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Distributional aspects of fiscal consolidation: the case of Greece

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**Abstract**

The literature on fiscal consolidation focuses mainly on factors accounting for the success of adjustments, placing particular emphasis on the composition between expenditure and revenue measures. Distributional aspects of consolidations have received less attention, although several studies have found strong evidence of the adverse effect of consolidations on the distribution of income. Such studies have shown that this effect is larger when consolidations are based primarily on expenditure measures, while revenue increases tend to have an equalizing effect and can even lead to reductions in inequality, especially when progressive taxation is complemented by targeted social benefits.

The question of the effect of fiscal adjustment on income distribution is particularly relevant in the case of Greece, which has undergone an exceptionally sizeable consolidation over the previous decade in the context of three Economic Adjustment Programmes. We calculate the total size of the consolidation at EUR 66.1 billion or 34.7% of GDP. This effort led to a dramatic improvement in the cyclically adjusted primary balance which rose from -9.2% of GDP in 2009 to +8.1% by 2018. Yet, at the same period, and partly, as a result of fiscal consolidation, output declined by more than 25% and disposable income by more than 40%, while the unemployment rate exceeded 27%. The aim of this paper is to study the changes in the distribution of income during the period of the Greek crisis and disentangle the distributional effects that were caused by the policy measures adopted during the period of fiscal consolidation 2010-2018.

The analysis covers an entire consolidation episode of exceptional size and duration, leading to significant insights on the distributional impact of specific types of fiscal interventions and discretionary policy shifts. The approach followed is based on the comprehensive identification of all discretionary policy measures implemented throughout this period, examining the breakdown and the policy shifts between categories of expenditure and revenue measures.

We use the EUROMOD tax-benefit microsimulation model, which simulates personal tax and social insurance contributions as well as cash benefit entitlements for all E.U. countries based on the national tax-benefit policy rules. Microsimulation is selected as a methodological tool for our paper as it allows for a more disaggregated analysis and better understanding of the exact channels involved in forming the final distributional outcome for the economy. We run the model using the relevant microdata of the Survey of Income and Living Conditions of the Hellenic Statistical Authority in order to examine the distributional impact of these measures.

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EUROMOD's underlying microdata are drawn from SILC 2011-2019. Results on the impact of consolidation on income distribution are provided for each year, breaking down the individual impact of concrete measures. The latter include fiscal interventions in the areas of direct income taxes, pension expenditures, social security contributions and the provision of means-tested and untargeted welfare benefits, which make up a significant fraction of the total consolidation effort in Greece.

The overall composition of the consolidation is found to be rather balanced, with 54.6% being due to expenditure measures and 45.4% due to revenue measures, although the data show a shift in emphasis from spending cuts to revenue increases between the first and the second half of the period. Increases in direct taxes and in taxes on goods and services account for almost 3/4 of total revenue measures, while cuts in pension spending account for more than 1/3 of total expenditure measures and for more than 1/5 of the total consolidation.

The results of the distributional analysis are presented in terms of the annual rate of change in the mean equivalised household disposable income per decile of the income distribution, as well as through a series of inequality, poverty and progressivity indicators. In the overall pattern that emerges, we can broadly distinguish between years 2010-2012 when the effect on income distribution depends mainly on the interplay between pensions and direct taxes and the period from 2013 onwards when the effect of means tested benefits gradually becomes the dominant factor in shaping changes in distribution.

This pattern is reflected in the path of spending on social protection, which contributes quite heavily to the consolidation effort in the early years, but shows marked increases in the later ones. The data show a total lack of expansionary measures over 2010-2012 and a gradual shift starting in 2014 and clearly manifesting itself in the last years of the consolidation period, with expansionary social protection measures coming to represent almost 1.5% of GDP and almost 38% of total expansionary measures by 2018.

Overall results show a limited progressivity of discretionary policy measures during the first phase. In 2013-2018, the distribution gradually becomes more progressive and is driven mainly by interventions related to means-tested benefits. The last three years of the consolidation period are characterised by a clearly progressive policy mix, which is shaped primarily by such benefits, although a degree of progressivity is also obvious in the distribution of income changes corresponding to social security contributions and direct taxes.

The results of the analysis show shifting patterns of the adjustment's distributional impact that are overall in line with empirical findings about the effect of expenditure-based versus revenue-based consolidations, as well as about the importance of social spending in containing the adverse effects of consolidation on income distribution. Specifically, the results confirm empirical findings on the potential of revenue-based consolidations, coupled with targeted social protection expenditures not only to contain but also to reverse the adverse impact of consolidations on income distribution.

**Keywords:** fiscal consolidation, income distribution, Greek crisis, microsimulation