

ESRI SPECIAL ARTICLE

Distributional impact of tax and welfare policies: Budget 2024

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ABSTRACT

In this Special Article we analyse the distributional impact of Budget 2024. Similar to last year, many reforms in this budget were temporary measures specifically aimed at combatting cost of living pressures. Compared to a baseline pegged to wage growth, we estimate that Budget 2024 will leave households across the income distribution better off, by 2.1 per cent of disposable income on average. The lowest income quintile of households experiences the largest relative gain (5-6 per cent of disposable income) but the lowest cash gain (€13-€17 per week). Much of the income gain is driven by temporary measures, although there are above-wage-growth increases to many permanent parameters of the tax-benefit system too. We show that from 2020 to 2024, permanent changes to the tax and welfare system have resulted in small average income losses (-0.5 per cent of disposable income) compared to policy changes pegged to wage growth. We suggest that policymakers should move away from the use of temporary measures to compensate households for rising prices and should consider the adequacy of welfare payments to provide an appropriate standard of living at current market prices.

1. INTRODUCTION

Budget 2024 commits to extra expenditure of \pounds 12.3 billion. This additional expenditure is comprised of a package of once-off measures worth \pounds 2.3 billion, a core budget package of \pounds 5.2 billion with the remaining \pounds 4.8 billion allocated to non-core expenditure.

Given high but stabilising inflation and the full employment outlook in Ireland (McQuinn et al., 2023), restraint in spending was urged by the Irish Fiscal Advisory Council, among others, amidst concerns that a large budgetary package could further fuel inflation (Irish Fiscal Advisory Council, 2023). Nevertheless, the

¹ Funding from the ESRI's Tax, Welfare and Pensions Research Programme (supported by the Departments of Public Expenditure and Reform; Employment Affairs and Social Protection; Health; Children, Equality, Disability, Integration and Youth; and Finance) is gratefully acknowledged. We are grateful to the CSO for facilitating access to the Survey of Income and Living Conditions (SILC) Research Microdata File used to construct the database for the SWITCH tax-benefit model and to the Irish Social Science Data Archive for facilitating access to the Household Budget Survey used in the ITSim model.

government has exceeded its own 5 per cent spending rule with Budget 2024, increasing expenditure by 6.1 per cent in 2024, citing the need to compensate households for the rising cost of living.

In this Special Article, we examine the tax and welfare measures announced in Budget 2024. We begin by outlining and assessing the taxation measures in Section 2, followed by an examination of the social welfare measures in Section 3. Section 4 presents our analysis of the distributional impact of these measures using SWITCH – the ESRI tax and benefit microsimulation model – and ITSIM, the indirect tax model jointly developed by the ESRI and the Department of Finance. We also estimate the cumulative impact of tax and welfare reforms announced to date by the coalition Government over the period 2021 to 2024. Section 5 concludes.

2. TAXATION MEASURES

Table A.1 in the Appendix lists the main taxation measures announced in Budget 2024 alongside the full-year cost estimated by the Department of Finance.

2.1 Income tax

Most income tax credits rose in nominal terms and the proportional increase of around 5.5 per cent was above both the ESRI's forecast rate of inflation (3.2 per cent) (McQuinn et al., 2023) and the Central Bank of Ireland's forecast increase in compensation per employee (5 per cent) in 2024 (Central Bank of Ireland, 2023). This amounts to an effective tax cut as these credits are worth more to taxpayers in real terms, while a lower share of aggregate earnings will be exposed to the top 40 per cent rate of tax.

By contrast, the freeze to many Pay Related Social Insurance (PRSI) and Universal Social Charge (USC) thresholds in nominal terms amounts to an effective tax increase for many taxpayers. This will be partly counteracted for some taxpayers by the reduction in the 4.5 per cent USC rate to 4 per cent but compounded by the small increase of 0.1 percentage points to all PRSI rates.

