4 The case of Ireland

Ireland benefits from a strong and high-level commitment to integrate equality and its different dimensions into budgetary processes. These efforts are articulated under the "Equality Budgeting" initiative, which has been progressively implemented across the government since 2018. As part of this initiative and the country's wider performance framework, the distributional impacts of budgetary and welfare measures are analysed to inform budgetary decisions. Government departments are also responsible for setting equality-related goals and relevant performance targets. An advisory group steers the development of the initiative, while the technical capacity to support its implementation is provided by an interdepartmental network of experts. Distributional analyses are underpinned by Ireland's tax-benefit microsimulation model, which is developed and maintained independently. Overall, Ireland's case therefore provides an example of a robust institutional framework for the routine consideration of equality in the budget cycle.

4.1. A review of recent trends in income inequality in Ireland

4.1.1. Market income inequality

As a small and open economy, Ireland tends to have a relatively high level of income inequality before redistribution in the form of taxes, transfers, and benefits; this is known as market income inequality. In 2019, Ireland was among the EU member states with the highest level of market income inequality for the working-age population, after Greece, Bulgaria, and Luxembourg (OECD, 2023[1]).

Figure 4.1 plots the evolution of the Gini coefficient for market income from 2004 to 2020, focusing on the working-age population (ages 18-65) to increase comparability between countries with public pension schemes and those with obligatory private pension schemes.[1] It shows that market income inequality rose in the years following the Great Recession, with the Gini coefficient for the working-age population rising from 0.468 in 2007 to 0.535 in 2010 (OECD, 2023[1]). These trends and previous research highlight the importance of changes in the employment level and the related evolution of income inequality in Ireland, both in terms of market and disposable incomes (ESRI, 2021[2]; Callan et al., 1998[3]; Barrett, Callan and Nolan, 1999[4]).

Figure 4.1. Income inequality before taxes and transfers, 2004 to 2020

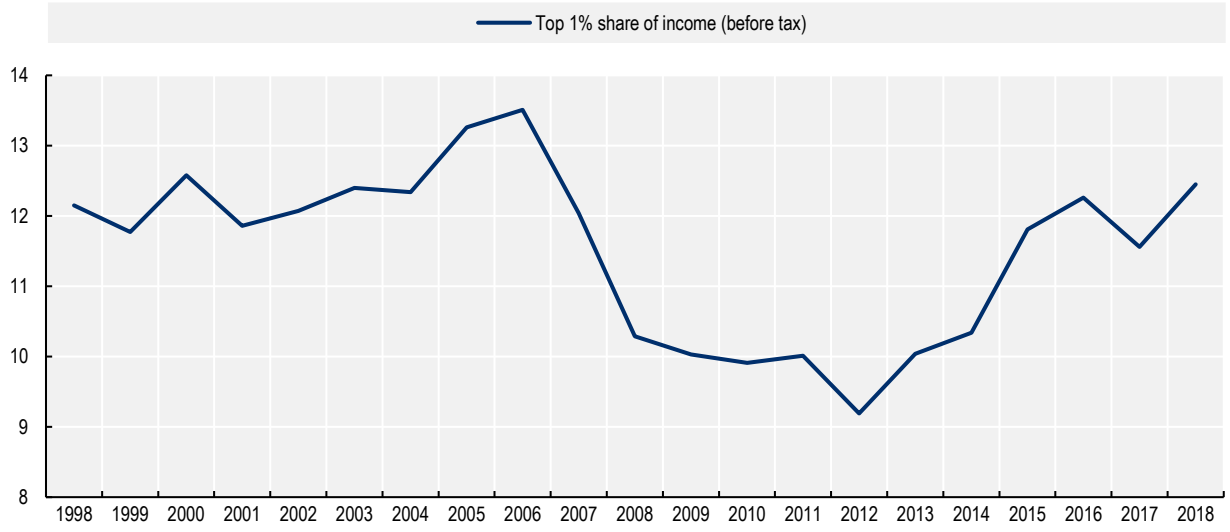
Ireland, Gini coefficient, market income (working-age population, 18-65)

Note: data for the working-age population (disregarding the effect of public pension schemes) and based on the 2012 new income definition
Source: OECD Income Distribution Database, data extracted on 09 Jun 2023.

Figure 4.2 plots the top 1% share of total income from 1998 to 2018. Around the Great Recession, from 2007 to 2010, the top 1% share of income fell from 12.04% to 9.91%. Importantly, income levels at the higher end of the income distribution may be underestimated as household surveys are not well suited to capture the incomes of the top 1% of households (Callan, Doorley and McTague, 2020[5]; Burkhauser et al., 2017[6]). However, tax returns can provide an alternative source of data for those on top incomes. Research by the OECD and Ireland's Revenue Commissioners, which relied on tax records microdata, shows a similar trend, with the top 1% share of gross income falling from 12.4% in 2006 to 9.8% in 2012, before rising to 11.3% in 2015 (Office of the Revenue Commissioners, OECD and IGEES, 2018[7]).

Figure 4.2. Income share of the top 1% before tax, 1998 to 2018

Ireland, top 1% share of total income



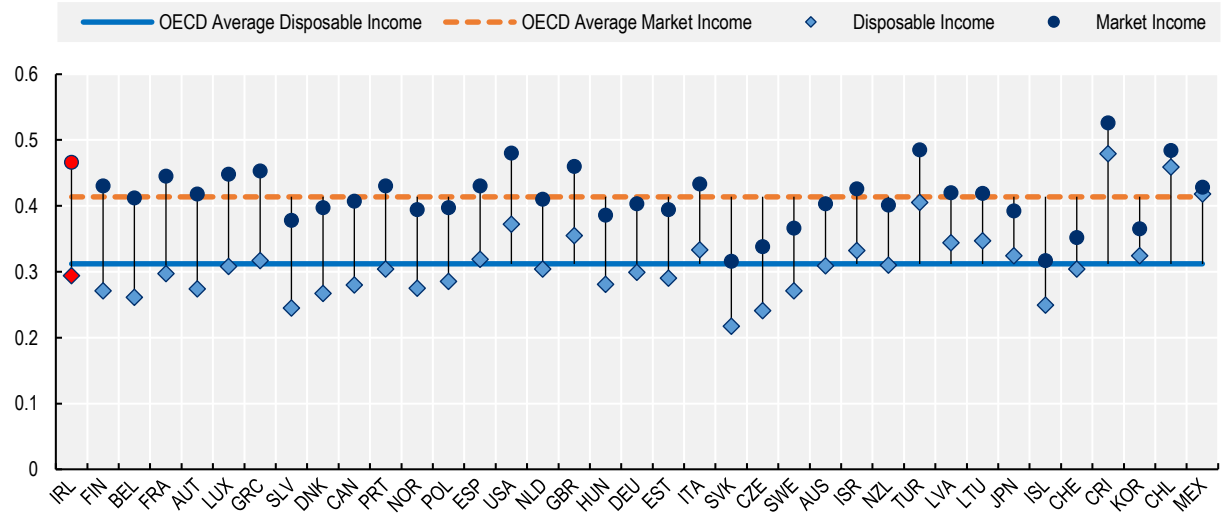
Note: Income is measured before the payment of taxes and non-pension benefits, but after the payment of public and private pensions.
Source: World Inequality Database (WID.world), data extracted on 09 June 2023

4.1.2. Disposable income inequality

In Ireland, like in other countries, market income inequality is reduced through the system of taxes and benefits, which redistributes levies (e.g. taxes, social insurance contributions, etc.) as social benefits (e.g. basic supplementary welfare allowance, child benefit, pensions, etc.) or public services (e.g. education, health, etc.). Disposable income refers to income measured after direct taxes, transfers and benefits. The difference between market income and disposable income, therefore, reflects the distributiveness of a country's taxation and benefits system.

