Research Briefing


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June 2022
This briefing summarises our research into the relationship between income poverty and material deprivation and the potential role of policy interventions in reducing the level of consistent poverty to 2 per cent by 2025. The research highlights the relative importance of access to employment and social welfare to tackle poverty.

The analysis draws on data from SILC (Statistics on Income and Living Conditions, 2004-2019) and SWITCH, the ESRI’s tax-benefit model, to simulate the effects of changes to labour market participation and social transfer reform packages on income poverty across vulnerable groups of the population.

First, we explore the relationship between income poverty and material deprivation as consistent poverty is measured by the overlap between these indices. We look at the level of exposure to both poverty measures across social risk groups. While the measures of poverty and deprivation are interrelated, it is difficult to directly assess the effect of policy reform on the level of consistent poverty. For this reason, we look separately at the impact of income changes on income poverty and on deprivation rates. We first investigate the impact of an increase of social transfers on the level of deprivation across social risk groups. In the second part of the analysis, we explore the impact of hypothetical changes in labour market participation on the income poverty level of vulnerable groups. In the last part of the analysis, we look at the impact of different social welfare reforms on income poverty of vulnerable groups.

The report is an output of the Department of Social Protection and the Economic and Social Research Institute research programme on monitoring poverty trends.
Main findings

- Over the period 2004-2019, lone parents and their children and working-age adults with disabilities and their children experienced the highest rates of income poverty (AROP), deprivation and consistent poverty. In 2019, the AROP rate for lone parents was 33 per cent, the deprivation rate 46 per cent and the consistent poverty rate 23 per cent.

- Lone parents and their children and working-age adults with disabilities and their children report the highest degree of overlap between deprivation and income poverty. In 2019 they account for just over half of those in consistent poverty.

- Statistical modelling shows that a simulated increase of five per cent in the value of total social transfers has very little effect on the level of material deprivation, though the effect is stronger among the most vulnerable. It reduces the deprivation rate by 0.8 percentage points among jobless households and half a percentage point for lone parents and their children.

- Using SWITCH, the ESRI’s tax-benefit model we estimate an AROP rate of 14 per cent for the whole population for 2022, 12 per cent for the working age population, 18 per cent for children and 14 per cent for people aged 65 and over.

- In 2022, 96 per cent of non AROP households are in receipt of market income and 70 per cent receive social transfers, while it is 51 per cent and 90 per cent, respectively, among AROP households.

- Using SWITCH, we simulate various scenarios to increase household market income. Increasing female labour force participation and hours of work has the largest reduction effect on AROP rates. It reduces the AROP rate by 3 percentage points for the whole population and by 5 percentage points for children.

- Simulations which increase selected social transfers by €100 million each show that the Working Family Payment (WFP) has the largest potential AROP reduction effect. An additional spend of €100 million on the WFP reduces AROP rates for the whole population by half a percentage point and by one percentage point for children and people in rented accommodation.
• We also simulate increased spending on social transfer packages for children, working-age adults and people over 65 by €1 billion each. The children’s package (Qualified Child Increases and Working family Payment) has the strongest impact on child poverty, reducing it by 4.8 percentage points. The children’s package and working age package (Jobseeker’s Allowance, One-Parent Family Payment etc.) also have a strong AROP reduction effect for people in rented accommodation (-4.5 percentage points).
Introduction

The Department of Social Protection is responsible for developing and monitoring the implementation of national anti-poverty strategies that include the setting of headline poverty targets. The current target is to reduce the “national consistent poverty rate from 5.6 per cent in 2018 to 2% or less of the population by 2025“. Because consistent poverty is a composite measure, it is difficult to directly predict the effect of policies on consistent poverty. To aid with this task, this report examines the relationship between income poverty and material deprivation, the two components of the consistent poverty measure. First, we explore the impact of an increase in social transfers on material deprivation before looking at the effect of labour market and social transfer reforms on income poverty. We explore the impact of these changes across social risk groups.