The income tax standard rate cut-off (SRCO: the point at which the higher income tax rate of 40 per cent begins to apply) rose by $\leq 2,000$ for a single adult, from $\leq 40,000$ to $\leq 42,000$, and by a proportionate amount for married couples and civil partners. This represents a proportionate rise of 4.8 per cent, above forecast inflation but just below forecast wage growth.

2.2 Taxation and housing

The Government also announced a range of tax measures aimed at addressing issues relating to housing. The income tax credit for private renters, introduced in Budget 2023, was increased from a maximum of \notin 500 to a maximum of \notin 750 per person per year for those eligible and living in unsupported private rental accommodation. It was also extended to parents who pay for rented accommodation for their student children. The credit will benefit middle income households most as households need to earn enough to incur a tax liability to benefit from the credit.

A new temporary Mortgage Interest Tax Relief was also announced for homeowners with an outstanding mortgage balance of between &80,000 and &500,000 at the end of 2022. This relief is mainly available to holders of tracker and variable rate mortgages and amounts to 20 per cent of the increased interest paid in 2023 compared to 2022. This relief is capped at &1,250. Like the rental tax credit, this relief will mainly benefit middle- and higher-income households as there are very few households in the lowest two-fifths of the income distribution with tracker or variable rate mortgages (Byrne et al., 2023).

A temporary rental income tax relief is also being introduced to support private landlords. The stated aim of this relief is to prevent private landlords from leaving the market. However, the evidence on whether or not this is actually happening is quite mixed. Data from the Residential Tenancies Board (RTB) point to fewer registered tenancies since 2016 while data from the Census suggest the opposite.² In addition, as shown by RTB data and discussed by NESC (2023), there is evidence that taxation is not a primary reason for landlords leaving the market in Ireland.³ The new relief, of 20 per cent, will be available against an increasing sum of rental income between 2024 and 2027, provided the landlord keeps their rental property in the market between 2024 and 2027. The relief will be worth up to €600 in 2024, rising to €800 in 2025 and €1,000 in 2026 and 2027. Given the absence of evidence on whether or not landlords might respond to this measure by staying in the market, it is possible that much of the estimated €160 million expenditure on this policy will be deadweight.

The Minister for Finance also announced in increase in the rate of the Vacant Homes Tax, which will increase from three to five times a property's existing base

² 2023-10-10_opening-statement-niall-byrne-director-residential-tenancies-board_en.pdf (oireachtas.ie).

³ Among 53 landlords who had recently sold their property, just 6 per cent cited high taxation as a reason for selling. Among 128 landlords who intended to sell in the near future, tax was cited by 25 per cent as a reason for selling.

Local Property Tax liability. This tax is a welcome supply-side measure and among the recommendations of the Commission on Taxation and Welfare (2022). However, given robust demand for housing combined with long-standing supply constraints, it is likely that despite this measure, the demand-side policies mentioned above will increase demand for housing, putting pressure on house prices.

2.3 Indirect tax

There was a well-flagged increase to the carbon tax of €7.50/tonne of carbon and an increase in the excise duties on tobacco products, amounting to an extra €0.75 on a packet of 20 cigarettes. Other indirect tax measures announced include the zero-rating of VAT on audiobooks, ebooks and solar panels on schools. Some costof-living measures which were due to expire in 2023 were extended. Reductions in VAT from 13.5 to 9 per cent for gas and electricity were extended until the end of October 2024. The reduction in (non-carbon) excise duties was also extended until the end of March 2024, while the 20 per cent reduction to public transport will continue for the whole of 2024.

3. SOCIAL WELFARE MEASURES

The Budget also included many changes to social welfare parameters alongside a number of temporary measures aimed at cushioning household incomes from supply-side driven inflation (Table A.1 in the Appendix).