Figure 4.3. Differences in household income inequality among the working-age population pre- and post-tax and government transfers, 2019

OECD, Gini coefficient, working-age population (18-65)



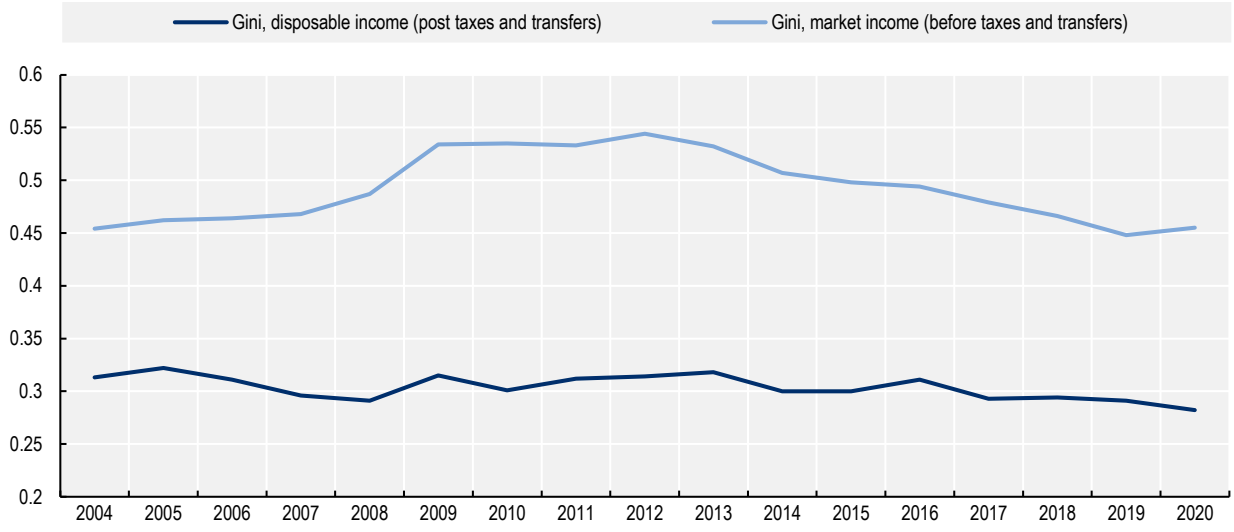
Note: Countries are ranked from the highest to the lowest difference before and after taxes. Before taxes and transfers data for Mexico are post taxes but before transfers. The latest data refer to 2019 for all countries except Costa Rica and the United States (2021); Australia, Canada, Latvia, Korea, Mexico, the Netherlands, New Zealand, Norway, Sweden and the United Kingdom (2020); Ireland, Italy, Japan and Poland (2018); Chile, and Iceland (2017). No data available before 2018 for Belgium and Japan or before 2015 for Luxembourg. Earlier data for Chile, Estonia, Sweden and the United States are from 2013.
Source: OECD Income Distribution Database, data extracted on 29 June 2023

Figure 3.3 plots the Gini coefficient of OECD countries before and after taxes and benefits to show the redistributive power of each system; the graph focuses on the working-age population to exclude the effects of pensions. Before taxes and benefits, income inequality for the working-age population in Ireland is among the highest in the EU. However, for the working-age population, the Irish system of taxes and benefits is also the most redistributive in the OECD. As shown above, the Irish system of taxation and benefit does more to reduce income inequality for the working-age population than in any other OECD member country. As a result, disposable income inequality in Ireland is close to the EU average after taxes and social transfers. For the whole population, Ireland still has one of the most redistributive systems of taxes and transfers, with only Finland, France, Belgium and Austria having more redistributive tax and welfare systems in 2019 (OECD, 2023[1]).

Figure 4.4 plots the evolution of the Gini coefficient for household disposable income for the working-age population in Ireland from 2004 to 2020. Despite some upheavals, notably around the Great Recession, the trend is broadly stable over the period. Disposable income inequality increased following the Great Recession, with unemployment rising from 5% to 15% and Gini coefficients rising from 0.291 in 2008 to 0.318 in 2013 (ESRI, 2018[8]).

Figure 4.4. Income inequality after and before tax, 2004 to 2020

Ireland, Gini coefficient, working-age population

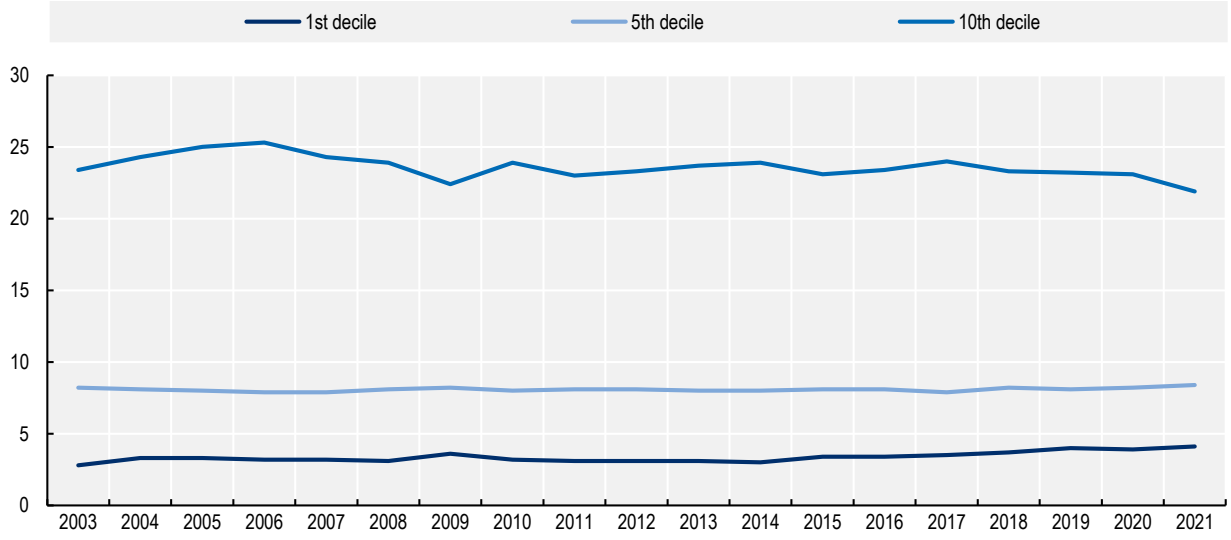


Note: data for the working-age population (disregarding the effect of public pension schemes) and based on the 2012 new income definition.
Source: OECD Income Distribution Database, data extracted on 09 Jun 2023

Overall, Ireland has experienced strong and progressive income growth over the last 30 years (ESRI, 2021[2]). While real income growth has taken place at all levels of the income distribution, it has grown relatively faster for the bottom half than the top half of the income distribution. Figure 4.5 plots the share of disposable income for the 1st, 5th, and 10th deciles from 2003 to 2021. It shows that growth was also stronger, on average, for the bottom decile of the distribution than the top decile, with 2.4% and -0.3% respective growth rates over the period. As a result of faster real growth at the bottom half of the income distribution from 2003 to 2021, disposable income inequality has fallen progressively over this period.

Figure 4.5. Decile shares of disposable income

Ireland, 2003-2021



Source: (Roantree, Barrett and Redmond, 2022[9])

This strong and inclusive growth in disposable income has continued despite the rise of the unemployment level during the COVID-19 pandemic. From 2019 to 2021, income grew on average by 4% each year for the bottom half of the disposable income distribution. This continued growth suggests that the measures taken to absorb the negative impact of the pandemic on market incomes, such as the Pandemic Unemployment Payment (PUP), did in fact cushion the blow to disposable incomes, especially around the middle of the income distribution (Roantree, Barrett and Redmond, 2022[9]).

