National Basic Livelihood Security System: Its Limitation and Way Forward]", *Health and* [36]

Welfare Forum, Vol. 275/4, pp. 32-45, https://www.kihasa.re.kr/common/filedown.do?seq=42644.

Stichnoth, H. (2018), *Kommt das Geld bei den Kindern an?*. [49]

Wilkins, R. (2014), "Derived Income Variables in the HILDA Survey Data: The HILDA Survey 'Income Model'", *Hilda Project Technical Paper Series, Faculty of Business & Economics, University of Melbourne*, Vol. 1/14. [50]

Wooldridge, J. (2010), *Econometric analysis of cross section and panel data*, MIT Press, https://mitpress.mit.edu/books/econometric-analysis-cross-section-and-panel-data. [24]

Ziomas, D. et al. (2018), "New reform of the family benefits scheme in Greece", *ESPN Flash Report*, Vol. 28, https://ec.europa.eu/social/main.jsp?catId=1135&langId=en. [44]

Ziomas, D. et al. (2018), "Reforming the social welfare system in Greece", *ESPN Flash Report*, Vol. 59, https://ec.europa.eu/social/main.jsp?catId=1135&langId=en. [59]

Annex A. Descriptive statistics

Descriptive statistics presented here draw on the GSOEP 2018 wave for Germany, the EU-SILC 2019 wave for most remaining European countries (2016 wave for Belgium and the United Kingdom), the HILDA 2018 wave for Australia, the KLIPS 2019 wave for Korea and SIPP 2020 wave for the United States.

Sample selection

To be included in the estimation sample, households need to contain at least one working age person and information on key variables of the model must be complete for all working-age household members. In particular, households in the estimation sample must contain complete information on monthly labour force status for each working-age household member, and complete information on household income components. Table A.2 shows how the original sample contracts to the final sample, by reason for sample exclusion.

Table A.2. Sample selection

In number of individuals and households

	AUS*	AUT	BEL	CZE	DEU	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
Households included	**4,680**	**3,878**	**4,118**	**5,169**	**7,700**	**11,641**	**7,397**	**6,139**	**10,425**	**13,068**	**7,327**	**9,207**	**3,812**	**14,873**
Individuals included	12,125	9,078	10,961	13,740	20,861	33,044	19,313	16,149	28,410	31,930	15,839	25,779	11,748	40,795
Individuals excluded, because of	11,135	3,279	2,812	5,410	29,059	6,808	7,171	6,056	11,393	11,470	5,898	7,302	2,906	10,691
no working-age active person in household	3,250	2,748	2,364	4,945	5,226	5,941	5,743	4,413	10,695	10,244	4,446	6,193	2,496	9,644
top 1% of MIB receipt	294	145	152	157	779	310	250	202	356	367	96	457	226	235
incomplete labour status calendar	4,794	-	249	-	14,659	402	1,106	35	317	-	-	9	-	520
missing education	-	-	-	-	367	-	16	82	-	-	-	-	-	-
missing health status	920	1	-	-	5,135	-	8	12	-	859	-	-	4	-
missing housing tenure	3	-	-	-	113	-	-	-	-	-	110	-	-	164
missing rent	40	-	-	-	2,553	-	-	-	-	-	-	-	-	-
inconsistent work-earnings information	1,043	385	47	308	138	155	48	1,312	25	-	516	643	180	95
inconsistent social insurance information (Korea only)	-	-	-	-	-	-	-	-	-	-	581	-	-	-
benefit imputation prevents correct assessment (Australia only)	650	-	-	-	-	-	-	-	-	-	-	-	-	-
persons with weight=0	141	-	-	-	89	-	-	-	-	-	149	-	-	31
no adult in the household (US only)	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Total (individuals)	23,260	12,357	13,773	19,150	49,920	39,852	26,484	22,205	39,803	43,400	21,737	33,081	14,654	51,486

Note: Exclusion reasons apply in the same order they are presented in the table. For example, if an individual is over 65 and his labour status calendar is incomplete, the table will report him as excluded because he is a non-relevant person (and not because his labour status calendar is incomplete). Only households composed at 100% by valid individuals are included in the final sample. (*) In Australia, 650 households were also excluded because the HILDA benefit imputation prevents a reliable categorisation of benefits by entitlement criterion.
Source: EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

The number of households in the final sample varies from 3,812 households for Slovakia to 14,873 for the United States. For all countries, the number of observations is large enough to fit econometric models on benefit receipt and amounts received (see Annex B). However, the analysis also includes statistical inference on specific subpopulations, such as workless low-income households with and without children. Table A.3 provides information on the number of available observations for each category of the most relevant variables: household type, work intensity and income.