As part of the permanent package, personal rates of payments for social welfare schemes were increased by ≤ 12 per week, with proportionate increases to qualified adult increases. Weekly payments for a qualified child increased by ≤ 4 , and the Working Family Payment income limits increased by ≤ 54 per week. For most social welfare recipients, these increases are relatively larger than forecast wage growth of 5 per cent in 2024 (Central Bank of Ireland, 2023). However, since retirement age payments tend to be higher than working age payments in nominal terms, the undifferentiated ≤ 12 increase represents a below-forecast wage growth increase for this group.

The National Childcare Scheme (NCS) saw an increase in the universal subsidy rate from \pounds 1.40 per hour to \pounds 2.14 per hour, effective in September 2024. This is likely to increase the demand for (subsidised) formal childcare over informal childcare,

which is currently unsubsidised.⁴ It also has the potential to increase female labour supply (Doorley et al., 2023a). The income limits and rates of payment of the income assessed component of the NCS were not adjusted and have not been adjusted since its introduction in 2019. Given household income growth since then, it is likely that some households have lost eligibility for the more generous income assessed subsidy.

Maintenance grant rates for those in receipt of student grants were also increased and the student contribution fee will be abolished for certain recipients of student grants from September 2024.

The welfare package in the Budget also included temporary welfare and universal payments to mitigate inflation-induced strain on household finances. Three universal energy credits were announced, payable in November 2023, January 2024 and February 2024. This is a significant fiscal outlay, totalling \notin 900 million. A double Child Benefit payment will also be made on 1 December 2023. Additionally, one-off lump sum payments for recipients of certain social welfare benefits were announced, with payment occurring during December 2023. Those in receipt of Working Family Payment, Disability Allowance, Carer's Support Grant, Blind and Invalidity Pension will receive a \notin 400 lump sum, while those in receipt of the Living Alone and Fuel Allowance receive \notin 200 and \notin 300 respectively. Two double payments of most social welfare schemes were also announced: the usual 'Christmas bonus' and a second double payment in January 2024. The temporary reduction in the student contribution fee for third-level students, announced in Budget 2023, was repeated in Budget 2024.

4. DISTRIBUTIONAL IMPACT ANALYSIS

We use SWITCH⁵ – the ESRI's tax benefit microsimulation model – and ITSim – an indirect tax microsimulation tool jointly developed by researchers at the ESRI and the Department of Finance – to assess the combined impact of taxation and welfare policy changes on households' incomes. The range of policy reforms modelled is detailed in the Appendix. SWITCH is linked to data from the 2019 Survey of Income and Living Conditions (SILC), the primary source of information on household incomes collected annually by the CSO. The data are reweighted to be representative of the 2019 population (in terms of demographics, employment, income and social welfare) and uprated to reflect price and income growth between 2019 and the year of analysis. The scale, depth and diversity of this survey

⁴ As discussed in Doorley et al. (2023b), the NCS is likely to be extended to childminders over the next three years which may alleviate some of these demand pressures.

⁵ See Keane et al. (2023) for a description and validation of the SWITCH model.

allows it to provide an overall picture of the impact of the policy changes on Irish households, which cannot be gained from selected example cases. ITSim estimates the indirect taxes (VAT and excise duties, including carbon taxes) paid by Irish households on the basis of their reported expenditure, collected by the CSO's nationally representative Household Budget Survey (HBS) in 2015-2016.⁶

Given the range of temporary and permanent measures announced as part of Budget 2024, we prepare a number of base and reform scenarios to estimate the distributional effect of Budget 2024. These are summarised in Panel A of Table 1. We distinguish between (i) permanent policy changes between 2023 and 2024; (ii) the additional effect of temporary measures announced as part of Budget 2024 and occurring in 2023 and (iii) temporary measures occurring in either 2023 or 2024.

We also set up a baseline and reform scenario (Panel B of Table 1) which presents a more medium-term picture. We estimate the effect of permanent policy changes only between 2020 and 2024 on the distribution of income compared to a scenario in which 2020 policies were pegged to wage growth.