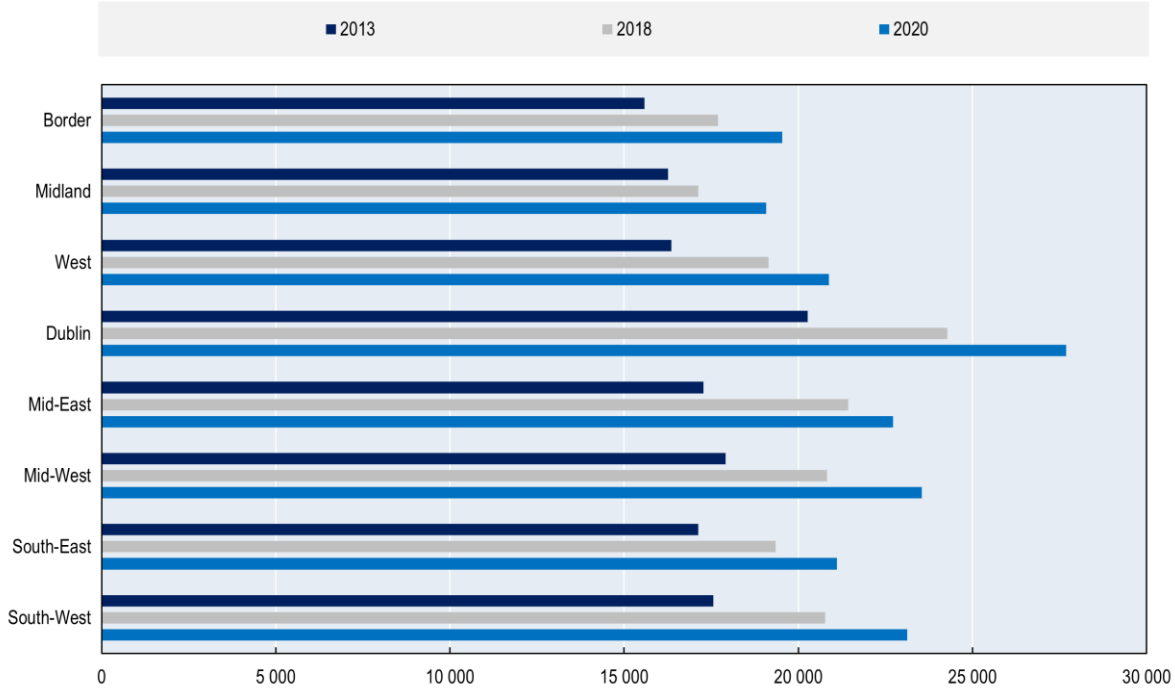
4.1.3. Regional inequality

Regional disparities in Ireland widened during the last decade. The shift toward high-value-added sectors contributed to the change in the geographic distribution of the country's economic activity. Dublin and Cork, the two largest cities, have experienced much faster growth than many other parts of Ireland since 2010. (OECD, 2022[10]). Employment is also heavily concentrated around Dublin and Cork, with 35% of all employees working in Dublin City and County and 12% of employees working in the Cork City and County. Both counties are outliers compared to the rest of the country. Galway City and County, the third largest county in terms of employed persons only accounted for 6% of employees, Limerick for 5% and Waterford for 2.5% (CSO, 2023[11]).

In most small regions, disposable income per capita moved further away from the national average between 2018 and 2020 (see Figure 4.6). The Dublin region, comprised of Dublin City and county, had the highest average disposable income per capita in 2020 (CSO, 2023[11]). On the other hand, disposable income per capita was at least 10% below the national average in the South East, West, Midland and Border regions (see Figure 4.6).

Figure 4.6. Regional income inequality increased during the last decade

Ireland, disposable income per person, percentage deviation from the national average by small regions



Data source: (CSO Ireland, 2023[12]), "County Incomes and Regional GDP 2020", data extracted on 09 Jun 2023

4.2. Budgeting frameworks related to inequality and well-being

Government can mobilise budgeting tools and public expenditure to reduce income inequality through various channels. Beyond the redistribution of tax revenues, governments can also use their budgets to fund programmes that provide direct assistance to low-income individuals and families, such as food stamps, housing assistance, and cash transfers. Governments can also invest in free education, training and job placement programmes that help individuals from disadvantaged backgrounds gain skills and knowledge to succeed in the workforce. Similarly, investments can be made in infrastructure projects that benefit marginalised communities; this includes building roads, schools and hospitals in underserved areas.

Overall, the key to using government expenditure to reduce inequalities is to ensure that programmes and services funded by the government benefit disadvantaged individuals and communities and that they are effective in addressing the specific needs and challenges faced by these groups. In other words, budgeting can be used as a means to achieve societal objectives.

The systematic consideration of distributional impacts in the budget process is not an entirely new concept in Ireland. “Equality Budgeting” has been high on the political agenda following developments such as the constitutional referendum on same-sex marriage and the Citizen’s Assembly on gender equality. In the 2016 Programme for a Partnership Government, the Irish Government made an explicit commitment to “develop the process of budget and policy proofing as a means of advancing equality, reducing poverty and strengthening economic and social rights”. Additional commitments to equality proofing were made in the current Programme for Government, which also introduced a broader perspective on well-being.

Ireland has made substantial progress around Equality Budgeting since it was first piloted in 2018. This section reviews the established practices to facilitate the consideration of the likely equality impacts of proposed and ongoing budgetary measures.

4.2.1. Equality Budgeting initiative

Equality Budgeting was introduced as a pilot programme for the 2018 budgetary cycle and expanded in subsequent years. It is a cross-government commitment that builds on Ireland’s performance budgeting framework by encouraging departments to identify programmes and set performance targets related to inequality.

In 2019, the OECD completed a Scan of Equality Budgeting in Ireland at the request of the Department of Public Expenditure, NDP Delivery and Reform (DPENDR) and in liaison with the Department of Justice and Equality. The report was published alongside the 2020 Budget, providing 12 recommendations to support the further expansion of Ireland’s Equality Budgeting efforts. As the implementation of these recommendations continues, guided by an ambitious roadmap, a progress update on the implementation of Equality Budgeting is included in Ireland’s annual Public Service Performance reports published by DPENDR. According to the last Public Service Performance report, all 18 government departments now report equality budgeting metrics, with some departments reporting progress on multiple high-level goals (DPER, 2022[13]).

The equality budgeting initiative is also informed by the Equality Budgeting Experts Advisory Group, which is comprised of experts from academia, civil society, government departments and agencies. In March 2021, the Irish Government defined several priorities to take Equality Budgeting further, including the establishment of an Interdepartmental Network for Equality Budgeting. Along with the Expert Advisory Group that advises on the direction of Equality Budgeting in Ireland, the Interdepartmental Network helps build capacity within government departments and share information.

Enabling environment

The development and implementation of Equality Budgeting require well-designed expenditure frameworks and institutional arrangements that define clear roles and responsibilities. Key elements for an effective Equality Budgeting framework include a national policy framework for Equality Budgeting, supporting operational guidance and tools, and mechanisms for cross-governmental co-ordination. As shown in Table 4.1, all of these strategic elements are currently in place to support Equality Budgeting in Ireland.

Table 4.1. Overview of the strategic framework for Equality Budgeting in Ireland

Elements of an effective framework for Equality Budgeting	Is it in place in Ireland?
National policy framework for Equality Budgeting	Yes
Guidance on the application of Equality Budgeting	Yes
Inter-agency group to ensure co-ordination and/or exchange of good practices on Equality Budgeting	Yes

Source: author (based on desk research and interviews)

4.2.2. Integration of Equality Budgeting in the budgetary process

Equality Budgeting reflects a cross-government commitment embedded in Ireland's performance framework. All government departments are therefore responsible for ensuring its implementation and the integration of consideration of equality in budgetary processes. To this end, government departments and agencies share information on the distributional impacts of proposed and ongoing policies at different points in the budgetary process. Figure 4.7 outlines the different phases of the budgetary cycle in Ireland.

