The effects of tax and benefit policy changes on poverty and income distribution, 2001 to 2011: Some lessons for the future

John Hills[1], Alari Paulus[2], Holly Sutherland[2] and Iva Tasseva[2]

[1]London School of Economics, [2]University of Essex

Through taxation and social policies, governments have crucial effects on the distribution of income and on poverty. Even though there are sometimes common trends, there have been striking differences between countries in the evolution of tax and benefit structures, with variations in outcomes. For policy-making such differences illustrate the freedom of action policy-makers have, even when they are trying to achieve similar changes in their fiscal positions. At the same time, this highlights the importance of careful policy evaluation, if governments take seriously their commitment to redistributive goals, such as the Europe 2020 poverty reduction target. Some have suggested that the Lisbon decade (2001-2011) was a 'lost decade' in terms of reducing relative poverty figures. However, some evaluations have not distinguished between the impact of policies under direct control of policy makers (e.g. taxes and social benefits) and the impact of other factors that are more difficult to influence (e.g. demographic trends).

In this study we isolate the effects of tax and benefit policy changes on poverty and the income distribution in seven EU countries between 2001 and 2011. Making use of the EU tax-benefit microsimulation model EUROMOD, we are able to track more carefully the effect of structural changes, where systems were reformed in some way, and the indexation effect, resulting from the ways that benefit rates, tax thresholds or tax brackets are changed over time.

Our main findings can be summarised as follows:

- Even though, overall, poverty figures did not decline substantially, the period from 2001 to 2011 was not a 'lost decade' as the net effect of policy changes was to reduce poverty in most of the countries we examine. At the same time, our findings show that in most of the countries, policies since the crisis achieved less in terms of poverty reduction than before it. This suggests the need for governments to achieve more under favourable economic conditions in order to be better prepared for more challenging economic periods.

- Indexation of benefits and tax thresholds (how their money values are adjusted from year to year) had important, but sometimes neglected, distributional effects in the period examined, often more important than more visible structural changes to the tax-benefit system. From a policy point of view there is a clear need to better understand the influence of indexation of policies on outcomes in terms of poverty and inequality, and on gains and losses by social and demographic groups.

- From an analytical point of view, our detailed analysis of the nature of the policy changes reveals that what can look like similar net effects of policy on inequality and poverty can result from very different patterns of change across the income distribution as a whole, and are often the result of structural reforms and indexation policies that act in opposite directions. In turn, what lies behind these changes can reflect the net effect of complex changes to different aspects of taxes and transfers that need to be seen together to understand the overall balance of policy change. This underlines the importance of looking at the range of measures together, rather than just a few of them in isolation. Forward-looking analysis (e.g. to 2020 or beyond) should take account of this.

More detailed findings

It is important to note at the start that the measurement of policy effects is sensitive to the assumption made as to what a 'neutral' adjustment would have been. We therefore use two benchmarks against which to compare how systems were actually indexed: growth in market incomes (MII) and change in the price level (CPI). Using the former, indexation of benefits faster than market incomes will, for instance, show as poverty-reducing (in effect, allowing progress against a relative poverty line) as well as inequality reducing. Using the latter, indexation of benefits faster than prices will show as poverty-reducing (allowing progress against a constant real poverty line).