In each case, we compare to a scenario in which policy parameters of the direct tax and welfare system are indexed in line with actual and or forecast wage growth (Table 1). As argued by Bargain and Callan (2010) and Callan et al. (2019), this provides a distributionally neutral benchmark against which to assess policy reforms. For the indirect tax system, we index our baseline scenario in line with price growth which is a more appropriate indexation factor for expenditure. Our baseline scenarios do not include temporary measures, since these do not make up part of the permanent policy system.

We use SWITCH to calculate households' social welfare entitlements, tax liabilities and net incomes under each system. ITSim calculates households' VAT and excise liabilities.

⁶ Income is uprated to 2024 levels using earnings indices and expenditures are uprated to 2024 levels using price growth indices.

TABLE 1 SUMMARY OF BASELINE AND REFORM SCENARIOS

	Panel A: 2023-2024				Panel B: 2020-2024	
	Base 1	Ref 1 w/o temp	Ref 1 w 2023 temp	Ref 1 w 2024 temp	Base 2	Ref 2 w/o temp
Policy	2023	2024	2024	2024	2020	2024
Indexed to	2024	-	-	-	2024	-
Indexation factor direct tax and welfare*	5%	-	-	-	18.9%	-
Indexation factor indirect tax*	3.2%	-	-	-	20.2%	-
Temporary policies included?**	No	No	Yes - those occurring in 2023	Yes - those occurring in 2023 and 2024	No	No

Sources: * We use CSO data on annualised quarterly average weekly earnings and the Central Bank of Ireland's 2024 forecast for increase in compensation per employee to index the direct tax and welfare system. We use CSO data on CPI growth until 2023 and forecasts from the ESRI's *Quarterly Economic Commentary* for CPI growth in 2024 to index the indirect tax system.

** Temporary policy measures introduced in Budget 2024 to be paid at the end of 2023 and beginning of 2024, e.g. energy credit, double social welfare payments, additional fuel allowance payments.

4.1 The distributional effect of Budget 2024

Figure 1 shows the distributional effect of changes to indirect tax, direct tax and welfare, the NCS and temporary measures announced as part of Budget 2024 compared to an indexed 2023 policy system. We show permanent changes to the direct tax and welfare system separately to the effects of temporary measures that take effect in 2023 and 2024.

We estimate that households will experience a rise in real income of 2.1 per cent on average in 2024 as a result of Budget 2024. This gain is mainly driven by temporary measures. The effect is split between permanent changes to the direct tax and welfare system (0.45 percentage points), temporary changes to the direct tax and welfare system taking effect in 2023 (0.67 percentage points) and 2024 (0.73 percentage points), and changes to indirect taxation (0.24 percentage points). Changes to the NCS have a negligible effect on real household disposable income on average.

Both permanent and temporary measures are progressive in relative terms. We estimate that households located in the lowest fifth of the income distribution will experience a larger rise in real incomes – of 5-6 per cent of disposable income – than households located in the highest fifth of the income distribution. In cash terms, however, households in the lowest fifth of the income distribution can expect gains of $\leq 13-\leq 17$ per week ($\leq 676-\leq 884$ per annum), compared to gains of $\leq 18-\leq 20$ per week ($\leq 936-\leq 1,040$ per annum) for households in the upper fifth of

the income distribution. By this measure, Budget 2024 is neither strongly progressive nor regressive: the effect is somewhat uniform in cash terms across deciles, with slightly higher gains for households in deciles three and ten.



FIGURE 1 DISTRIBUTIONAL IMPACT OF BUDGET 2024 COMPARED TO INDEXED 2023 POLICIES

Source: Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Notes: Deciles are based on equivalised household income, using CSO national equivalence scales.

4.2 The effect of Budget 2024 by household type, gender and disability status

We further examine the distributional impact of Budget 2024 by household type, gender and disability status. All results relate to the *Base 1 – Reform 1 with 2024 temporary measures* scenario, meaning that all temporary policies are excluded from the indexed 2023 baseline but are included in the reform.