Figure 4.7. Whole-of-Year Budgetary Process in Ireland

Source: (Kennedy, 2022[14])

Prior to the Budget, the Department of Finance, the Department of Public Expenditure, NDP Delivery and Reform, and the Department of Social Protection each conduct distributional analyses of proposed budgetary measures and welfare packages. This analysis is carried out on an *ex ante* iterative basis earlier in the budget year when potential policy options and prospective welfare measures are examined and as

the budget is being finalised to help inform budgetary decisions. This work relies on the use of the SWITCH (**S**imulating **W**elfare and **I**ncome **T**ax **C**hanges) tax-benefit microsimulation model by different government Departments in their respective policy areas. SWITCH is based on EUROMOD, the harmonised European microsimulation model developed and maintained by the European Commission. Multiple departments collectively provide the funding to the Economic and Social Research Institute (ESRI) for the development of the model and related research. More departments now have access to the SWITCH model, which allows for analysis to be undertaken across more policy areas (e.g. Department of Health).

Spending departments across the Irish Government are responsible for implementing equality budgeting by setting relevant performance targets across their policy jurisdictions (Nicol, 2021[15]). The Performance Budgeting unit in DPENDR is available to provide technical support to government departments in this process. The ESRI also engages with government departments to support their use of the SWITCH model. Overall this provides a very comprehensive framework for distributional analysis. Box 4.1 provides an example where SWITCH analysis was undertaken by the ESRI to inform policymaking.

The distributional analyses conducted by DPENDR and the Department of Finance on a nominal basis are routinely published alongside the budget announcements on Budget Day, making Ireland one of only two countries in the Euro Area that systematically carries out distributional impact assessments as part of the budgetary process. Between 2015 and 2020, Ireland, along with the Netherlands, were the only two Euro Area member states that consistently presented DIAs in their Draft Budgetary Plan (DBP) (Bazoli et al., 2022[16]). The final budget DIA, prepared by the Department of Finance, is included in the Memorandum to Government on budgetary measures, Ireland's Draft Budgetary Plan, and in the Department's *Beyond GDP – Quality of Life Assessment* publication.

The Parliamentary Budget Office (PBO) uses the SWITCH model to carry out its own analyses, which can further enrich budget discussions in Parliament. It has also developed its own indirect tax model, EVE, to inform its budgetary analysis. For example, the Irish PBO estimated the real distributional impact of selected tax and welfare measures in the 2023 budget and the progressivity of targeted measures versus universal measures. The ESRI and the Department of Finance also use the ITSim (**I**ndirect **T**axes **Sim**ulation) model to complement the analysis of direct tax and welfare measures by examining the distributional impact of indirect tax measures.

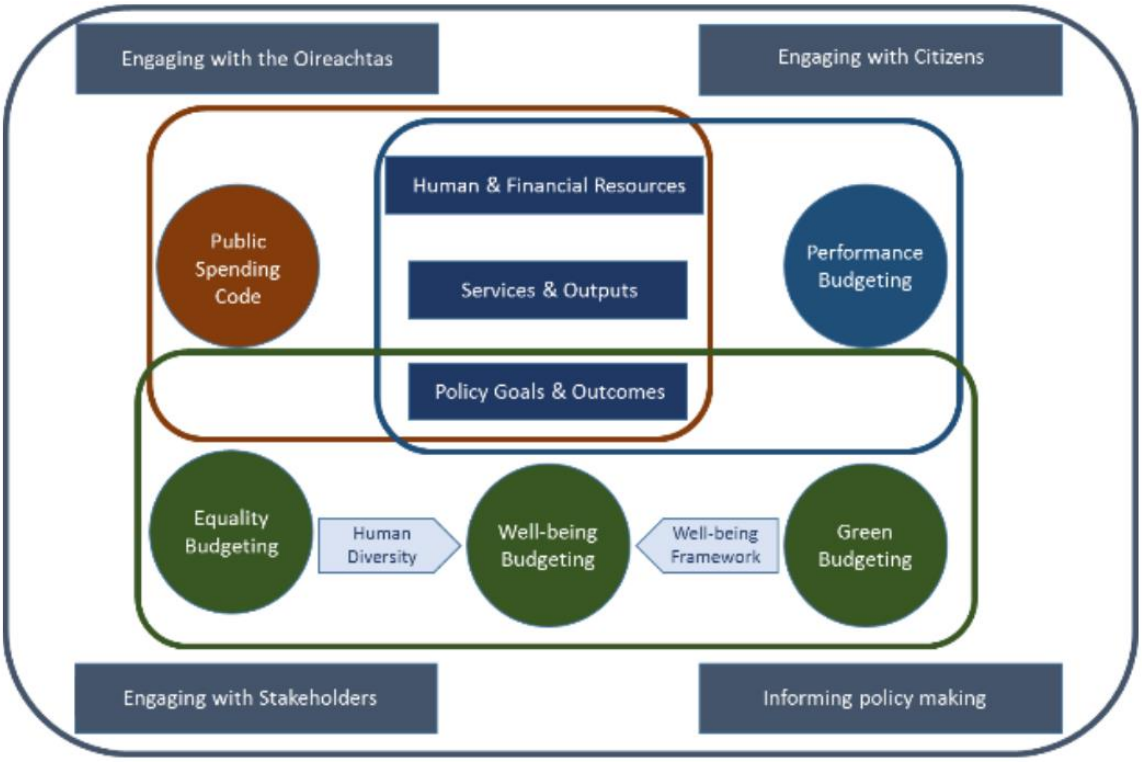
The Department of Social Protection uses the SWITCH model to carry out distributional impact assessments in advance of the budget, the results of which are published in the Department of Finance's Tax Strategy Group papers and during the budgetary process. On Budget Day, distributional impact assessments are published as part of the Budget Day documentation. A few months after the budget, the Department of Social Protection also releases an *ex post* assessment of the likely effects of policies on household incomes, families, poverty and access to employment – this is known as the Social Impact Assessment.

These different distributional impact assessments ensure that considerations related to equality and poverty are systematically incorporated into the Irish budgetary process. Thanks to these processes, decision making can be informed in real-time. Such distributional analyses were very important in the recent decisions on how the Government could best support households with the cost of living in a high inflation scenario. Throughout this process, the Department of Finance engages with relevant colleagues in the ESRI and DPENDR. Officials in the Department of Finance, Department of Public Expenditure, NDP Delivery and Reform and Department of Social Protection also produce internal distributional analyses to inform policy development in the lead-up to decisions being taken. DPENDR maintains engagement with line departments, which are responsible for implementing Equality Budgeting in their respective policy areas. In more recent years, DPENDR has also produced a publication on the use of Carbon Tax funds, which includes a reference to how the impact of Carbon Tax increases on lower-income households has been offset by targeted social welfare policies.

Integration of equality budgeting through performance budgeting

Equality Budgeting in Ireland is integrated into the budgetary process through the country's Performance Framework. As part of the overall structure of performance monitoring, Equality Budgeting exists alongside other cross-government initiatives, including the recent well-being initiative. These initiatives and their wider performance framework seek to promote the use of evidence in policymaking and ultimately improve the use of public resources. Figure 4.8 offers an overview of the different constituent initiatives of Ireland's performance framework.

Figure 4.8. Overview of Ireland's Performance Framework



Source: (Kennedy, 2022[14])

The different initiatives shown above co-exist within the broader performance framework and bring different perspectives on the efficient use of public resources. In recent years, the development of new initiatives such as Equality Budgeting and Well-being Budgeting have placed policy goals at the centre of performance. Both initiatives, as well as Green Budgeting, are concerned with the impact of public policies on people's lives.

