Evidence to Joint Committee on Education and Social Protection
Impact of Social Protection Payments on Income Distribution

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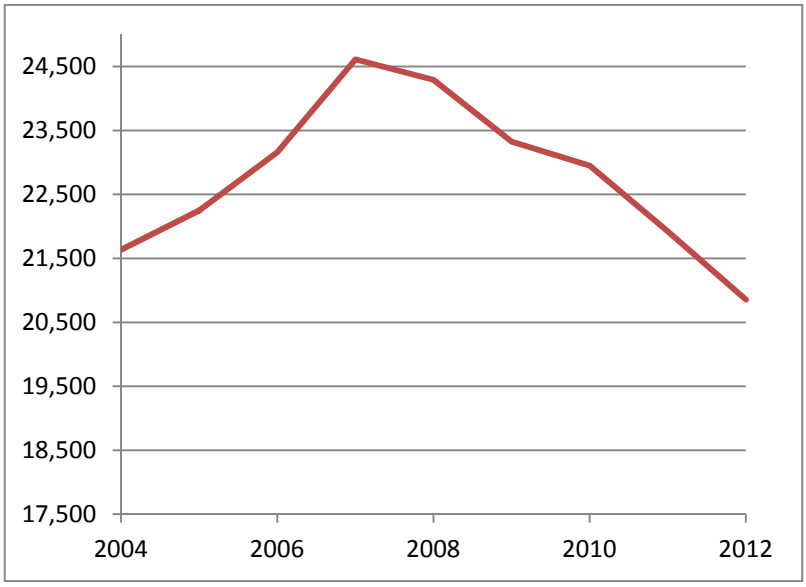
I welcome the opportunity to address the Joint Oireachtas Committee about the impact of social protection payments on the income distribution. I draw on research work with many colleagues, much of it published by the ESRI. Responsibility for the results rests with the authors and myself rather than the ESRI. I begin by summarising evidence on what has happened to the distribution of income since 2008

Ireland's Income Distribution: How Has It Changed?

Before considering how the distribution of income is changed, it is important to establish what has happened to the level of household disposable income in the last 10 years. Figure 1 shows that average household disposable income[1] fell by close to 15 per cent between 2007/8 and 2012.

Figure 1: *Average Household Income 2004-2012, adjusted for numbers of adults and children (equivalised)*



Source: CSO Survey on Income and Living Conditions, 2012, Table A.

Changes in the Gini coefficient have been described in papers elsewhere. The Gini is the most commonly used summary measure of inequality, but like any summary measure, it cannot provide a full picture of changes in incomes across the distribution.

[1] Unless otherwise specified, I use household disposable income per adult equivalent (or "equivalised income") as the key variable in analysing income distribution. The scale used in the national poverty target counts 1 for the first adult, 0.66 for other adults, and 0.33 for children under 14, to allow for economies of scale in household consumption.

Analysis using what are termed income deciles – groupings of households obtained by ranking households from the lowest incomes to the highest, and dividing households into ten equally sized groups – helps to flesh out the picture of income distribution. Table 1, reproduced from the CSO's SILC release, shows how the income shares obtained by each decile have changed between 2008 and 2012 (e.g., the 10% of households with the lowest incomes – the lowest income decile - had 3.5% of total income in 2008, while highest income decile had 24.4%) Focusing on changes over the full period 2008 to 2012 period, we see that, while there is broad stability in the income shares of middle income groups (deciles 3 to 8) there are significant shifts at both the bottom and the top of the income distribution. The share of the lowest income households (bottom decile) fell from 3.5 per cent to 3 per cent with a smaller fall for the second decile. The share of the highest income households (top decile) fell from 24.4 per cent to 24 per cent, while there was a rise in the share of the 9th decile.