Figure 2 displays the impact of direct tax and welfare measures and indirect tax policies of Budget 2024 by household type. All types of household benefit on average from temporary measures in Budget 2024, especially single retirement age households and lone parent households. These household types disproportionately gain from lump sum welfare top-ups and double payments

compared to other household types, due to their low average labour market attachment. The distribution of gains from permanent changes to the tax and welfare system are a little more uneven across household types. On average, working-age households benefit from permanent tax and welfare reforms while retirement age households do not. This is because the increases in both contributory and non-contributory state pensions, while identical in cash terms, are lower in relative terms than increases to working age payments. They are also lower in relative terms than forecast wage growth while the increases in payments for working-age individuals are above forecast wage growth. Consequently, retirees fare relatively worse as a result of permanent changes to the tax-benefit system compared to their working-age counterparts.

FIGURE 2

DISTRIBUTIONAL IMPACT OF BUDGET 2024 BY HOUSEHOLD TYPE COMPARED TO **INDEXED 2023 POLICIES**



Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on Source: 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Figure 3 shows the estimated effects of direct tax and welfare policy changes from Budget 2024 by gender.⁷ For this analysis, we assume that income is split evenly between individuals in a couple. Compared to a wage-adjusted budget, our analysis suggests that Budget 2024 measures affected men and women similarly. Women

⁷ It is not possible to estimate the gender impact of indirect tax changes using ITSIM as expenditure data are collected at the household level.

in lower income quintiles tend to gain more from temporary measures while men and higher income quintiles tend to gain more from permanent measures. This reflects the lower labour market participation of women which makes their income more sensitive to welfare reform and less sensitive to taxation reform.



FIGURE 3 DISTRIBUTIONAL IMPACT OF BUDGET 2024 (DIRECT TAX AND WELFARE) BY GENDER COMPARED TO A WAGE INDEXED 2023 POLICY

 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 Income is assumed to be fully shared between members of a couple. Quintiles are based on equivalised household income, using CSO national equivalence scales.

Figure 4 shows the estimated effects of the Budget 2024 direct and tax measures⁸ by disability status.⁹ We identify households with disabilities as those in which there is at least one member who self-declares to have a medical condition which limits them in their daily activities. Permanent measures disproportionately benefit households without disabilities, resulting in an average increase in disposable income of 0.5 per cent, compared to an increase of 0.4 per cent for those with disabilities. Temporary measures more than compensate for this differential however and result in higher gains (2.6 per cent) for households with disabilities compared to households without disabilities (1.2 per cent).

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⁸ ITSIM does not currently allow the estimation of indirect taxation measures by disability status.

The precise definition we employ in the SILC data is to identify those who respond positively to the following two questions as having a disability:

⁻ Do you have any chronic physical or mental health problem, illness, or disability?

⁻ Are you hampered [limited] in your daily activities by this physical or mental health problem, illness, or disability?

FIGURE 4 DISTRIBUTIONAL IMPACT OF BUDGET 2024 (DIRECT TAX AND WELFARE) BY DISABILITY STATUS COMPARED TO A WAGE INDEXED 2023 POLICY



 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 Households with disabilities are those in which there is at least one adult with a chronic health condition or disability which limits them in their daily life. Quintiles are based on equivalised household income, using CSO national equivalence scales.

4.3 The effect of Budget 2024 on income inequality and AROP rates

Figure 5 (and Table A.2 in the Appendix) shows the impact of Budget 2024 on income inequality, as measured by the Gini Index, and at risk of poverty (AROP) rates. Compared to a system adjusted for wage inflation, there is a slight reduction (0.1 percentage points) in the Gini Index. This change is entirely driven by temporary measures.

AROP rates decrease across all groups of the population, with the most pronounced declines observable among the elderly and people with disabilities. This outcome is also driven by temporary measures. Some of these subgroups would experience an increase in AROP rates if we considered only permanent measures. This highlights the reliance of these groups on social welfare payments, many of which were subject to temporary lump sum payments but which saw permanent increases below the rate of forecast wage growth.