Table A.3. Sample size by household's characteristics

A. Household type

	AUS	AUT	BEL	CZE	DEU	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
Single	1,219	1,171	986	1,015	1,715	1,725	1,760	1,285	1,697	3,800	1,210	1,186	463	3,083
Couple without children	1,264	1,114	1,029	1,418	2,020	3,003	1,973	1,747	3,123	2,902	1,511	2,507	998	4,257
Lone parent	307	181	249	251	628	411	498	550	197	520	68	382	74	684
Couple with children	1,362	912	1,093	1,342	2,438	3,007	2,099	1,672	2,445	2,468	2,145	2,097	662	3,059
3+ adults without children	343	342	479	771	505	2,464	652	585	2,325	2,649	1,935	2,137	1,072	2,311
3+ adults with children	185	158	282	372	394	1,031	415	300	638	729	458	898	543	1,479
Total	4,680	3,878	4,118	5,169	7,700	11,641	7,397	6,139	10,425	13,068	7,327	9,207	3,812	14,873

A. Income ranges

	AUS	AUT	BEL	CZE	DEU	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
Decile 1-2	530	311	864	372	967	1,979	956	1,385	2,698	1,651	2,221	1,170	376	1,834
Deciles 3 - 4	537	484	659	762	1,096	2,588	1,091	1,001	2557	2363	3127	1671	663	2,571
Deciles 5 - 6	407	472	804	620	899	1,390	912	1,161	985	1,205	1,347	1,313	644	1,828
Deciles 7 - 10	3,206	2,611	1,791	3,415	4,738	5,684	4,438	2,592	4,185	7,849	632	5,053	2,129	8,640
Total	4,680	3,878	4,118	5,169	7,700	11,641	7,397	6,139	10,425	13,068	7,327	9,207	3,812	14,873

B. Work intensity

	AUS	AUT	BEL	CZE	DEU	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
0 to 10%	558	342	766	370	1,081	1,225	815	905	1,222	1,194	433	1,107	322	1,518
10-30%	345	296	161	319	689	981	664	153	1,057	995	695	753	279	1,356
30-60%	827	629	865	830	1,222	2,071	1,302	1,053	2006	2166	1624	1836	674	2,808
60-90%	1,047	737	534	1,234	1,514	2,375	1,482	773	2,118	2,647	1,642	1,881	867	2,971
90%+	1,903	1,874	1,792	2,416	3,194	4,989	3,134	3,255	4,022	6,066	2,933	3,630	1,670	6,220
Total	4,680	3,878	4,118	5,169	7,700	11,641	7,397	6,139	10,425	13,068	7,327	9,207	3,812	14,873

Note: See Annex B for definitions of variables in each category.
Source: Estimates based on EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Observed characteristics of households in the final sample