Table 1: Income shares by decile groups (lowest incomes to highest incomes)

	2008	2009	2010	2011	2012
Decile	%	%	%	%	%
Lowest income	3.5	3.6	3.2	3.0	3.0
2nd	5.1	5.2	5.0	5.0	4.9
3rd	5.9	6.1	5.9	6.0	6.0
4th	6.8	7.0	6.8	6.9	6.9
5th	7.9	8.1	7.8	7.9	7.9
6th	9.1	9.3	9.1	9.2	9.1
7th	10.4	10.6	10.3	10.5	10.5
8th	12.2	12.3	12.0	12.4	12.4
9th	14.7	14.8	15.2	15.2	15.2
Highest income	24.4	23.2	24.7	24.0	24.0

Source: CSO Survey on Income and Living Conditions, 2012, Table B.

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These shifts in the income distribution reflect substantially different changes in the levels of real income for different income groups, as shown in Table 2. The general fall in household incomes was close to 14 per cent. However, the lowest income group obtained a smaller share of this shrinking national income, so that real incomes

for the poorest 10 per cent of the income distribution[2] had already fallen by 14 per cent in 2010, and fell by a total of more than 25 per cent over the 2008 to 2012 period.

Table 2: Changes in Average Income by Decile, 2008 to various years

	Cumulative changes in average income by decile			
Decile	2008-9	2008-10	2008-11	2008-12
Lowest income	-1.2	-13.6	-22.6	-26.4
2nd	-2.1	-7.4	-11.5	-17.5
3rd	-0.7	-5.5	-8.2	-12.7
4th	-1.1	-5.5	-8.4	-12.9
5th	-1.5	-6.7	-9.8	-14.1
6th	-1.9	-5.5	-8.8	-14.1
7th	-2.1	-6.4	-8.9	-13.3
8th	-3.2	-7.1	-8.3	-12.7
9th	-3.3	-2.3	-6.7	-11.2
Highest income	-8.7	-4.4	-11.2	-15.5
Overall average	-4.0	-5.5	-9.8	-14.1

Source: Derived from CSO SILC, 2012, Tables A and B

The reasons for this sharp fall in disposable incomes among low income groups are still under investigation: further work on this topic will be presented at an ESRI seminar in April. Work to date suggests that much of the explanation is likely to be connected with falling employment and falls in self-employment incomes over the recessionary period.

Taxes, Transfers and the Distribution of Income

I now turn to the role played by changes in social protection policy, along with tax policy and public sector pay and pension policies which also have distributional objectives.

One can think of policy impact as depending on two main factors:

1. *Policy structure:* The structure of the tax/transfer system, including levels of welfare payment, coverage of welfare schemes, the level of tax credits and the rate structure of the direct tax system (including income tax, PRSI and USC) etc.

[2] It should be noted that the decile groups are constructed on the basis of CSO's cross-sectional survey data, so that the comparison is not between the same set of households in different years, but between households occupying the same income positions (rankings) in different years.

2. *Market income structure:* The structure of distribution of "market" incomes (including employment earnings, self-employment profits, occupational pensions, rent, interest, dividends etc.)

The policy structure effect is familiar and needs no further exposition. The market income structure effect is less familiar, and an example may help to clarify. A system which pays benefits (whether contributory or means tested) in respect of unemployment will have a greater impact – i.e., do more redistribution – in the context of a high unemployment rate than a low unemployment rate. This is part of the "automatic stabilization" function of the social protection system.

Analyses by Dorothy Watson, John FitzGerald and other colleagues clearly demonstrate the major role played by social protection payments in protecting low income households. These results do not, however, address the issue of what has been the impact of changes in policy structure. When we compare results across years or across countries, these policy structure and market income structure effects cannot readily be identified. For a more direct identification of the impacts we must use a microsimulation model, which compares, on a given population, the impact of actual policies with a neutral continuation of existing policies[3].

Results from this approach were published in a special article in the December 2014 *Quarterly Economic Commentary*, reproduced here as Figure 2. This analysis deals with policies implemented over the 2009 to 2015 period.