FIGURE 5 IMPACT OF BUDGET 2024 ON INCOME INEQUALITY AND POVERTY COMPARED TO WAGE-INDEXED 2023 POLICIES

 Source:
 Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

 Notes:
 The poverty rate is calculated based on a poverty line equal to 60 per cent of median equivalised disposable income. The CSO equivalence scale is used. Working age defined as aged 18-65 and children as those under age 18. People with disabilities are identified as those who self-report to have an illness or disability which limits them in their daily activities.

4.4 The effect of permanent policy reform 2020-2024

We next consider how the outlook for households may change if temporary policies are not repeated in future budgets. To do so, we compare a 2024 policy system without temporary policies to an indexed 2020 system (see Panel B of Table 1). This shows how changes to the permanent tax and welfare system have affected real income over the last four years. Direct tax and welfare policy parameters in the baseline are indexed by 18.9 per cent, matching wage growth that has and is forecast to occur in 2021, 2022, 2023 and 2024, while indirect tax policy parameters are indexed by 20.2 per cent, reflecting actual and forecast CPI growth between 2020 and 2024.

Figure 6 shows the effects of permanent policy changes in Budget 2024 compared to an indexed 2020 policy scenario. On average, households lose 0.5 per cent of disposable income. Income losses are regressive as, apart from the lowest income decile, lower-income deciles experience the greatest erosion in real income. Losses are between 1 and 1.5 per cent in deciles two to six and taper out in higher income deciles. There are small average gains across the income distribution resulting from reforms to indirect taxes and the NCS. The average losses, therefore, are overwhelmingly driven by changes to the direct tax and welfare system. This illustrates that permanent changes to the direct tax and welfare system over the last four years have not kept pace with current and forecast wage growth on average.



FIGURE 6 DISTRIBUTIONAL ANALYSIS 2020-2024 WITHOUT TEMPORARY MEASURES

Source: Authors' calculations using ITSim linked to the 2015-2016 Household Budget Survey uprated to 2024 prices, and SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.

Notes: Deciles are based on equivalised household income, using CSO national equivalence scales.

Comparing Budget 2024 without temporary measures to a wage-indexed 2020 policy setting conveys the magnitude of the challenge that will be faced if policymakers wish to maintain household living standards once temporary policies lapse. Compared to indexing tax and welfare policies in line with wage growth since 2020, Budget 2024 leaves households worse off on average. Except for the first decile, losses are greater for low-income households, suggesting that permanent above-wage-growth changes to welfare in particular will be needed to maintain the real incomes of these households when temporary measures expire.

5. CONCLUSION

Budget 2024 is substantial in scale, introducing a range of permanent changes to the tax and welfare system as well as a suite of temporary cost-of-living measures. We estimate that these will result in average gains to real income for households next year. The package of tax cuts, welfare increases, one-off payments and indirect tax cuts is worth around 2 per cent of household disposable income on average, with higher gains for low-income compared to high income households.

The total budgetary package is progressive in relative terms and our research estimates that it will result in reductions in the at-risk-of-poverty (AROP) rate of most groups, compared to a budget pegged to income growth. However, this reduction is accomplished mainly though the temporary measures in the budgetary package. For example, without the one-off measures, the AROP rate for elderly households would actually increase by close to 1 percentage point. With inflation moderating and wages growing strongly, policymakers should now consider moving away from one-off payments and benchmarking social welfare payments to provide more certainty to those dependent on them.

We assessed the distributional impact of Budget 2024 on two equality grounds: gender and disability. We estimate that Budget 2024 provides higher income gains for households with disabilities compared to households without disabilities. However, this is wholly due to the package of temporary measures. Looking at permanent measures alone, we estimate that households without disabilities gain slightly more in real terms than households with disabilities. Budget 2024 is mostly gender-neutral, with both men and women gaining 2 per cent of disposable income on average.