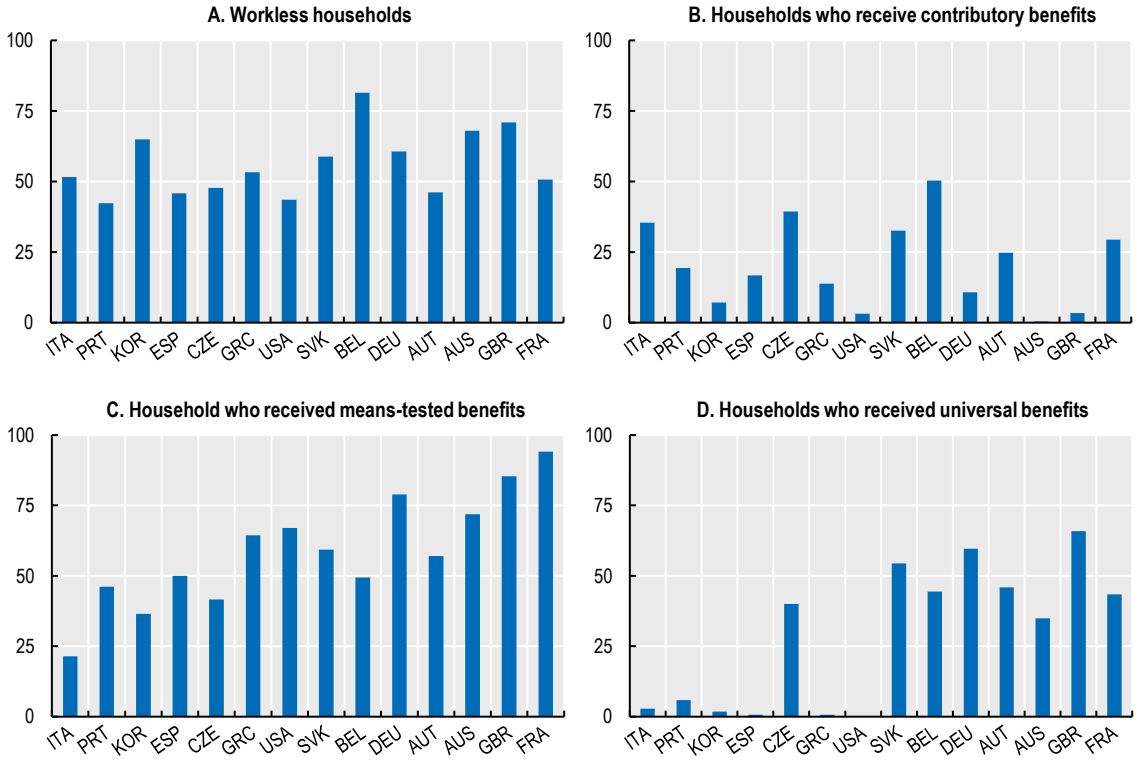
This section provides information on observed characteristics of the households included in the final sample. As the focus of this analysis is the income support received by low-income households (bottom decile of income from market sources and contributory benefits), most descriptive statistics presented here also refer to low-income households.

Figure A. 8, Panel A, provides information on the observed labour supply of low-income families and the type of cash support they receive. The share of workless households is particularly high in Belgium (82%) and the United Kingdom (71%). Few of these households received contributory benefits (Panel B), except in Belgium and Czechia (about 40-50%).

Means-tested benefits play a major role for low-income households; 40% or more are in receipt of MIB, except in Italy and Korea (Panel C). In France and the United Kingdom receipt shares are above 80%. Universal benefits (in practice child allowances) also play a sizeable role in most countries (Panel D). It is important to note that households can receive, in one single year, contributory, means-tested and universal benefits. Hence, shares in panels B, C and D do not sum to an overall coverage rate.

Figure A. 8. Low-income households: Shares in work and receiving benefits

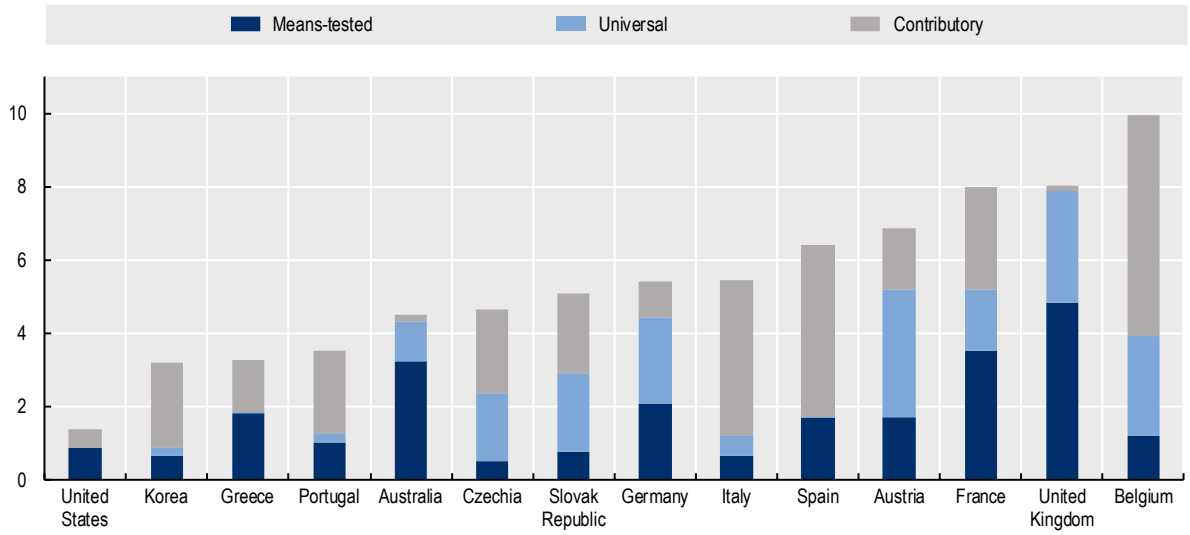
In % of all households in the first income decile, at or before 2019