Data and definitions

The report draws on data from 2004 up to 2019 from the CSO’s Statistics on Income and Living Conditions (SILC) to explore the historic relationship between income poverty and deprivation. The data contains administrative and detailed information on the household’s total annual income in the previous year (including earnings, social transfers and tax). We also use SWITCH, the ESRI’s tax-benefit model, which is linked to 2019 SILC data to simulate the effects of changes to labour market participation and social transfer reforms on income poverty.

Section 1: Income Poverty and Material Deprivation

Over the period 2004 to 2019, Figure 1 shows that the At-risk of poverty rate (AROP) fell consistently. We do not observe a large increase in the AROP rate during the Great Recession (2008-2013) as the income poverty threshold fell as a consequence of the overall fall in household income. In contrast, the measure of material deprivation picked up the impact of the recession going from 12 per cent in 2007 to a high of 31 per cent in 2013. Consistent poverty more than doubled between 2008 and 2013 and subsequently fell to 5.5% in 2019.
Box 1: Social risk

Social risk groups: Most people meet their material needs through the market – usually through their own paid work or that of their families. Social risk groups are made up of people who face barriers to labour market participation. The barriers may be linked to the challenge of combining work and sole-caring responsibilities (lone parents), illness or personal capacity (e.g. people with a disability), or to differences in norms by life-course stages (children are expected to be in full-time education; and older people are expected to retire from work).

The groups examined here are:

- Lone parents and their children
- Working-age adults with a disability and their children
- Other adults (age 30-65) and their children
- Older people (aged 66 and over).
Overlap between Poverty and Deprivation

Figure 2 below shows the overlap between AROP and deprivation between 2004 and 2019. The sum of those AROP only and consistently poor gives the total AROP percentage. The sum of those deprived only and consistently poor is the total deprivation percentage. There has been a decline in the proportion of individuals that are ‘AROP only’ over time, from 13 per cent in 2004 to seven per cent in 2019. Consistent poverty fell from 2004 to 2008, and then rose between 2009 and 2015 before declining again to pre-recession level in 2019 (5.5%). The proportion of those ‘deprived only’ grew rapidly during the recession to a peak of 22 per cent in 2013 before declining to 12 per cent in 2019, a level above the pre-recession rate.

Figure 2: Proportion of individuals in AROP only, deprivation only and consistent poverty 2004-2019

Poverty and Social risk Groups

In Figure 3 we look at the experience of AROP, deprivation and consistent poverty across social risk groups in 2019. Lone parents and their children as well as disabled adults and their children experience distinctively higher rates of income poverty, deprivation, and consistent poverty. For example, lone parents and their children...
report deprivation rates of 46-47 per cent while this rate is only 11 per cent for people aged 66+.

Figure 3: AROP, deprivation, consistent poverty by social risk groups, 2019

These vulnerable groups also show a greater degree of overlap between AROP and deprivation as shown in Figure 4. Focusing on the AROP measure first, 57-59 per cent of lone parents and their children who are income poor are also deprived (dark blue bar). This is also true for 50 per cent of adults with disabilities and 60 per cent of their children. Thus, for these specific groups, policies targeting income poverty will also reach many of those experiencing deprivation. The overlap with deprivation is also relatively strong for other children who are AROP (43%) and young adults (40%). The overlap between deprivation and AROP (red bar) is lower than that between AROP and deprivation (blue bar) but the risk pattern across social risk groups remains
Focusing on consistent poverty for the overall period 2004 to 2019, we see in Figure 5 that the same vulnerable groups make up a very high proportion of the total number of people in consistent poverty. Lone parents and their children make up 30 per cent of those in consistent poverty in 2019 and working age adults with a disability and their children account for 21 per cent. This means that tackling income poverty (or deprivation) among these groups would have a relatively large impact on the consistent poverty rate.
Following previous research, we use statistical modelling to predict households’ level of deprivation based on a range of individual and household characteristics. Using such statistical modelling, we then assess the effect of a universal increase in the value of social transfers of five per cent on the rates of deprivation. The results in Figure 6 show that vulnerable groups benefit most from the increases in social transfers even though the reduction in deprivation is quite modest. Across social risk groups, children living in lone parent households benefit most and those aged 30 to 65 benefit least. Deprivation is reduced by 0.5 percentage points for lone parents and their children, followed by people with disabilities and their children. For people aged 30 to 65 the reduction is only 0.15 percentage points. Besides social risk groups, people in jobless households experience the largest reduction in deprivation, by almost 0.8 percentage points.
**Box 2: What is SWITCH?**