Strategic guidance

The implementation of Equality Budgeting in Ireland benefits from the relatively strong institutional framework in which it is embedded. In Ireland, equality budgeting is spearheaded by DPENDR with the support of the Department of Children, Equality, Disability, Integration and Youth (DCEDIY) and benefits from the political support of the Taoiseach. Figure 4.9 provides an overview of the institutional set-up for equality budgeting in Ireland.

Figure 4.9. Institutional framework for equality budgeting

Note: Adapted from (Nicol, 2021[15]).
Source: OECD Secretariat (based on desk research and interviews)

The Government has also established the Equality Budgeting Expert Advisory Group to provide strategic guidance on the further development and roll-out of equality budgeting in Ireland. The Group advises the Government on the future direction and thematic areas of equality budgeting in light of international experiences and best practices, academic work, and considering the strengths and potential shortcomings of the Irish context. The Group is chaired by DPENDR and involves representatives from relevant departments and institutions.[2] In addition, the Irish Human Rights and Equality Commission (IHREC) is available to provide general expertise vis-à-vis equality proofing of policies. The Women's Council of Ireland was also instrumental in providing strategic guidance for the development and implementation of equality budgeting.

The Equality Budgeting Interdepartmental Network was established in July 2021 to co-ordinate the implementation of Equality Budgeting across government departments. It is composed of senior staff members from all departments. Each member has a broad knowledge of the policy work carried out within their department and how it relates to the advancement of equality and inclusion. Members of the Interdepartmental Network are accountable for:

> - *"ensuring that policy makers in their departments are fully aware of, and implementing, Equality Budgeting policy where applicable;*
> - *bringing all relevant work within their department to the attention of the Equality Budgeting unit, to ensure that strategic direction of Equality Budgeting is fully informed; and*
> - *attending all scheduled meetings, or where this is not possible, nominating a suitably informed deputy to attend and represent their department." (Oireachtas, 2022[17])*

Social Impact Assessment Framework

To complement the microsimulation exercise undertaken as part of budget preparations and considering the Government's commitment to equality budgeting, a Social Impact Assessment series was introduced.

Social Impact Assessment (SIA) is an analytical framework that is designed to examine the demographic profile of public services users, and how they are impacted by budgetary policy decisions. SIAs are published throughout the year and examine current expenditures in specific policy areas. 13 SIA papers have been produced as of July 2023, including on domiciliary care allowance, social housing support and targeted childcare programmes.

These analyses are based on an analytical framework for SIAs, developed by IGEES analysts within the Department of Public Expenditure, NDP Delivery and Reform. It has been developed to focus on policy areas that cannot easily be incorporated into the existing SWITCH model, mainly the impacts of public expenditure on recipient households. The Social Impact Assessment framework, which is inspired by New Zealand's experience with well-being budgeting, widens the scope of analysis and integrates factors other than direct tax and benefits. This new framework focuses on policies and programmes with explicit socio-economic goals. It seeks to ascertain whether a policy change resulted in a quantifiable loss or gain to existing beneficiaries by measuring changes in income. To do so, SIAs examine the distributional Impact of policies across various indicators related to equality, including age, region, income and household composition.

By establishing a baseline, this exercise also has the potential to incorporate a medium- to long-term dimension to policy assessment. The impacts of public spending measures, which may be delayed over several years, could be assessed over time (e.g. policies related to healthcare, childcare, and other long-term investments). The results would, therefore, not only relate to immediate 'cash' effects of policy changes, but they could also potentially account for long-term effects, including changes in behaviour over time as a result of the implementation of new policies. This approach would also allow for a more comprehensive assessment of the causality of policy outcomes.

SIA is a key tool in assessing the distributional equality impacts of budgetary decisions on certain group characteristics such as age, gender, and region. Since the introduction of Equality Budgeting, the Irish Government has expanded the number of policy areas assessed. So far, SIAs have been carried out in relation to the National Minimum Wage scheme, targeted childcare schemes, energy poverty and the general medical services scheme (Connors, 2016[18]; Ivory, 2016[19]; Nestor, 2020[20]). These policy areas and programmes were chosen for Social Impact Assessments on the basis that they represent a large share of public expenditure in Ireland.

In the current social impact assessment (SIA) framework, households may be broken down by income, economic situation, household size, and age. This information is available on Budget Day and offers a thorough look into the scope and impact of budget decisions on specific groups.

Poverty Impact Assessment (PIA)

Ireland was seen as a frontrunner in Europe when it introduced 'poverty proofing' in 1998 following a prior commitment in the Government's Anti-Poverty Strategy (Murphy, 2017[21]). As a result of this early commitment, examining the effects of policy proposals on poverty and inequalities that lead to poverty is now a routine part of the policy planning process in Ireland.

Relevant departments are responsible for undertaking poverty impact assessments (PIAs) in their respective policy areas. These assessments should be performed at every stage in which significant policy proposals are being considered. PIAs should therefore be carried out as an inherent part of the policy development and decision making cycles before budget allocation decisions have been made (DSP). Except in particular circumstances where a policy initiative is subject to Cabinet confidentiality, the results of poverty impact assessments are made public.

This commitment was strengthened by the introduction of the Cabinet Handbook, which made it mandatory for Government Memoranda with significant policy proposals to "indicate clearly the impact of the proposal on groups in poverty or at risk of falling into poverty" (GOV.IE, 2022[22]).

Assistance and supporting guidelines for PIA are available from the Social Inclusion Division in the Department of Social Protection. According to these guidelines, the following groups should be considered when conducting poverty impact assessments: women; lone parent families; families with large numbers of children; people with disabilities; unemployed people; members of the travelling community; people experiencing rural disadvantage; people experiencing rural poverty; homeless people; migrants and ethnic minorities.

Integration of equality budgeting and distributional considerations as part of Parliamentary Oversight

The Parliament is involved in holding the Irish Government accountable for the progress made in implementing Equality Budgeting across departments. The Parliamentary Budget Office provides financial and budgetary information to members of the Parliament, and in particular to the Committee on Budgetary Oversight, as it conducts *ex ante* scrutiny of budgetary matters. The PBO has access to the SWITCH model, its EVE indirect tax model and publishes research to inform the budgetary process. For example, the PBO analysed the real distributional impact of different welfare package options in the 2023 Budget on household income by decile (PBO, 2022[23]). Beyond this, members of Parliament engage in the broader policy debate on these and other topics through inter alia leaders' questions, parliamentary questions, representations, topical issues debates, private members' motions and parliamentary committees. In addition, there is strong interest from civil society, non-governmental organisations (NGOs) and other stakeholders to promote active engagement and maintain political pressure.

Budget reports

Finally, analysis of the distributional impact of budgetary measures have also been included in government budgetary documentation. For Budget 2024, analysis was conducted by the IGEES Unit in the Department of Public Expenditure, NDP Delivery and Reform using the ESRI's microsimulation SWITCH (Simulating Welfare and Income Tax Changes) tax-benefit model to assess the distributional impact of tax and welfare measures implemented as part of Budget 2024. The analysis also included Department of Finance estimates of the distributional impact of changes in indirect taxes using the indirect taxes satellite model ITSim (Indirect Taxes Simulation). This analysis was contained in the budget expenditure report (Government of Ireland, 2023[24]). In addition, the Department of Finance includes the final budget DIA in Ireland's Draft Budgetary Plan and in the Department's Beyond GDP – Quality of Life Assessment publication (Government of Ireland, 2023[25]; Government of Ireland, 2023[26]).

4.2.3. Ex post *assessments for Equality Budgeting*

ESRI Winter Quarterly Economic Commentary

Three days after the budget is announced, the Economic and Social Research Institute presents DIA results comparing the policy reform to a counterfactual indexed scenario. This analysis uses SWITCH, the ESRI's microsimulation model, to illustrate -in real terms- the effects of proposed policies. The impact of the budget is estimated for households by income decile, family type, work status and by gender. About a month later, the analysis is published in the peer-reviewed Quarterly Economic Commentary.

