Special Articles

Distributional Impact of Tax, Welfare and Public Sector Pay Policies: 2009-2012

Tim Callan, Claire Keane, Michael Savage and John R. Walsh

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The banking and fiscal crises, coupled with the worldwide Great Recession, have led to major declines in Ireland's national income. In this article, we examine the direct impacts of changes in income-related taxes and social welfare policies on disposable incomes across the income distribution and for different family types. We also examine the effects of changes in public sector pay. The size and shape of the impacts in Budget 2012 are compared with the cumulative impact of policy over the full period since the initial budgetary response to the emerging crisis in October 2008. We also draw on recent work on the distributional impact of austerity packages in other EU countries to see how Ireland's policy impacts compare with countries including Greece, Spain and the UK.

MEASURING THE DISTRIBUTIONAL IMPACT OF POLICY

Who will lose most from Budget 2012? What has been the overall impact of the austerity budgets of the past four years? Analysis based on a few household examples cannot provide accurate answers to these questions – the results would depend too much on the particular cases chosen. Instead, to get the true picture we must calculate the impact of tax and welfare policy changes on large numbers of real households in a nationally representative sample. The ESRI tax-benefit model (*SWITCH*) allows us to do this: it estimates the impact of direct tax and welfare changes using anonymised data from the CSO's *Survey on Income and Living Conditions*. Given the importance of indirect tax measures in Budget 2012, we combine this analysis with results on the impact of the increases in VAT and carbon tax.¹ Again, these are firmly based on national survey data – in this case, the CSO's *Household Budget Survey*.

^{*} tim.callan@esri.ie; claire.keane@esri.ie

¹ Thanks are due to Seán Lyons and Anne Pentecost for the analysis of budgetary changes in indirect taxation, building on the paper by Leahy, Lyons and Tol (2011). Indirect tax changes for the years 2009 to 2011 could not be taken into account in this way. We are also grateful to two anonymous referees for helpful comments.

The impact of policy change must be measured against an alternative specifying what would happen if the policy change did not take place (a "counterfactual" policy). In the construction of budgets, the official procedure constructs an "opening budget" against which changes are measured. For tax and welfare the conventional opening budget simply freezes tax rates, credits and welfare payments at their existing levels. While this is useful in accounting terms, it would be highly misleading in analysis of distributional impact.² In normal times, with wage growth and price inflation positive, and positive real wage growth, implementing the conventional opening budget would lead to real income losses for those dependent on welfare, while incomes would rise further up the income distribution. (Callan et al., 2001, Bargain and Callan, 2008).³ The alternative used here is a policy which indexes both tax and welfare parameters with respect to the expected growth or decline in wages. This ensures that average tax rates are held constant (no fiscal drag); and approximates equal growth (or decline) in income across different income groups. It should be clear that this is designed to provide a "distributionally neutral" benchmark, rather than a policy recommendation. There are many reasons why it may be desirable to depart from this benchmark; but having a distributionally neutral benchmark is an essential aid to clear thinking in this area.

Forecasts of wage growth and decline are needed to implement this approach on a prospective basis. Similarly, accurate economy-wide measures of wage growth are needed for implementation on a retrospective basis. Forecasts for 2012 are centred on zero growth, as in this *Commentary*. Over the 2008-2011 period this *Commentary* estimates an economy-wide decline in hourly wages of 1.5 per cent, and this is the figure used in our analysis. In comparisons with other EU countries, summarised in a later section, we have found broadly similar impacts with a constant wage scenario over the 2008 to 2012 period.

The welfare measures in Budget 2012 are unusual in a number of respects. They include a number of large-scale items which are not part of the core income supports provided by the welfare system – for example, the reduction in the refunds of redundancy payments to employers. It is unclear where the burden from this change will ultimately fall – for those made redundant, there is still a guarantee of statutory entitlements, but there could be implications in terms of redundancy terms above this minimum. Given the uncertainty as to where the burden may fall, this measure cannot be included in our analysis. We estimate

² For a more detailed exposition, see Callan *et al.* (2001).

³ When wages are falling, the conventional benchmark would give rise to income gains for welfare recipients and income losses for those in employment.

that of the total reduction in welfare spending of \notin 475 million, about \notin 300 million is in the form of reductions in income support payments – with the rest made up of a variety of savings in expenditures not directly contributing to income supports.

The welfare measures which are directly included in our analysis are:

- Reductions in Child Benefit payable to families with 3 or more children.
- Reductions in the amounts payable under the Rent Supplement Scheme.
- Restriction of the Fuel Allowance to 26 weeks.
- Reduction in the amount of earnings which is "disregarded" in the means test for One Parent Family Benefit.
- Reductions in the amounts payable under the Back to School Scheme.