While Budget 2024 ensures that households will, on average, be insulated relative to a wage-adjusted benchmark, the temporary nature of many of the measures targeted at low-income households this year and in previous years means an erosion of the real purchasing power of structural rates of payments within the social welfare system over the last four years. In addition, over successive Budgets, rates of welfare payments have been incremented by fixed amounts. This translates to ad-hoc proportionate increases for different cohorts in receipt of welfare. If this pattern of increase continues, it will erode the relativities implicit in the social welfare system and weaken the link between rates of payment and income adequacy.

REFERENCES

- Bargain, O. and T. Callan (2010). 'Analysing the effects of tax-benefit reforms on income distribution: a decomposition approach', *The Journal of Economic Inequality*, 8, pp.1-21.
- Byrne, D., F. McCann and E. Gaffney (2023). 'The interest rate exposure of mortgaged Irish households', *Central Bank of Ireland, Financial Stability Notes*, Vol. 2023, No.2.
- Callan, T., C. Keane and M. Regan (2019). *Assessing the distributional impact of budgetary policy: the role of benchmarks and indexation*, Budget Perspectives 2020/2.
- Central Bank of Ireland (2023). 'Quarterly Bulletin: QB3 September 2023'.
- Commission on Taxation and Welfare (2022). Foundations for the Future: Report of the Commission on Taxation and Welfare.
- Department of Finance (2022). Budget 2023 Economic and Fiscal Outlook.
- Doolan, M., K. Doorley, M. Regan and B. Roantree (2022). 'Distributional impact of tax and welfare policies: Budget 2023', *QEC Special Article*, Dublin: ESRI.
- Doorley, K., D. Tuda and L. Duggan (2023a). *Will Childcare Subsidies Increase the Labour Supply of Mothers in Ireland?* (No. 16178). Institute of Labor Economics (IZA).
- Doorley, K., D. Tuda and L. Duggan (2023b). *Extending the National Childcare Scheme to childminders: Cost and distributional effect,* No BP2024/3, Papers, Economic and Social Research Institute (ESRI).
- Irish Fiscal Advisory Council (2023). Pre-Budget 2024 Statement, September 2023.
- Keane, C., K. Doorley, T. Kakoulidou and S. O'Malley (2023). 'SWITCH: A Tax-Benefit Model for Ireland Linked to Survey and Register Data', *International Journal of Microsimulation*, International Microsimulation Association, Vol. 16(1), pp. 65-88.
- McQuinn, K., C. O'Toole and E. Kenny (2023). *Quarterly Economic Commentary: Autumn 2023*, Economic and Social Research Institute.
- NESC (2023). Private Rental in Ireland, NESC Council Report, February 2023.

APPENDIX

TABLE A.1 REFORMS MODELLED IN DISTRIBUTIONAL ANALYSIS

Taxation	Cost, €m	Modelled
Income Tax		
€100 increase to tax credits, €200 increase to Incapacitated Child tax credit, and rise in Standard Rate Cut Off ¹⁰		\checkmark
Increase Rent Tax Credit to €750 and extension of eligibility to students in 'digs' ¹¹		\checkmark
Universal Social Charge		
USC second band increase from €22,920 to €25,760, USC 4.5% rate reduced to 4%	365	\checkmark
Extension of reduced USC rate for Medical Card holders	35	\checkmark
Housing		
Help to Buy amendments and extension to 31 Dec 2025	181	
Increase in Vacant Home Tax to five times Local Property Tax charge	-1	
Rental Income Relief for landlords of up to €3,000	160	\checkmark
Amendment of Defective Concrete Products Levy	-7	
Carbon Tax		
+€7.50 per tonne of carbon	-152	\checkmark
Excise Duties		
+€0.75 on a packet of 20 cigarettes	-68	\checkmark
VAT		
Zero VAT on audiobooks and ebooks	3	
Zero VAT for solar panels in schools	0.5	
Increase fund for VAT Charity Compensation Scheme	5	
Misc.		
Flat rate compensation per centage for farmers reduced from 5% to 4.8%	-18	
Revision of Bank Levy for 2024	-200	
Extension of Vehicle Registration Tax relief for battery electric vehicles to 31 Dec 2025	30	
Once-off cost-of-living measures		
Extension of Mineral Oil Tax (excise on fuel) rate reduction to 31 March 2024	122	~
Extension of 9% VAT rate for gas and electricity to 31 Oct 24	315	\checkmark
Introduction of one-year mortgage interest relief	125	
Extension of Benefit in Kind relief of €10,000 and tapering mechanism for electric vehicles	*	
		Contd.