Note: The first income decile corresponds to the bottom 10% of income from market sources and contributory benefits calculated over the whole population. "Workless" means worked less than 10% of potential full-time hours during income reference period, i.e. less than one month of full-time work during the entire year (previous calendar year of the survey year, except Australia with financial year running July to June). Countries are ranked by the probability of receiving non-contributory benefits for a workless low-income adult living alone (see Figure 5, Panel A).
Source: EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Figure A. 9. Countries' income support systems differ in both size and structure

As % of working age benefits in total household incomes, by entitlement criterion, pre-COVID (at or before 2019)



Note: Working-age households. Countries are ranked by the share of working age benefits in gross working-age household incomes.
Source: EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Annex B. Model specification and model selection

The main variable of interest is the value of the *total package of non-contributory benefits*, including means-tested transfers (such as social assistance and jobseeker benefits that do not require a contribution- or work history, housing benefits, means-tested family benefits etc.) or universal transfers (de-facto child benefits), reflecting the fact that countries provide support through a number of different channels and programs.

For Germany, information on benefit receipt is available on the level of individual transfers. The EU-SILC provides information on the income received by individuals and families in the form of standardised comparable variables for all countries. For social transfers, these variables may include the aggregated amount related to several benefits, without further breakdown. Although EU-SILC variables are already harmonised, it is important to note that methodological differences between countries may subsist. For example, for the United Kingdom, family transfers (variable hy050g) include the *Child Tax Credit*, while social assistance (hy060g) includes the Working Tax Credit. Other countries also provide income support in the form of tax credits, but do not include them in the EU-SILC social transfer variables.[24] Contributory benefits are excluded from the dependent variable and are added to the explanatory variable encoding household income (see below). For the coverage model, a binary variable indicates if the household received non-contributory benefits.[25] For the entitlements model, the dependent variable is the amount of non-contributory benefits received, expressed as percentage of the median income in each country.

For Austria and Germany, universal child benefits were imputed for children under 17 years of age according to statutory benefit entitlement rules, using an approach similar to Stichnoth (2018[49]). Imputed values were only substituted if they were greater than reported benefit receipt; this concerns a small share of observations. Family benefits in HILDA are imputed based on eligibility criteria, assuming 100% take-up (Wilkins, 2014[50]). In other countries, even in those where a large majority of families are entitled and benefit from child benefits (e.g. France, Belgium or the United Kingdom), not all families with children receive benefits, either because there is a cap on total benefits a family can receive, because some family types are not entitled to benefits, or because benefits are not paid out automatically, and some families do not claim them. Therefore, we use the benefit amounts reported by the households.

In the KLIPS, the (means-tested) benefits *Basic Pension*, *Child Home Care Allowance*, *Disability Allowance* and *Childbirth Incentive / Childcare Subsidy (municipal level)* are not reported separately. Working age benefits are separated from the old-age *Basic Pension* benefit using household composition and the age of household members, as well as the statutory rules for the main programmes (*Basic Pension* and *Child Home Care Allowance*) in the following way: For households where all members are aged 64 or younger in the income reference period, the entire amount is considered as working-age benefits. For households with at least one member aged 65 or older, and without any preschool-aged children, the amount is considered to be *Basic Pension*, an old-age benefit. In households with both a person aged 65 and older and preschool-aged child(ren), the amount of *Child Home Care Allowance* is imputed based on the

[24] Further useful information on comparability of income variables in EU-SILC was compiled by Tim Goedeme and can be found via https://timgoedeme.com/tools/

[25] For families with children, to avoid the saturation effect produced by universal benefits (100% of observed households receive benefits), an alternative specification looks only at means-tested benefits receipt.

age of the child and the remaining amount is considered as *Basic Pension* paid to the elderly member.[26] This is only the case for 39 households in the final sample.

For the United States, EITC amounts are imputed for individuals who report EITC receipt in the data; however, EITC coverage is underestimated because of survey underreporting, as well as inconsistencies between reported EITC receipt and previous year's earnings. As a tax credit, the EITC amounts are not directly reported in the SIPP. However, the SIPP does include a question on whether an individual received an Earned Income Tax Credit (EITC) on their tax form. Because de facto receipt of the EITC is recorded in the SIPP, and amounts are deterministic, we impute EITC amounts based on self-reported recipients' previous year's income and the number of dependent children in a given household.[27]

Receipt of the US Child Tax Credit, and of similar refundable tax credits for families with children in other countries, is unfortunately typically not reported in the microdata. As discussed in the main text, in these countries, estimated benefit receipt incidence and amounts will therefore underestimate the true extent of income support for households with children. While it would be possible to impute child tax credits from statutory entitlement rules using microsimulation, this would require assumptions about take-up and administrative capacity and practices (unlike for the EITC, the SIPP data does not include a binary flag indicating CTC receipt). Such imputations are therefore not consistent with this paper's objective of measuring de-facto benefit receipt.