SWITCH is the ESRI’s direct tax and benefit microsimulation model. SWITCH simulates the direct tax liabilities and social welfare entitlements of the Irish population using the nationally representative SILC. SILC is an annual household survey conducted by the CSO that collects detailed information on individuals’ incomes, along with detailed demographic information. The latest available data are from 2019. The data has been reweighted to match the 2019 employment; unemployment and gender-age profile of the population –as reported by the CSO– as well as a forecasted version of the 2019 income distribution for employees and the self-employed.

**Section 2: Income Sources and Poverty Rates**

Using SWITCH, the ESRI’s tax-benefit model, we simulate the income poverty rates for 2022 using different measures of household income, as shown in Table 1.
The first row shows the poverty rate that would prevail for market income only, that is in the absence of the tax and transfer system. For the total population, the AROP for 2022 is estimated to be 28 per cent and it is slightly lower for the working age population at 21 per cent while it is more than twice that for the elderly population as they have very low market income. For children, the AROP is estimated at 30 per cent. The next row shows that deducting taxes and social security from market income increases AROP rates across all age groups. Adding social transfers to market income in the third row, considerably reduces the AROP rates for all age groups, demonstrating that the benefits system in Ireland strongly reduces AROP rates. Finally, taking account of all tax deductions and social transfers and comparing to market income only (first row), the AROP rate is halved for the total population, it is over 1.5 times less for the working age and children and it is four times lower for the elderly. Equivalised disposable income, after taxes and transfers is the income measure used for the official AROP rate.

**TABLE 1: SIMULATED AT RISK OF POVERTY RATES IN 2022 BEFORE AND AFTER TAXES AND TRANSFERS**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Working age</th>
<th>Elderly</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market income</td>
<td>28%</td>
<td>21%</td>
<td>57%</td>
<td>30%</td>
</tr>
<tr>
<td>Net income (market income less tax and social security)</td>
<td>32%</td>
<td>24%</td>
<td>63%</td>
<td>35%</td>
</tr>
<tr>
<td>Gross income (market income plus transfers)</td>
<td>12%</td>
<td>10%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Disposable income (market income less tax and social security plus transfers)</td>
<td>14%</td>
<td>12%</td>
<td>14%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: Authors calculations using SWITCH v4.4

Note: The AROP rate is the share of persons with an equivalised income below 60% of the national median income. Income is equivalised using the CSO’s equivalence scale.

In Table 2, we report the income sources and average amounts received for households that are AROP and those not AROP. Among AROP households, 51 per cent are in receipt of some sort of market income while it is 96 per cent of non-AROP households. Ninety per cent of AROP households are in receipt of welfare benefits, compared to 70 per cent of non-AROP households. Means-tested benefits are much more common among AROP households than among non-AROP households. While

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1 Market income includes all income earned through the labour market and investments within the household.
almost all non-AROP households pay income tax and/or Universal Social Charge (USC), it is only 68 per cent among AROP households. Overall, the market income of non-AROP households is 4.6 times greater than of AROP households and the average disposable income of the former is almost three times higher than for the latter.

### TABLE 2: A PROFILE OF INCOME SOURCES AND AMOUNTS FOR AROP AND NON-AROP HOUSEHOLDS IN 2022

<table>
<thead>
<tr>
<th></th>
<th>In receipt</th>
<th>Average Monthly amount given receipt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AROP</td>
<td>Not AROP</td>
</tr>
<tr>
<td>Market income</td>
<td>51%</td>
<td>96%</td>
</tr>
<tr>
<td>Benefits</td>
<td>90%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Pensions</strong></td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td><em>Means-tested benefits</em></td>
<td>64%</td>
<td>23%</td>
</tr>
<tr>
<td><em>Non-means tested benefits</em></td>
<td>76%</td>
<td>59%</td>
</tr>
<tr>
<td>Tax and USC</td>
<td>68%</td>
<td>98%</td>
</tr>
<tr>
<td>Employee social security</td>
<td>16%</td>
<td>69%</td>
</tr>
<tr>
<td>Self-employed social security</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>Disposable income</td>
<td>99%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Authors calculations using SWITCH v4.4

### Section 3: Labour Force Participation, Wages and Income Poverty Alleviation

Using the SWITCH model, we examine the effect of labour force participation and wages on market income and thus in income poverty alleviation. We create counterfactual scenarios for households with low labour market attachment or low wages. We examine the impact of the five scenarios listed below to improve labour market participation and wages and their respective effects on AROP reduction.