Taken together these changes account for about 70 per cent of the total reductions in income support. We make allowance for the remaining 30 per cent by assuming that the impact of other cutbacks is distributed across income groups in the same way as the set of items listed above. On the tax side, we allow for the impact of the increases in VAT and carbon tax, and for the introduction of a household charge; but increases in motor tax (road tax) are not covered. We also take into account the increase in the exemption limit for the Universal Social Charge.



FIGURE 1: Impact of Budgetary Policy (2012 and 2009-2012) by Income Decile

Looking at the impact of the Budget 2012 (see Figure 1), it is clear that the greatest reduction in income is for those on the lowest incomes – a fall of about 2 to 2½ per cent for the poorest 40 per cent of households. This compares with a fall of close to 1 per cent for deciles 5 to 7, and of about 0.7 per cent for the top 30 per cent. These results reflect the fact that increases in indirect taxes are regressive, and that cuts in welfare have a greater impact on low income groups.

How do the measures in Budget 2012 affect the overall impact of policy changes from October 2008 up to and including the present Budget? In this analysis we include the main changes to income tax – including cuts to income tax credits and the width of the standard rate band – elimination of the PRSI ceiling and the introduction of Universal Social Charge. Also included are the initial rise in welfare payments in the October 2008 Budget, and the subsequent cuts in payment rates for working age payments and Child Benefit. Other measures included are the impact of the public sector pension levy (Pension Related Deduction – PRD) and the explicit cuts in public sector pay. (As these policy measures are quite different from the usual tax/welfare policies, we also reconsider the tax/welfare and pay elements in a subsequent chart.)

Figure 1 shows that over this 4 year period, the distributional impacts show a strongly progressive pattern, with the lowest income group losing by about 4 to 5 per cent and the highest income group losing by close to 13 per cent.⁴ The scale of the progressive impact of earlier budgets, which raised income tax, abolished the ceiling on PRSI payments, and introduced the Universal Social Charge is much greater than the regressive impact of Budget 2012. The net effect over the whole period is therefore strongly progressive.

Figure 2 shows how results over the 2009 to 2012 period⁵ vary depending on whether attention is focused on traditional tax/welfare measures or includes decreases in public sector pay via explicit cuts and/or the public sector pension levy (PRD). It is clear that the public sector pay cuts have a progressive impact – as would be expected, given that the rate of pay cut was designed to increase

⁴ While this analysis does not include the elimination of the Christmas bonus, the pattern would not be substantially affected by its inclusion. While for individual cases, the elimination of the bonus means a reduction of about 2 per cent, the impact on low income households is not as great as this – not all welfare recipients receive the bonus, and not all of those who received the bonus are in low income households. The full year cost of the bonus was about €170 million, as against total social welfare cuts of close to €3,000 million between the Budgets of April 2009 and December 2011. As a result, the broad figures given in our analysis are a good guide to the overall distributional impact of the budgets.

⁵ This includes the October 2008 budget which was implemented in 2009, and further amended by a supplementary Budget in April 2009.

with income. The public sector pay cuts make little difference to low income households, but reduced the income of higher income households. While the results are broadly similar – least impact on low income households, and the greatest impact on high income households – it is noteworthy that the tax/welfare measures alone led to a reduction in income of about 7 per cent for the middle income deciles (deciles 4,5,6 and 7). Inclusion of the public sector pay cuts means that losses rise with income over these deciles.





Table 1 looks at how the policy impacts were distributed over a "family type" classification which combines demographic elements (age, marital status, presence of children) and economic characteristics (number of earners).⁶ Losses for single employees and families with one or two earners were between 9 per cent for those without children and 11 to 12 per cent for families with children. The greater losses for families with children reflect the focus of cuts on Child Benefit.

⁶ This analysis does not include the impact of indirect tax changes. A fully integrated analysis of direct and indirect tax changes would require a dataset which combines the key features of the CSO's *Survey on Income and Living Conditions and the Household Budget Survey*.

TABLE 1: Impact of Budgetary Policy Changes by Family Type

Family type	Impact of Policy Changes, 2008-2012 vis-à-vis Wage Indexed Policy
	Percentage Gain or Loss
Single, employed	-9.0
Couple, 1 earner	-8.7
Couple, 1 earner with children	-11.4
Couple, 2 earners	-10.8
Couple, 2 earners, with children	-11.7
Single unemployed	-11.1
Couple, unemployed/not at work	-2.2
One parent family	-6.6
Single retired	-1.6
Retired couple	-3.6
Other (ill/disabled)	-3.5
All family types	-8.4

Policy changes offered greater protection to most, but not all, family types which were mainly dependent on welfare income, with losses of about 3½ per cent for categories including those who are ill or disabled, and retired couples. The loss for single retired people was even smaller at about 1½ per cent, while couples affected by unemployment experienced a loss of just over 2 per cent on average. It should be remembered in this context that couples with children form only a small proportion of the live register, as demonstrated by NESC (2011).