[26] As of 2016, Child Home Care Allowance was a flat-rate benefit only depending on the age of the child as long as the means-test was met, while the amount of Basic Pension varied by income.

[27] Because of inconsistencies between self-reported incomes and EITC entitlement rules, as well as underreporting of EITC receipt when compared to Internal Revenue Service Statistics, imputed EITC payments are somewhat lower than in the administrative data. See (OECD, 2023[35]) for details.

Table B.4. Independent variables

	Definition	Categories	Other comments
Household type	Family arrangements based on the number of adults and number of dependent children in the household	- One adult - Couple without children - Lone parent - Couple with children - 3+ adults no children - 3+ adults with children	
Age	Age of the oldest working-age person in the household	- under 30 - 31 – 54 - 55+	
Foreign born	Indicates if any working-age person in the household was born abroad	- 0 - 1 (foreign born)	
Education	Lowest education level among working-age persons in the household	- low (ISCED 0 – 2) - medium (ISCED 3 - 4) - high (ISECD 5+)	Does not consider dependent (not working) 18 – 24 year-olds
Poor health	Indicates if at least one person in household has bad health	- 0 - 1	Poor health is self-declared
Dependent adults	Indicated if at least one person in household is over 80 or is over 65 and has poor health	- 0 - 1	Definition of poor health as above.
Dependent youth	Indicates the presence of dependent young person(s) in the household	- 0 - 1	Dependent young people are 18 – 24 year-olds who are not working or looking for a job (incl. students)
Work intensity	Work intensity is evaluated at the household level based on the declared labour status of working-age adults in the household over the year. The number of months effectively worked by each person (full-time counts as 1 month and part-time counts as 0.5 months), is divided by 12 (the maximum potential months worked in a year). Individual work intensity indicators are aggregated at household level to create a household work intensity indicator.	- 0 – 10% - 11 – 30% - 31 – 60% - 61 – 90% - 91 – 100%	This indicator differs from EUROSTAT work intensity variable provided by EU-SILC. A more accurate indicator may be built based on the number of hours effectively worked during the year. But this information is not available in the surveys.
Work instability	Indicates the presence of at least one working-age adult having worked between 2 and 8 months in the year.	- 0 - 1	
Rent paid	Amount of rent paid by tenants (in quintiles) plus an extra category to identify owners.	- 0 (homeowner) - 1 quintile 1 - 2 quintile 2 - 3 quintile 3 - 4 quintile 4 - 5 quintile 5	Quintiles are calculated over the entire population of tenant households who pay a positive rent.
Income range	Income distribution categories from market income, unearned incomes, old-age and contributory benefits calculated over the entire population.	- Decile 1 - Decile 2 - Deciles 3 – 4 - Deciles 5 – 6 - Deciles 7 - 10	Income equalized by the square root of the household size. Unearned income refers to rents et.al.
Old-age benefit receipt	Indicates if any person in the household received old-age benefits in 2015	- 0 - 1	Old-age benefits as classified in the micro-data

For each country, we estimate a "coverage" model (a logit model where the dependent variable is binary – benefit receipt yes or no) and an "entitlements" model (a Poisson model, calculated only over the population who receive benefits, where the dependent variable is the amount of benefits received). Since ten countries are included in the analysis, twenty models are estimated. The principles used for model selection are:

1. **A common specification for all countries**. This basic condition guarantees that the resulting vignettes have a common interpretation.

2. The **number of observations in key interaction cells** (for example low-income couples without children) has to allow for statistical interference.

Starting from a basic specification without interactions, we run a series of models of increasing explanatory power. The final specification respects criteria 1 and 2, provided a good fit for each one of the 20 models and, on average across countries, maximised R2 and minimised BIC.

Table B.4 lists the variables included in the final specification. All variables are defined at household level and there is only one observation per household. Table B.5 shows a set of selected coefficients of models 1 to 10 (coverage) and Table B.6 presents selected coefficients for models 11 to 20 (entitlements). For space reasons, other variables coefficients as well as full interaction coefficients are not included.