Spending Reviews

The Spending Review process aims to facilitate the development of policy analysis and evaluation in support of the agenda of evidence-informed policymaking, subjecting programmes / policy areas to critical assessment on an ongoing basis. Spending reviews focus on programmes of strategic importance, from a policy and/or expenditure perspective, and are conducted by government departments, typically undertaken by IGEES (Irish Government Economic and Evaluation Service) analysts within these

departments. Along with additional assessments of sustainability and value-for-money, these reviews help inform budgeting decisions. In 2022, the Department of Public Expenditure, NDP Delivery and Reform and the Department of Further and Higher Education, Research, Innovation and Science performed a spending review of demographics in the higher education sector and their implications for public expenditure.

ESRI Assessments

A key research area for the ESRI is the examination of the design of the tax, welfare and pensions system, particularly the impact it has on individuals, redistribution and work incentives. Integral to this work is the use of the SWITCH model to simulate the impact of actual or proposed reforms on households (ESRI, 2023[27]). Each year the ESRI develops a work programme, which outlines intended model developments and planned research. Some of the papers identified in the work programme and of interest in light of upcoming budget discussions are then presented at the ESRI's annual pre-budget conference. The most recent, Budget Perspectives 2024, discussed work on removing cliff-edges from the taxation and welfare systems; housing tenure, health and public healthcare coverage; and extending the National Childcare Scheme to childminders (ESRI, 2023[28]).

Changes can be made to the SWITCH work programme to allow for the analysis of unexpected issues. For example, in early 2020, the ESRI evaluated how COVID-19 and the new pandemic-related welfare payments had impacted employment levels and incomes. The results showed that direct and indirect taxation and welfare measures implemented before Budget 2021 helped to cushion income losses incurred during the pandemic.

Box 4.1. *Ex post* assessment

Assessing the distributional impact of COVID-19-related unemployment

In early 2020, the ESRI evaluated how the new pandemic-related welfare payments impacted employment levels and family incomes. Given the significant impact of the pandemic on employment, the 2017 survey data on which the model rests were adjusted to be representative of the unemployment rates observed in the 2020 population. A subset of workers from each industry were assumed to have either become unemployed or to have been placed on the Employment Wage Subsidy Scheme (EWSS). The proportion of individuals that either lost their occupations or received the EWSS was determined from public CSO data on the number of people who received the Pandemic Unemployment Payment (PUP) and the Temporary Wage Subsidy Scheme (TWSS, which was later replaced by EWSS). Both calculations rely on figures from late August 2020 and consider the industry and age breakdown of recipients for either scheme. The data was also calibrated to account for income growth between 2017 and 2020.

SWITCH was subsequently used to calculate households' welfare benefits, tax liabilities and net incomes under the baseline policy. This indexes the February 2020 policy rules to forecast inflation of 0.2% between 2020 and 2021, which provides a benchmark that controls for welfare payments, tax credits and thresholds in real terms. Comparing this baseline scenario (no policy response to the pandemic) to one in which there is no downward employment shock (Pre-COVID) shows in real terms the effect of pandemic-related unemployment on incomes, controlling for the offsetting effect of lower tax payments and higher welfare benefits ('automatic stabilisers').

The ESRI found that pandemic-related unemployment could have lowered household income by an average of 7% across the Irish population, with significantly larger losses for those who became unemployed. However, thanks to the initial policy response (e.g. the PUP), wage subsidies and cuts on the standard VAT rate, household income only fell by an average of 3%. These losses are most pronounced at the upper end of the income distribution, among youths, and for workers in the most

impacted sectors (e.g. hospitality). The impact of Budget 2021, while less costly than the pre-budget measures, is similar in pattern, with above-average gains for the bottom two-fifths of the income distribution and lower-than-average gains for those at the upper end.

Without these interventions, income inequality would have increased substantially. Instead, the simulations suggest that the COVID-related interventions stabilised disposable income inequality, a remarkable achievement considering the significant unemployment shock. The proportion of people 'at risk of poverty' were also stabilised by policies enacted in response to the pandemic.

Source: (Doorley et al., 2020[29])

4.3. Tools for assessing the distributional impacts of budget decisions

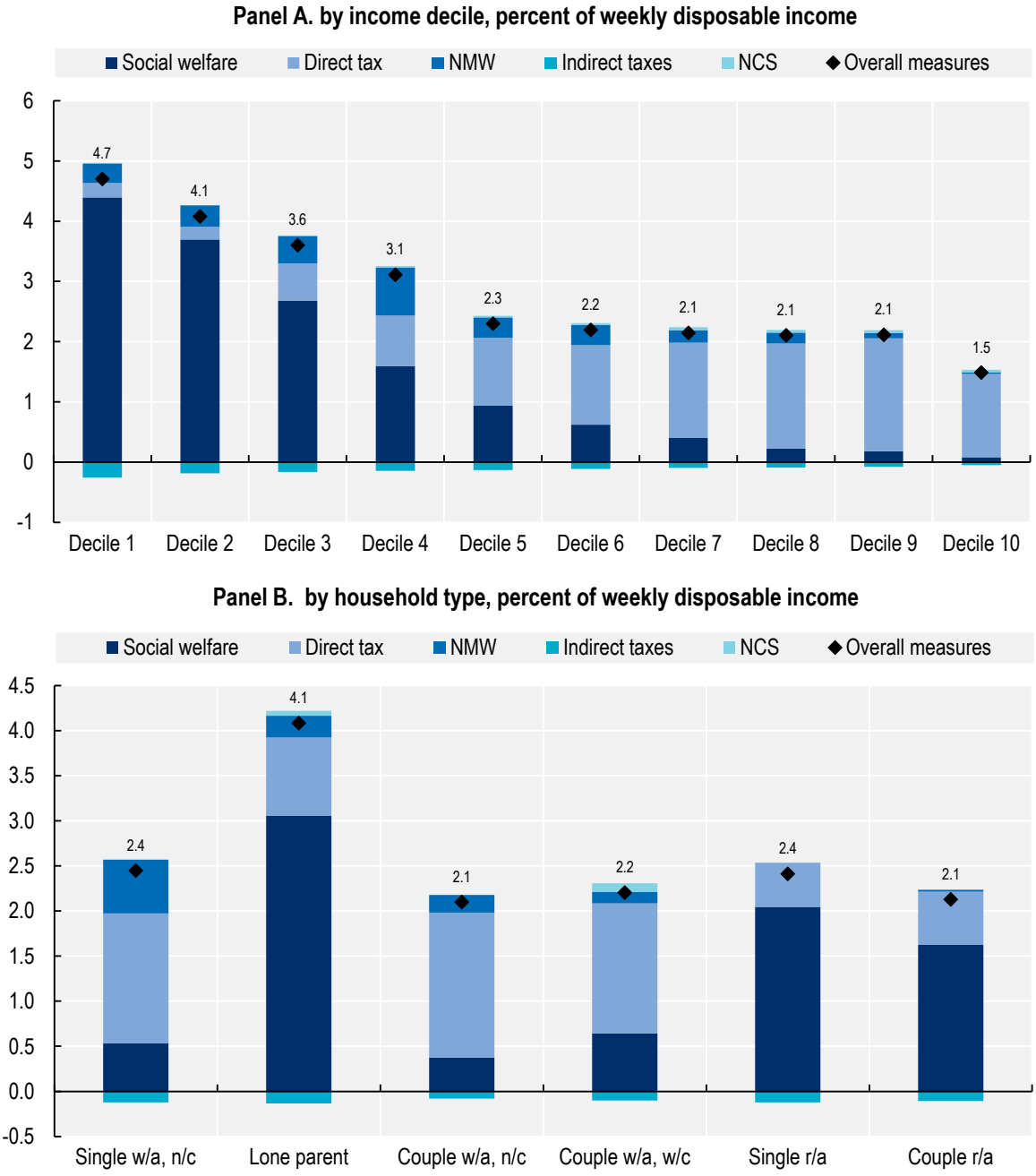
In practice, embedding equality considerations into the budget process requires detailed information on the likely effects of proposed and ongoing budgetary decisions on different groups in society. Governments have a set of tools at their disposal to estimate distributional impacts and provide this information to decision makers. This section provides an overview of the operational tools used in Ireland to support distributional analysis from a technical perspective.