Findings – poverty reduction

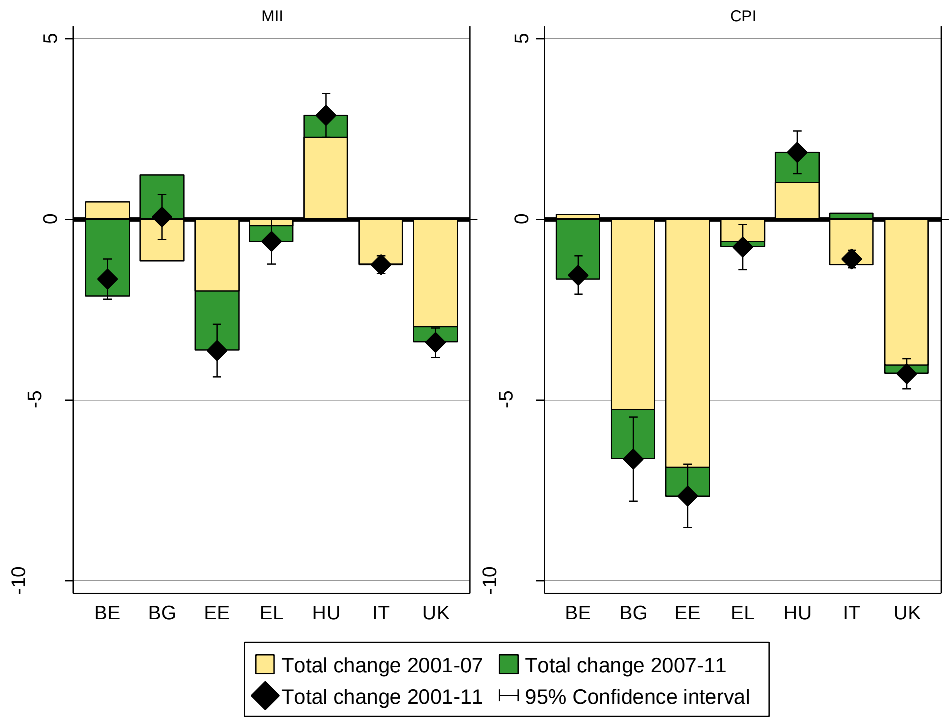
Figure 1 shows the effects of policy changes on poverty (using thresholds that are adjusted to take account of the impact of the policy changes themselves on median incomes) over the two periods 2001-2007 and 2007-11 (the yellow and green parts of the bars, respectively), and over the whole period (the diamonds). The left panel shows the policy effects compared with baseline systems that had been adjusted in line with average market incomes and the right panel by comparison with baseline systems adjusted in line with prices.

This shows that policies were poverty-reducing over the period as a whole on either basis in five of the countries. Against an income-adjusted base the effect was largest in Estonia and the UK, equivalent to a fall of 3.5 percentage points in the poverty rate, and more than 2 percentage points in Belgium. In Bulgaria, policy had a sizeable poverty-reducing effect when compared to a base system only adjusted in line with price inflation. However, if the neutral benchmark is taken as system where benefits, pensions and tax thresholds are adjusted in line with market income growth, the policy changes in Bulgaria had a neutral effect on poverty. By contrast, policy had a poverty-increasing effect in Hungary, equivalent to about 3 percentage points against an income-linked base and 2 percentage points against a price-linked base.

In most of the countries, therefore, policy did act to reduce poverty over the decade, and these poverty-reducing effects came despite the policy changes overall being revenue-raising (against an income-linked base) in Greece, Italy and the UK.

In most of the countries (apart from Belgium and to some extent Estonia), policies after the crisis achieved less in terms of poverty reduction than before it. On the other hand, the observation there were periods when governments reformed their systems resulting in net revenue but in a way that avoided increasing poverty (for instance, the UK in the period up to 2007), suggests that budget-improving fiscal adjustment does not necessarily have to be regressive.

Figure 1: Effect of policy changes 2001-11 on poverty



Notes: 2001 and 2011 policy parameters are adjusted to 2007 levels using growth in market income (MII) or CPI; poverty is measured using 60% of median equivalised household income under each policy scenario as the poverty line (with the poverty line 'floating' in response to the effect of policy on median incomes).

Source: Authors' calculations using EUROMOD version F6.36. See Discussion Paper 14/03 (Figure 2) for more discussion.