1. Assigning the head of household in each jobless household to employment provided they do not self-report that they are unfit to work.
2. Increasing the labour market participation and hours of work of the head of a household containing a person with disabilities to match the structure of labour force participation and hours of work of workers from households which do not contain a person with disabilities. If the head of the household is a person with disabilities, then we change the labour supply of the second adult in the household.
3. Increasing the labour market participation and hours of work of married women so that it matches the structure of male labour force participation and hours of work.

4. Increasing the participation rate and hours of work of lone parents to match that of a similar single individual without children.

5. Introducing a mandatory living wage.

Figure 7 presents the results of the simulated changes to market income on the AROP rate where the poverty line is fixed at the baseline 2022 level. In the first scenario, increasing the labour supply of jobless households decrease the whole population AROP by 2.1 percentage points and by three percentage points for child AROP. In the second scenario, increasing the labour supply of households containing a person with disabilities has very little effect on the AROP. The largest effect is to reduce child AROP by 0.3 percentage points. In the third scenario, the labour supply of married women is adjusted to mirror that of married men, both in terms of participation and of hours supplied. Of all scenarios, this has the largest effect as it reduces the whole population AROP by 2.9 percentage points and 5.2 percentage points for children. It is worth mentioning that the labour market changes for married women do not take account of associated increased childcare costs and therefore are likely to produce higher estimates of the poverty impact from these labour market changes. In the fourth scenario, assigning to lone parents the employment characteristics of a similar single individual person without children has very little effect on AROP rates across all groups. In the final scenario, increasing the minimum wage from its level in 2022 of €10.50 to €12.90 per hour has also very little impact on the AROP rate across all groups. The largest effect is to reduce child AROP rates by 0.6 percentage points.
Section 4: Social Transfers and Income Poverty Alleviation

Using SWITCH, we consider how increases in spending across a range of social transfers reduces the AROP rate of the whole population, the adult population, the elderly, children and renters. The social transfers we consider are the following:

- Child Benefit
- Qualified Child Increase (QCI)
- Living Alone Allowance
- Core Benefits (Jobseeker’s Allowance, Jobseeker’s Benefit, One-Parent Family Payment, Jobseeker’s Transitional Payment and Disability Allowance)
- Qualified Adult Increase (QAI)
- Fuel Allowance
- Working Family Payment.

Given the current policy concerns about rising rental costs and previous findings of affordability problems and poverty after housing costs among those in the private rental and Local Authority rental sectors (Russell et al., 2021), the impact on poverty among renters is also considered.
These benefits are selected due to their ability to target each of the sub-populations, thus allowing for a policy mix which has the potential to alleviate poverty across the whole population. We simulate two social transfers reform packages. The first simulation consists of increasing spending on each of these benefits by €100 million through reforms to their parameters. The second involves increasing spending by €1 billion for packages of reforms. We summarise below the effect of each of these simulations on the AROP rate across these groups of population.