4.3.1. SWITCH – Direct Tax and Welfare Measures

The Department of Finance, the Department of Public Expenditure, NDP Delivery and Reform and the Department of Social Protection assess the distributional effects of direct tax and social welfare measures using the SWITCH tax-benefit model. The model is developed and maintained independently by the ESRI, based on the European Union's EUROMOD platform. SWITCH uses individual and household-level data from the Irish component of the Survey on Income and Living Conditions (SILC). The model is also linked to administrative information on income from the Revenue Commissioners and administrative information on welfare receipt from the Department of Social Protection (Keane et al., 2022[30]).

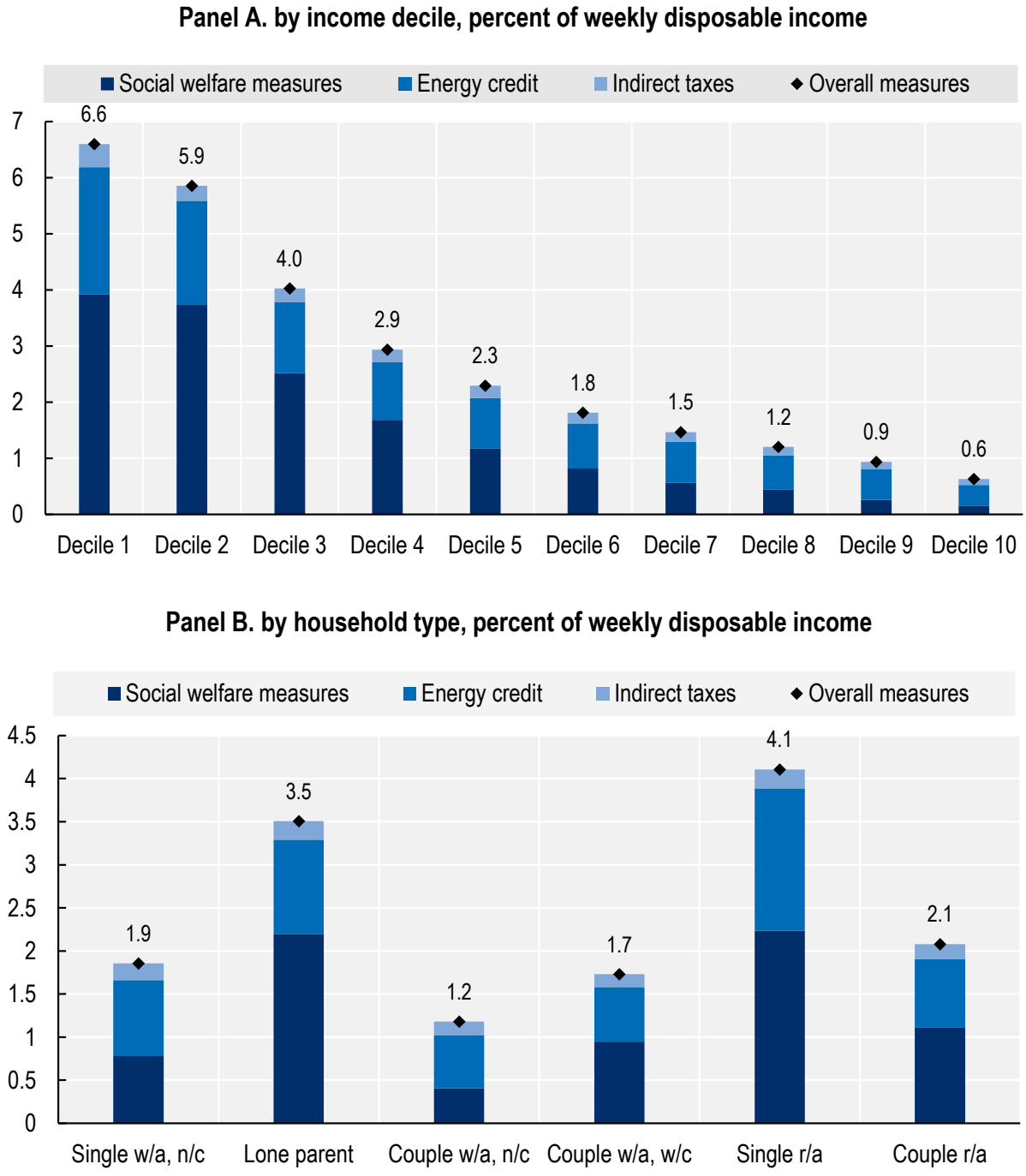
The analysis is performed by measuring the effects of policy change on equivalised household disposable income groups by income decile (see Panel A of Figure 4.10 and Figure 4.11), family type (see Panel B of Figure 4.10 and Figure 4.11), gender and earnings status. The likely impacts of a policy change are considered for different dimensions of equality, including income poverty and the Gini coefficient; the results are produced in an Excel format.

Figure 4.10. Distributional Impact Analysis of the 2024 Core Budget Measures



Note: for Panel A: NMW = national minimum wage; for Panel B: Note: w/a = working age; n/c = no children; w/c = with children; r/a = retirement age. NMW = national minimum wage.
Source: Department of Finance calculations using the ESRI SWITCH model and ITSIM model (Government of Ireland, 2023[31]).

Figure 4.11. Distributional Impact Analysis of the Cost of Living Measures



Note: for Panel B: w/a = working age; n/c = no children; w/c = with children; r/a = retirement age.
Source: Department of Finance Calculations using the ESRI SWITCH model and ITSIM model (Government of Ireland, 2023[31]).

Box 4.2. Examples of the use of SWITCH to inform spending decisions in Ireland

Compensating a rise in the Irish carbon tax by redistributing the additional revenues

In 2020, the ESRI examined how to increase the Irish carbon tax without disproportionately affecting low-income households and increasing poverty. In high-income countries, uncompensated carbon taxes are often regressive by nature because goods subject to the tax make a larger share of spending for lower-income households than higher-income ones (e.g. fuel and natural gas). Research also highlights a strong positive correlation between inequality and the regressivity of carbon taxes, meaning that the more unequal a country is, the more regressive its carbon tax tends to be (Andersson, 2021[32]).

To avoid reinforcing inequalities, it is therefore particularly important to understand how to redistribute the revenues of carbon taxes and any subsequent increases in the carbon tax rate. In Ireland, the ESRI found that the Government can offset and even reverse the regressive impact of a carbon tax rise by allocating one-third of the additional revenues to targeted increases in welfare payments.

In Ireland, the lowest-income fifth of households is largely made up of working-age adults who receive welfare payments and their dependents. The ESRI found that this group can be compensated for a rise in the carbon tax by increasing the maximum rates of the main working-age welfare payments or by raising Increases for Qualified Children (IQCs). In fact, using a third of the additional revenue from a 7.5 EUR increase in the carbon tax would even reduce the overall poverty rate by 0.2 percentage points and leave the lowest income a fifth better off on average. Similarly, using the extra revenue to raise the Increases for Qualified Children would reduce the child poverty rate by 0.4 percentage points.