Table B.5. Coverage models (selected coefficients)

		AUS	AUT(2)	BEL	CZE	DEU(2)	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
Household type	one-adult household(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	couple without children	1.474***	-0.228	-0.777	-0.199	0.0354	0.291	0.448	-0.950**	-0.315	1.049***	-0.285	0.0529	-0.241	0.617***
	lone parent	3.497***	0.948	-0.608	1.401***	1.410***	-0.00842	1.934*	2.526***	1.616*	0.393	0.600	2.233***	-0.623	2.076***
	couple with children	3.139***	0.748	-0.993*	0.928*	0.656	1.087***	1.096	0.976*	2.697***	1.029**	0.0767	1.853***	-0.0191	1.493***
	3+ adults without children	2.423**	0.966	-1.905***	-0.0148	1.461	0.104	2.762***	1.372	-0.432	1.310***	-0.407	0.169	-0.454	0.681*
	3+ adults with children	4.205***	1.074	-0.735	2.786**	1.255	0.776*	2.397***	1.606	3.917***	0.673	-0.344	1.739***	1.055	1.242***
Income	decile 1(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	decile 2	0.141	-0.718	-2.996***	-2.017	-0.806*	-1.175**	-1.013**	-0.380	-2.040***	-1.025**	-1.641***	-2.514**	-2.884**	-0.626***
	deciles 3 - 4	-2.021***	-1.463***	-2.800***	-3.806***	-2.422***	-2.453***	-2.205***	-1.155*	-2.423***	-0.646	-2.263***	-1.731***	-1.544	-2.108***
	deciles 5 - 6	-3.122***	-2.939***	-1.764**	-4.184***	-2.003***	-2.492***	-3.436***	-5.019***	-3.619***	-0.551	-3.863***	-2.063***	-1.119	-3.039***
	deciles 7 - 10	-4.841***	-3.020***	-3.707***	-5.314***	-4.602***	-3.897***	-4.872***	-3.985***	-4.707***	-1.563***	-3.984***	-0.698*	-2.385*	-3.754***
Health	good or fair(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	bad	-0.0927	0.487*	0.321	0.418	0.530***	0.159	0.276*	0.772***	-0.171	1.366***	0.758***	0.0479	1.566***	0.518***
Work intensity	0 - 10% (1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11 - 30%	0.691	-0.0259	0.0480	0.332	-0.0295	0.0514	-0.0491	-0.534	0.0239	0.194	0.314	-0.464	0.0713	-0.347
	31 - 60%	0.771*	-0.496	0.0943	-0.334	-0.0396	-0.574***	0.472*	-0.623*	0.0697	-0.319	0.277	-0.396*	-1.025**	-0.288*
	61 - 90%	0.197	-0.784*	-0.229	-0.629	-0.126	-0.894***	0.121	-0.891*	0.187	-0.376	0.342	-0.699***	-1.780***	-0.122
	91 - 100%	-0.843**	-1.758***	-0.638*	-0.866*	-1.819***	-1.238***	-0.0386	-1.666***	0.345*	-0.759***	0.454	-0.346*	-3.445***	-0.246*

Note: One logit model per country, estimated independently. Star-notation corresponds to the standard output for significance levels (0.05, 0.01, 0.001). Specifications include a full set of interactions (not shown).
(1) Base category.
(2) Coefficients associated to families with children in Austria and Germany are omitted by the model because 100% of families with children receive family allowances.
Source: Estimates based on EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Table B.6. Entitlement models (selected coefficients)