¹⁰ Incapacitated Child Tax Credit increase not modelled.

¹¹ Extension to students in 'digs' not modelled.

TABLE A.1 CONTD.

Welfare	Cost, €m	Modelled
General		
+€12 (under 66) welfare payments, proportionate increase for qualified adults	461.4	\checkmark
+€12 (over 66) welfare payments, proportionate increases qualified for adults	448.6	\checkmark
+€4 for qualified child	60.9	\checkmark
Working Family Payment		
+€54 per week to income thresholds	1	\checkmark
Domiciliary Care Allowance		
Increase personal rate by €10 per month	7.6	\checkmark
Increase in income disregard for Carer's Allowance to €450 for singles (€900 for couples)	19.2	\checkmark
National Childcare Scheme		
Universal subsidy increased from €1.40/hour to €2.14/hour	162	\checkmark
Misc.		
€450 increase in Income disregard for Carers Allowance recipients	19.2	\checkmark
Extension of Child Benefits to 18 years-olds in full-time education	21.6	\checkmark
Free School Books Scheme	42	\checkmark
Extension of Hot School Meals from April 2024	42.5	
Pay-related jobseeker's benefit from Dec. 2024	5.0	
Extension of Free Travel Scheme	8.5	
Student Grant Scheme	31	
Once-off cost-of-living measures		
3x €150 household energy credits	900	\checkmark
Fuel Allowance €300 lump sum	123	\checkmark
Child Benefit double month	179	\checkmark
Living Alone Allowance €200 lump sum	47	\checkmark
Working Family Payment €400 lump sum	18	1
Disability Allowance, Carer's Support Grant, Blind & Invalidity Pension €400 lump sum	138	√
€100 lump sum for Increase for a Qualified Child (IQC) recipients	37	\checkmark
Double week for all long-term weekly welfare schemes	342	\checkmark
Foster Carer Allowance double payment		√ √
Other measures (Higher education student contributions, school transports, State exam fees etc.)	250	√ √

Source:

Budget 2024 Expenditure Report and Budget 2024 Tax Policy Changes. Costs are in millions of euros per annum and are mostly full year costs for 2024. Some small schemes are excluded. * indicates no costing was available. Notes:

TABLE A.2SIMULATED INCOME INEQUALITY AND AROP RATES IN 2024 WITH AND WITHOUT
TEMPORARY MEASURES

Inequality/poverty	Indexed 2023 permanent policies	Budget 2024 without temporary measures	Budget 2024 with temporary measures	
Gini Index	0.273	0.272	0.267	
AROP rate	0.139	0.137	0.117	
Adult	0.124	0.121	0.109	
Elderly	0.162	0.170	0.097	
Child	0.166	0.161	0.148	
Disability	0.233	0.236	0.171	

Source:Authors' calculations using SWITCH run on 2019 Survey of Income and Living Conditions data, uprated to 2024 income levels.Notes:The poverty rate is calculated based on a poverty line equal to 60 per cent of median equivalised disposable income. The CSO
equivalence scale is used. Working age defined as aged 18-65 and children as those under age 18. People with disabilities are
identified as those who self-report to have an illness or disability which limits them in their daily activities.