Source: (O'Malley, Roantree and Curtis, 2020[33]),

The areas covered by SWITCH include income tax, social welfare payments (PRSI), Universal Social Charge (USC), property tax, welfare benefits and public service remuneration; this accounts for the bulk of the impact of budgetary policy changes on households' cash incomes in recent years. The SWITCH model is updated every year according to the ESRI's annual tax, welfare, and pensions research programme. For example, in 2023, the ESRI adjusted the model to account for work incentives and to allow analyses disaggregated by disability status. The routine SWITCH output is already disaggregated by income decile, family type, gender and earnings status (ESRI, 2022[34]). In some cases, the ESRI also amends its model to allow for topical analyses of policy options being publicly debated (e.g. lump sum payments, rent tax credit in Budget 2023). Despite the model's expansion in recent years, there remain some limitations. For instance, SWITCH does not account for indirect taxes, although these are covered by the ITSIM (Indirect Taxes Simulation) model, jointly developed by the Department of Finance and the ESRI. In addition, SWITCH –like most microsimulation models– does not model expenditure on public services such as healthcare, nor does it incorporate behavioural changes that can potentially result from the policy.

4.3.2. ITSIM – Indirect Tax Measures

The ESRI and the Department of Finance also measure the distributional effects of indirect tax measures with the ITSIM model. The model is jointly developed by the Department of Finance and ESRI. It is built in STATA and uses data from the Household Budget Survey (HBS). The current version of the model uses the CSO HBS 2015-16 – survey data. In addition, the Parliamentary Budget Office have developed EVE to examine the impact of indirect tax measures on income, using data from the CSO's 2015-16 Household Budget Survey.

To conduct this analysis, the Department of Finances and the ESRI measure the effects of policy changes on equivalised household disposable income groups by income decile and family type. Unlike SWITCH, ITSIM does not show the likely impacts of policy changes on other dimensions of equality, such as gender as it is impossible to attribute consumption in the HBS to an individual within a household; the results are also produced in an Excel format.

4.4. Data and information infrastructure

Tax-benefit micro-simulation models use a variety of data sources to model the effects of ongoing and proposed policies on individuals and households. These sources can include administrative data from government agencies, self-reported data from household surveys, and other sources of economic and social data. The specific data sources used in a particular model may vary depending on the goals and objectives of the model and the information needed to achieve them. Overall, the goal of using these data sources is to provide a detailed and accurate picture of the target population and how it would be affected by a change in policy.

An essential element of equality budgeting is, therefore, the availability of data disaggregated by individual characteristics, including gender, age, race, disability, and others. The ability to properly measure these characteristics is key to ensuring the representativeness of the sample used in the model data vis-à-vis the target population. However, in Ireland, the extent to which disaggregated data on the use of government services is collected is not consistent across all government spending. While the introduction of equality budgeting –starting with the 2018 pilot– has helped promote the collection of gender-disaggregated data and indicators, disaggregated data on age, disability, and race is still lacking.

The routine availability of such datasets and statistics would greatly facilitate the evidential basis for the identification of equality gaps along any of these individual variables, as well as the design and impact of certain policy areas. The need to address such data gaps and data protection issues, if relevant, will be an important objective in ensuring the continued implementation of Equality Budgeting in Ireland.

4.4.1. Survey on Income and Living Conditions (SILC) underlying the SWITCH model

Tax-benefit microsimulation models generally rely on large samples engineered to be representative of the wider target population. In Ireland, there are two main obstacles to building a representative sample of the population despite the availability of data on market and social welfare income from the Revenue Commissioners and the Department of Social Protection. First, simulating tax and welfare benefits requires additional information such as the number of household members, their age, and whether they earn an income or not (e.g. children and unemployed adults) (Keane et al., 2022[30]). This level of granularity is not available in administrative records. Second, and unlike many other countries, Ireland does not have a population register (Keane et al., 2022[30]). Additionally, information on hours of work is not available from income tax data, which is necessary for simulating entitlements to benefits such as the Working Family Payment and Medical Cards.

Because of the above-mentioned limitations, the SWITCH model relies on individual and household level data from the Irish component of the Survey of Income and Living Conditions (SILC), an EU-wide survey. In Ireland, the survey is administered by the Central Statistical Office (CSO) and surveys a sample of Irish households. The Survey is the official source of information on income and living conditions and broader indicators of social and economic issues.

The survey is administered every year and covers around 4 000 private households and 10 000 individuals. The SWITCH model relies on the 2019 SILC dataset, which captures information on all household members, their relationships, labour force status, number of hours worked, income types and levels. Such a level of granularity is key to accurately modelling income tax liabilities and entitlement to benefits. The

information collected through the survey is supplemented by more accurate information on income from the Revenue Commissioner and information on welfare from the Department of Social Protection (Keane et al., 2022[30]).

The analysis in Social Impact Assessment (SIA) and Poverty Impact Assessment (PIA) relies on a mix of sources, depending on the policy matter being considered. Generally, a range of survey data from the CSO, Eurostat, OECD etc. and administrative data is used. Depending on the level of detail required, data can be extracted from online databases or can be sought through CSO Research Microdata Files and Anonymised Microdata Files – ISSDA, etc.

4.4.2. CSO Audit of the availability of public service data

In line with the OECD recommendation[3] to develop a data strategy for the collection and management of equality-related information, the CSO completed a data audit to appraise the availability of public service data disaggregated along the different dimensions of equality. The Equality Data Audit was informed by a sub-group of the Equality Budgeting Expert Advisory Group and published in October 2020. The CSO plans on regularly updating the report. The audit was followed by an analysis highlighting the different areas where equality-related data is lacking, such as race and sexual orientation and areas where data is plentiful but not necessarily centralised, such as age.

Overall, there are three types of data gaps: (1) data exists but is not collected regularly, which prevents the analysis of trends over time; (2) data exists but does not provide sufficient disaggregation to explore certain dimensions of inequality; and (3) data does not exist, or data quality is too poor to conduct detailed analyses. The findings of the audit are presented below for different dimensions of equality (CSO, 2020[35]).

Gender

Data on gender was included in 68 of the 107 datasets analysed by the CSO audit, making gender the dimension of equality for which data is most collected. Gender-disaggregated data was collected for 25 of those 68 datasets, with 23 providing a breakdown for “Male”, “Female”, and “Prefer not to say” (CSO, 2020[35]). One dataset included “Transgender and Non-Conforming” as an option, and another included “Other gender”.

Age

Detailed age data was contained in 26 datasets. Of these, 21 provided continuous age data (either as years of age or date of birth). The remaining five datasets collected data per age group or regrouped continuous age data after it had been collected (CSO, 2020[35]). Importantly, the age groupings are not necessarily the same across datasets. For example, some datasets group ages by deciles and others by 15 years. Even when data is collected by deciles, these will not always be the same across different data sources (e.g. 20-30 or 25-35). This variation reduces comparability and complexifies analyses.

Disability

Of 107 datasets audited, only 24 (less than a quarter) included a variable on disability (i.e. yes/no question). Eight of these further disaggregate the variable, but the breakdown varies across sources. Some datasets collected information on the severity of a disability, while others collected information on the category/type of disability (CSO, 2020[35]).

Race

Race was reported in only two datasets – the CSO Census of Population and the Social Inclusion and Community Activation Programme (SICAP). 24 other datasets claimed to cover race but asked about nationality or ethnicity instead (CSO, 2020[35]).

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Notes

[1] Market income data from the OECD excludes public pension schemes but includes obligatory private pension schemes.

[2] The following government departments and institutions are represented at the Group: the Central Statistics Office, the Department of Social Protection, the Department of Finance, the Department of Children, Equality, Disability, Integration and Youth, the Economic and Social Research Institute, the Irish Human Rights and Equality Commission, the National Disability Authority, the National Economic and Social Council, the National University of Maynooth, and the National Women's Council of Ireland.

[3] This recommendation was made in the 2019 OECD Scan of Equality Budgeting in Ireland, see (Nicol, 2021[15]).