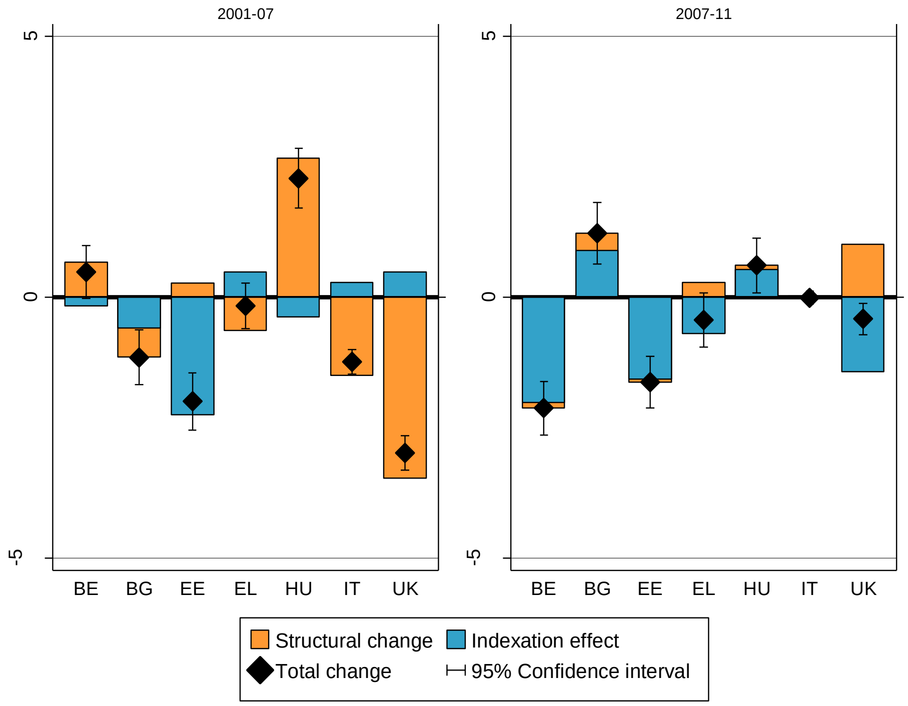
Findings – structural reforms and indexation

It is often assumed that it is the well-advertised effects of structural reforms to taxes and benefits that make the biggest contributions to whether policies reduce or increase poverty. But Figure 2 shows that the ways in which their parameters are adjusted from year to year can be equally or even more important. This breaks down the policy-induced changes in poverty shown in the left panel of Figure 1 (compared to an income-linked base) into structural and indexation-related components within the two periods.

In the growth period from 2001-07 it was more often structural reform that had the largest effects, reducing poverty in Italy and the UK, but increasing it in Hungary.

However, in the crisis period from 2007-11, it was the indexation effect which contributed to poverty (as well as inequality) reduction in nearly all cases. This was because monetary parameters such as benefit levels and tax thresholds were on the whole adjusted (or kept) ahead of market incomes (which were often falling in real terms). By contrast, structural changes tended to increase poverty slightly in the post crisis period in Bulgaria, Greece and the UK.

Figure 2: Structural change and indexation effects on poverty, 2001-07 and 2007-11 (compared to income-indexed base)



Source: Authors' calculations using EUROMOD version F6.36. See Discussion Paper 14/03 (Figure 6) for more discussion.

Especially in times of economic volatility, whether policies should keep pace with market incomes, with prices or some other economic variable is an important issue for consideration and open debate. Indexation by the growth in market incomes keeps public support in line with changes in private incomes, and hence relative poverty using a floating threshold constant, though may imply that benefit levels are cut in times of economic hardship.

By contrast, indexation of policies by changes in the price level means that public support may lag behind market incomes in times of growth but protects living standards in periods when real (market) incomes are falling, hence offering greater automatic stabilisation. If short-term fiscal considerations make this impossible then, as our analysis shows for some countries, it is still possible to structure policy changes to provide relative protection for those on low incomes.

Key Resources

John Hills, Alari Paulus, Holly Sutherland and Iva Tasseva (2014), *A lost decade? Decomposing the effect of 2001-11 tax-benefit policy changes on the income distribution in EU countries*, ImPRovE Discussion Paper 14/03, June 2014 [http://improve-research.eu/?page_id=37]

Author for correspondence: John Hills (J.Hills@lse.ac.uk)

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Manager: Tim Goedemé (tim.goedeme@uantwerpen.be)
Project officer at the European Commission: Marc Goffart (Marc.Goffart@ec.europe.eu)

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