Commenting on this, we said:

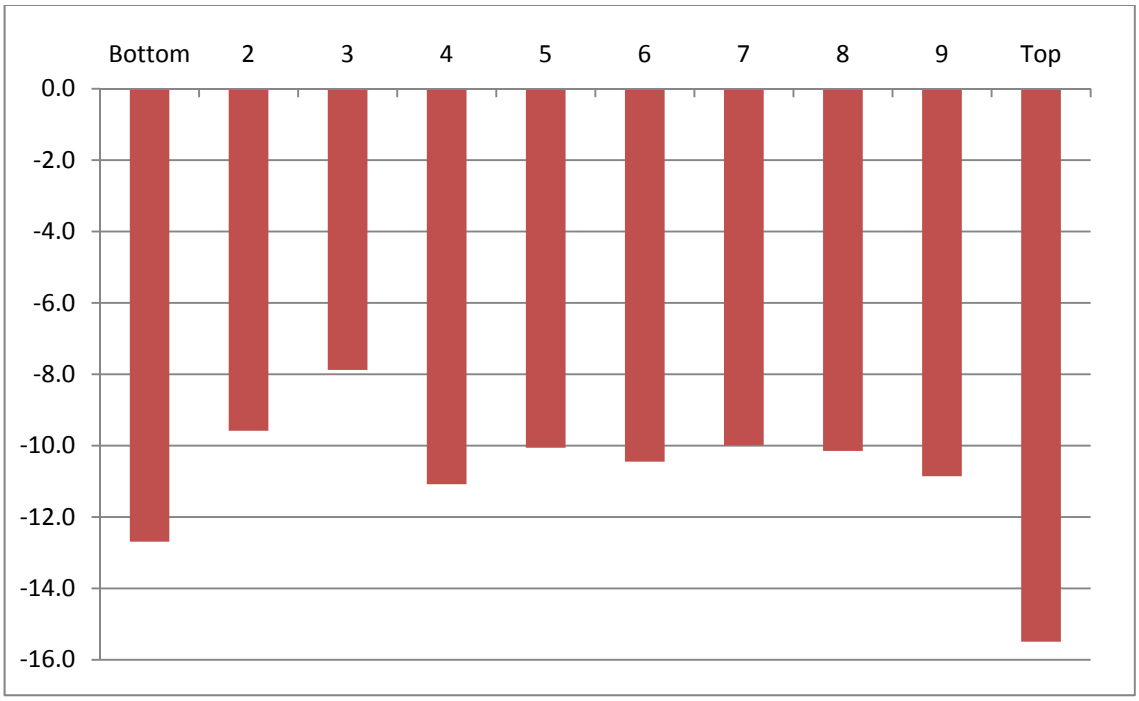
> For six of the ten deciles the income loss arising from policy changes was between 10 per cent and 11¼ per cent. Outside this band, the highest losses were for the top decile, which is estimated as having lost 15½ per cent of its income due to the policy changes examined here. The bottom decile is estimated as having policy-induced losses of 12¾ per cent. Somewhat lower losses are found in deciles 2 and 3, which include a higher than average representation of pensioner households.....

[3] Neutrality can be assured by indexing policies in line with wage growth. Over the relevant period here, wage growth has been close to zero; this issue becomes more important as wage growth resumes.

To sum up: the net effect of Budgets 2009 to 2015 has been to squeeze incomes at all income levels, but by most of all at the top and the bottom of the income distribution

(Keane et al.., 2014)

FIGURE 2 Impact of Budgetary Policy 2009-2015 - Percentage Change in Disposable Income by Income Decile



Source: *SWITCH model at December 2014 incorporating main changes in direct tax, welfare and public service pay/pensions, and water charges; augmented by results on carbon tax and VAT, DIRT, specific Budget 2014 restrictions of tax reliefs for pension contributions and medical insurance premia, and Capital Gains Tax as described in Callan et al. (2013b).*

Conclusion

While this evidence has focused on understanding the past, the methods employed can also be applied to analysis of future options. Tax and transfer policies, including social protection, have to strike a balance between competing demands. Exploration of the potential trade-offs between social protection payment rates, tax and USC rates, and other taxes and charges can benefit from the "what if" analyses which a microsimulation model, such as the ESRI tax-benefit model, can provide. We aim to

provide some forward-looking analyses in June of this year, which will help to inform debate on future directions for policy.

References

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