		AUS	AUT	BEL	CZE	DEU	ESP	FRA	GBR	GRC	ITA	KOR	PRT	SVK	USA
Household type	one-adult household(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	couple without children	0.348***	0.0547	-0.106	0.128	0.239**	0.141	0.523***	0.367***	0.0406	0.219	0.0798	0.105	0.0153	0.306**
	Lone parent	0.675***	0.563***	-0.318*	0.507**	0.562***	0.0761	0.774***	0.616***	-0.0682	0.165	0.351	0.211	0.383*	0.935***
	couple with children	0.776***	0.676***	-0.293*	0.558**	0.763***	0.320**	0.858***	0.735***	0.276***	0.267	-0.245	0.111	0.625***	0.671***
	3+ adults without children	0.659***	-0.00698	-0.375	0.787***	0.454***	0.373***	0.847***	0.671***	0.00112	0.663***	0.179	0.158	0.255	0.446**
	3+ adults with children	1.078***	0.696***	0.0532	0.971***	0.702***	0.349***	1.076***	0.811***	0.272**	0.620**	-0.843	0.264	0.799***	0.785***
Income	decile 1(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	decile 2	-0.398**	-0.672***	-1.221***	-0.177	-0.290*	-0.256	-0.257**	-0.354**	-0.493**	0.345*	-0.514	-0.895	-0.154	-0.917***
	deciles 3 - 4	-0.803**	-0.885***	-0.898	0.238	-0.259	-0.271	-0.713***	-0.777***	-0.975***	0.259	-1.550***	-2.983***	-0.268	-0.712**
	deciles 5 - 6	-1.211***	-0.802***	-0.947**	0.285	-0.0435	-0.402	-0.531***	-0.332	-1.243***	0.0566	-0.976***	-3.498***	0.0770	-0.925**
	deciles 7 - 10	-1.580***	-1.059***	-1.132***	0.663	-0.512***	-0.0795	-0.303	-0.752**	-0.828**	-0.0358	-1.338***	-2.684***	-1.480***	-1.291**
Health	good or fine(1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	bad	0.0694	0.0669	-0.0314	-0.171	-0.00194	0.111*	0.0578	0.175***	-0.278***	0.353***	0.157*	0.142*	-0.0381	0.169***
Work intensity	0 - 10% (1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11 - 30%	0.155	-0.154	-0.0431	0.0331	-0.0809	-0.205*	0.0777	0.158	-0.188*	-0.106	0.0526	-0.341	-0.0377	-0.0228
	31 - 60%	-0.127	-0.278**	0.0949	-0.270	-0.186**	-0.129*	-0.0815	-0.121*	-0.278***	-0.180*	-0.0366	-0.351***	-0.247	-0.0683
	61 - 90%	-0.379***	-0.468***	-0.320**	-0.485*	-0.353***	-0.325***	-0.198**	-0.368***	-0.161	-0.265*	-0.212	-0.534***	-0.565***	-0.0953
	91 - 100%	-0.467***	-0.614***	-0.298**	-0.602***	-0.482***	-0.475***	-0.287***	-0.313***	-0.192**	-0.105	0.0134	-0.821***	-0.704***	-0.128*

Note: One logit model per country, estimated independently. Star-notation corresponds to the standard output for significance levels (0.05, 0.01, 0.001). Specifications include a full set of interactions (not shown). (1) Base category.

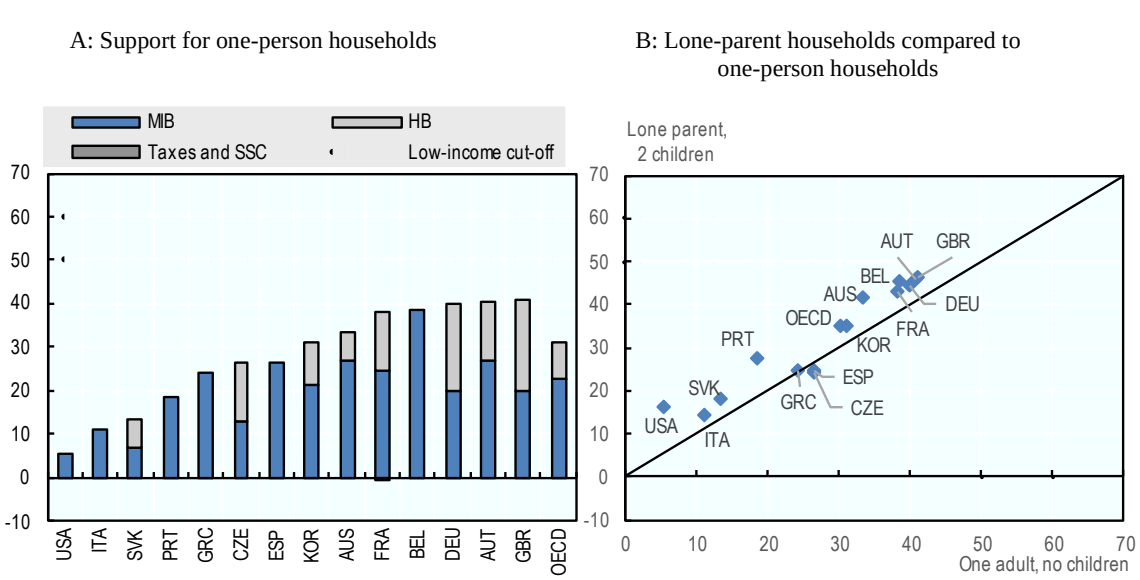
Source: Estimates based on EU-SILC (2016 wave for Belgium and the United Kingdom, 2019 wave for Austria, Czechia, France, Greece, Italy, Portugal, Slovak Republic, Spain), GSOEP (2018 wave) for Germany, KLIPS (2019 wave) for Korea, HILDA (2018 wave) for Australia and SIPP (2020 wave) for the United States.