**Social transfer increases of €100 million each (Figure 8)**

- Increasing Child Benefit has a very limited effect on the AROP rates, leading to a poverty reduction of just 0.1 percentage points overall and 0.3 for children.
- An increase in Qualified Child payments (QCI) is slightly more effective at reducing overall poverty (-0.3 percentage points) and has a larger effect on child poverty (-0.8 percentage points) but all effects remain quite weak.
- Increasing the Living Alone Allowance or the Fuel Allowance reduces poverty by around 0.3 percentage points overall, with particularly large effects on elderly poverty (-2.2 percentage points).
- Increasing the rate of payment of core working age benefits (Jobseeker’s Allowance, Jobseeker’s Benefit, One-Parent Family Payment, Jobseeker’s Transitional Payment, and Disability Allowance) or Qualified Adult payments (QAI) reduces the overall at risk of poverty rate by around 0.3 percentage points. The core benefits reform has a larger effect on child poverty and renters (-0.5 percentage points), while the QAI affects elderly poverty more (-0.8 percentage points).
- Increasing the income limit for the Working Family Payment (WFP) has the largest effect of any of the measures considered above, reducing the overall AROP rate by 0.5 percentage points, the child poverty rate by one percentage point and the AROP rate of those who rent by 1.1 percentage points.
FIGURE 8: PERCENTAGE POINT CHANGE IN AROP RATE DUE TO SIMULATED INCREASE IN SELECTED WELFARE PAYMENTS COSTING €100M EACH (FIXED POVERTY LINE 2022)

Source: Authors calculations using SWITCH v4.4

Social transfer increases of €1 billion each (Figure 9)

For this simulation we consider four reform packages as described below:

- Child benefit increase reform.
- Children’s reforms consisting of changes to the Qualified Child and the Working Family Payment.
- Elderly reforms including changes to the Living Alone Allowance, Fuel Allowance and Qualified Adult Increase.
- Working-age adult reforms including increases to core benefits.

The main findings from these simulations can be summarised below:
• The child benefit reform of €1bn is still the least effective at reducing the overall AROP rate (-1.5 percentage points overall) but has a more substantial impact on the child poverty rate (-3.3 percentage points).
• The children’s reforms have the greatest effect on the overall AROP rate (-2.3 percentage points) and child poverty rate (-4.8 percentage points). The reduction for renters is also large (-4.4 percentage points).
• The elderly reforms reduce overall poverty by 1.9 percentage points, and elderly poverty by 5.7 percentage points.
• Working-age adult reforms reduce the overall poverty rate by 2.1 percentage points with an even distribution across groups of the population (except the elderly). The largest reduction in poverty is for renters (-4.5 percentage points).

Overall, we find that the children’s package and the child benefit reforms have the strongest impacts on child poverty (decreased by 4.8 and 3.3 percentage points respectively) and the working working-age reforms and children’s package have the largest effect on poverty for people living in private rental accommodation (4.5 percentage points each).
Section 5: Conclusions and Policy implications

The aim of this report was to understand the relationship between official poverty measures - income poverty and material deprivation - across vulnerable groups of the population. The report also examines a selected range of policy interventions to reduce the overall level of poverty with the national poverty targets in mind. The findings highlight the relative importance of access to employment and social transfers to tackle poverty. The main findings are as follows:

- Lone parents and their children and working-age adults with disabilities and their children experience high rates of income poverty, deprivation and consistent poverty. They also report the highest degree of overlap between deprivation and income poverty. Policies addressing income poverty among these groups are also likely to affect many of those in deprivation and thus, consequently, their exposure to consistent poverty.
• Increases to social transfers reduce the overall level of deprivation. While modest, the reduction in deprivation most benefits the most vulnerable.
• Increasing the labour market participation of lone parents or of the head of household in a household with a person with a disability, has little effect on income poverty rates overall but it is more likely to have a significant impact on consistent poverty. This is due to the strong association between employment status and deprivation. These two groups with their children represent half of those in consistent poverty in 2019.
• The most effective of the labour market simulations considered in decreasing AROP rates was increasing female labour force participation and hours worked to match those of men with similar characteristics.
• The most effective of the social transfer simulations considered in reducing AROP rates for the overall population, for children and for people in rented accommodation involved targeting children and their families through Qualified Child Increases and the Working Family Payment.
• These findings show that a combination of measures targeting both employment and social transfers is likely to be the most effective way to address poverty reduction targets. While not examined in this report, other measures like investment in services such as health, education and housing needs to be considered for improving the living standard of low-income households.
Publication information: The research report and briefing are jointly published by the Department of Social Protection and the ESRI as part of the Social Inclusion Report Series. The authors are solely responsible for the views, opinions, findings, conclusions and/or recommendations expressed, which are not attributable to the ESRI who does not itself take institutional policy positions, nor are the views attributable to the Department. The researchers are responsible for the accuracy of the research and all reports are peer-reviewed.