Two groups of welfare recipients experienced much greater losses: the single unemployed, with an average loss of 11 per cent, and one-parent families, with an average loss of over 6 per cent. The single unemployed group includes those aged under 25, for whom payment rates on Jobseeker's Assistance payments were cut by between 25 and 50 per cent. Losses for the unemployed aged over 25 were much more limited. These results refer to incomes at the narrow family unit level, which counts a single unemployed person as a separate unit; household incomes for young unemployed persons living with their parents have not fallen so dramatically.

The loss of more than 6 per cent experienced by one-parent families reflects a number of factors. Many in this group are both in employment and in receipt of welfare, and are thus affected by reductions in the value of the One-Parent Family Payment, reductions in the amount of employment income disregarded in the means test for one-parent families, the introduction of USC, and, as parents, by the general cuts in Child Benefit.

AUSTERITY PACKAGES IN EU COUNTRIES: DISTRIBUTIONAL ANALYSIS

Some recent work in collaboration with European research partners has examined the distributional impact of austerity measures in six EU countries - the UK, Spain, Portugal, Greece, Estonia and Ireland. The analysis incorporates policy changes implemented during the period 2009 to 2011 for Ireland, the UK and Portugal and for 2010-2011 in Spain, and for 2009 in Estonia. For Greece, the analysis incorporates the combined impact of the first wave of austerity measures from March 2010 up to and including the measures agreed with the Troika in May 2010; the later (June 2011) package is not included. Two key features stand out from an Irish perspective in Figure 3, reproduced from Callan et al. (2011). First, the size of the adjustment undertaken by Ireland is substantially greater than that analysed for the other countries. Second, the distributional impact of the policy changes in Ireland is among the most progressive - with one important caveat. The lowest income losses are not at the very bottom of the distribution, but for those with somewhat higher incomes (deciles 2, 3 and 4). The major factor contributing to this is the special treatment afforded to the elderly, with a rise in the State pension in 2009, and no subsequent downward adjustment, unlike other welfare payments over that period.





Notes: The austerity measures included here are limited to those that have a direct effect on household disposable income (changes to direct taxes, cash benefits and public sector pay). They do not include changes to employer or credited contributions. In addition, increases in indirect tax, cuts in public services and some minor tax-benefit changes (see text) are not included. Deciles are based on equivalised disposable income in the counterfactual (before austerity) scenario and constructed using the modified OECD equivalence scale to adjust incomes for household size.

Source: EUROMOD version F4.19 and SWITCH.

Figure 4, reproduced from a study of austerity impacts in 6 EU countries (Callan et al., 2011) gives a different perspective on impacts by family type. It compares results for households containing children andhouseholds containing an elderly person with the average for all households.





Source: SWITCH.

The calculations underpinning the analysis in Figure 4 are based on examination of policy without indexation of wages, but the broad result would not change under wage indexation. Households containing an elderly person fare better than the others at all income levels, not just at low incomes. This is not uncommon in the other EU countries examined, though Greece is an exception because of its pension cuts; but the size of the gap between households containing an elderly person and other households is particularly great in Ireland. Households containing a child fare consistently worse than others in Ireland, reflecting the sharp decreases in child benefit over the period. Households with children also fare worse in Spain, Estonia and Portugal, though not in Greece. Low income households with children fare somewhat better under the UK austerity measures than others, but middle income households with children fare somewhat worse and high income households with children about the same as other high income UK households.

Notes: The austerity measures included here are limited to those that have a direct effect on household disposable income (changes to direct taxes, cash benefits and public sector pay). They do not include changes to employer or credited contributions. In addition, increases in indirect tax, cuts in public services and some minor tax-benefit changes are not included. Deciles are based on equivalised disposable income in the counterfactual (before austerity) scenario and constructed using the modified OECD equivalence scale to adjust incomes for household size. Children are defined as those aged under 18 and "elderly people" as all those aged 65 or more.

CONCLUSION

Budget 2012 involved greater proportionate losses for those on low incomes: reductions of about 2 to 2½ per cent for those with the lowest incomes, as against losses of about ¾ of a per cent for those on the highest incomes. A combination of indirect tax increases (VAT and carbon tax) and selective reductions in welfare payments gave rise to these effects. However, austerity measures over the full period since the October 2008 budget show a very different pattern. Losses imposed by policy changes in tax and welfare have been greatest for those on the highest incomes, and smaller for those on low incomes. Increases in income tax, elimination of the PRSI ceiling and introduction of the Universal Social Charge, coupled with increases in old age pension payments, have contributed to these results. The structure of public sector pay cuts (both directly and via the public sector pension levy) has also imposed greater losses on high income groups in the population. The overall distributional pattern of Irish austerity measures is among the most progressive in 6 EU countries examined in a recent study.

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