Annex C. Statutory MIB entitlements

Families with no or little income from other sources may be entitled to support from several different programmes. Their income levels and poverty risks depend on the size of that overall benefit package, including notably MIB but also cash housing benefits (for those living in rented accommodation) and family benefits (for families with children). The statutory rules affecting these entitlements are complex. Figure C. 10 and Figure C. 11 draw on the OECD TaxBEN model to assess statutory entitlements in specific policy-relevant, but hypothetical, household circumstances. Figure C. 10 shows statutory entitlements for a workless one-person household who is not entitled for unemployment benefits, by benefit type, 2019 (Panel A), and the net incomes from the total benefit package for a one person household and a lone parent with two children (Panel B).

Figure C. 10. Minimum-income recipients without other incomes face sizeable poverty risks

Value of total benefit package for a jobless household without any other incomes, % of median household income, 2019



Note: MIB: Minimum-income benefits; HB: Cash housing benefits; Taxes and SSC: Income tax & own social security contributions. Incomes in Panel B adjust for differences in household size ('square root' equivalence scale). Housing-benefit entitlements are calculated for privately rented accommodation with rent equal to 10% of national average full-time earnings, irrespective of income or household size. Any dedicated housing components of social assistance schemes are shown as housing benefits. Calculations for the UK refer to 2018, i.e., prior to the rollout of Universal Credit to all new claimants. Panel B: The two children aged 7 and 9.
Source: OECD TaxBEN model version 2.6.3, 2024. http://oe.cd/TaxBEN.

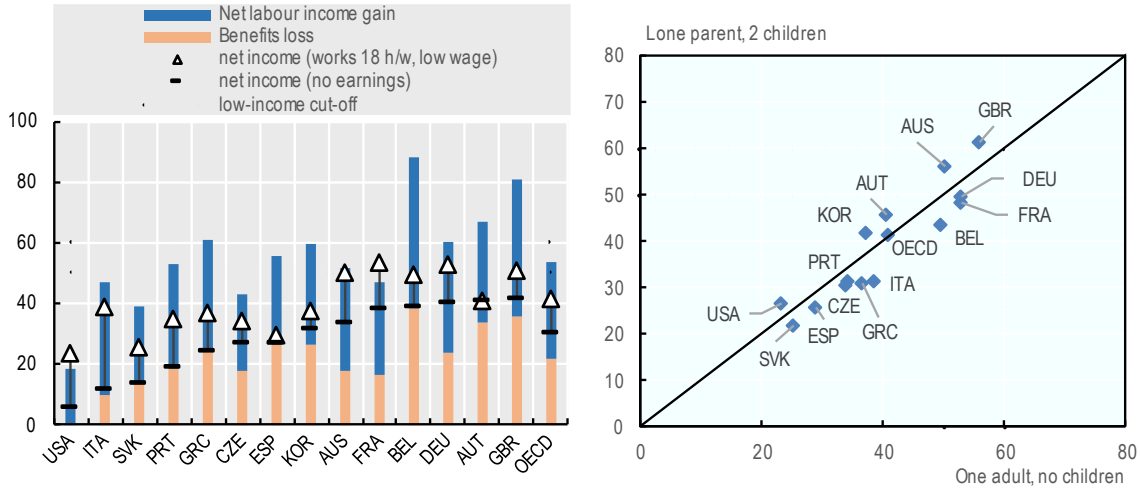
Figure C. 11 shows statutory entitlements for the same household types, assuming they work 18 hours per week with hourly wages at the 10th percentile of the national wage distribution (a value that is often close to the national minimum wage).

Figure C. 11. Incomes in part-time & low-paid work

% of median household income, 2019

A: One-person household: With / without employment

B: Working lone-parents compared to working one-person households



Notes: See Figure C. 10. Results refer to part-time work at 18 hours per week and with hourly wages at the 10th percentile of the national wage distribution.
Source: OECD TaxBEN model version 2.6.3, 2024. http://oe.cd/TaxBEN.