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Inequality and poverty in Greece: Myths, realities and the crisis

1. Introduction

In recent years, distributional issues are almost always in the centre of the Greek public discourse while, at the same time, many aspects of inequality, poverty and the redistributive role of the state have been investigated in depth (see, for example, Tsakloglou, 1990, 1993; Tsakloglou and Panopoulou, 1998; Mitrakos and Tsakloglou, 2000, 2006). Nevertheless, many assertions made in the public discourse are sometimes contradictory (for example, claims that inequality is due to sharp class differences and assertions that the Greek society is dominated by an oversized middle class), in some instances unsubstantiated (for example, statements about the distributional effects of the recent austerity measures) and in other cases in sharp contrast to the findings of the empirical studies (for example, the often heard claim that in recent decades inequality and poverty are constantly rising). The objective of this paper is to shed light in some of these allegations by presenting empirical findings on the inter-temporal trends and the structure of inequality and poverty in Greece, as well as on the distributional effects of the austerity measures adopted as a consequence of the current economic crisis.

2. Data and methodology

The main source of data for the analysis of the inter-temporal trends and structure of inequality and poverty are the Household Budget Surveys (HBS). HBSs provide detailed information on consumption expenditures (actual and imputed), incomes (after social security contributions and transfer payments) and socio-economic characteristics of a representative sample of households and their members. Seven such surveys are available, covering the entire period after the restoration of democracy in Greece (1974, 1982, 1988, 1994, 1999, 2004 and 2008). Distributions of both income and consumption expenditures are utilized. In most cases, the results are very similar, irrespective of the distribution used. Complementarily, the disposable income information of the European Community Household Panel (ECHP) and the EU Survey of Income and Living Conditions (EU-SILC) is also exploited. EU-SILC data are also used in the micro-simulation model utilised for the analysis of the distributional effects of the crisis.

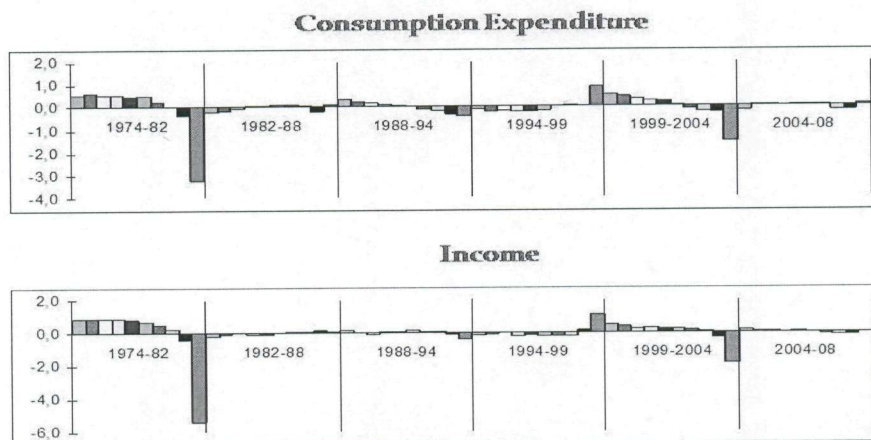
For the analysis of the inter-temporal changes in inequality, we use the Gini index which is relatively more sensitive to changes around the median of the distribution and the Atkinson index for inequality aversion parameters $\epsilon=0.5$ and $\epsilon=2.0$, for which the index becomes relatively more sensitive to changes near the top and the bottom of the distribution, respectively. For the analysis of the structure of inequality we rely on Mean Logarithmic Deviation that attributes aggregate inequality to disparities "within groups" and "between groups". For the analysis of poverty we use the members of the Foster, Greer and Thorbecke family for poverty aversion parameters $\alpha=0$ (poverty rate) $\alpha=1$ (normalized poverty gap) and $\alpha=2$ (that is also sensitive to the distribution of resources among the poor).

The evidence on the distributional effects of the crisis is taken from Matsaganis and Leventi (2011). Since no data for the period after 2008 are currently available they use tax-benefit microsimulation techniques in order to provide estimates of the impact of the austerity measures and the concomitant decline in economic activity on aggregate inequality and poverty, using the Greek section of the European microsimulation model EUROMOD. This model depicts the payments made by the households to the state in the form of direct and indirect taxes (accounting for tax evasion) and social insurance contributions, as well as the monetary public transfers to the households (pensions, other social insurance and social assistance payments).

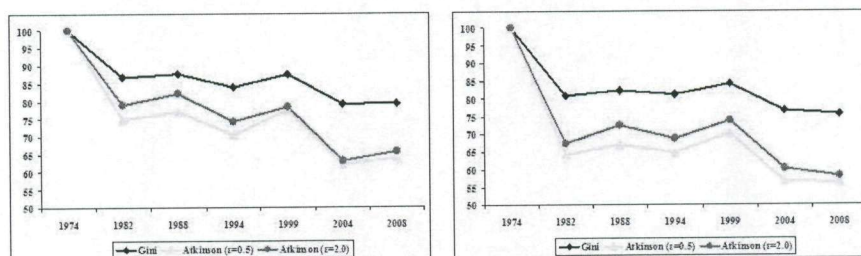
3. Empirical results

Graph 1 shows the inter-temporal changes in decile shares in total income and total consumption expenditure. They show that between 1974 and 1982 there was a substantial decline in the shares of the top deciles and a corresponding increase in the shares of the poorer deciles. This finding is in line with the claims made in the public discourse. However, unlike the claim that after 1982 the distribution remained largely stable, Graph 1 shows that considerable inegalitarian/egalitarian changes took place in the sub-periods 1994-1999 and 1999-2004, while the changes in the last sub-period were not statistically significant. As a result, the Lorenz curves of 2004 and 2008 dominate (are closer to the line of perfect equality) all other Lorenz curves.

Graph 1. Changes in decile shares



Graph 2. Inter-temporal trends in inequality indices

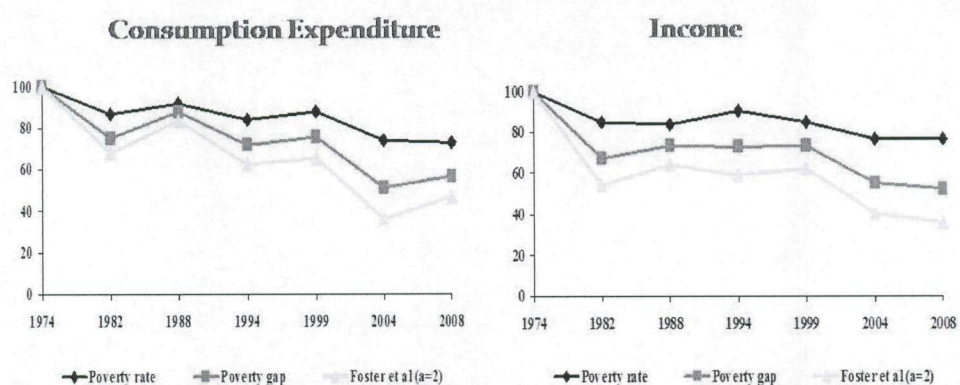


As a consequence, in Graph 2 all inequality indices report a non-monotonic decline in inequality that is far more pronounced in the case of indices that are relatively more sensitive to changes in the tails of the distribution (Atkinson 0.5 and 2.0). For the period 1994-2008, these trends are largely confirmed using the data of ECHP and EU-SILC.

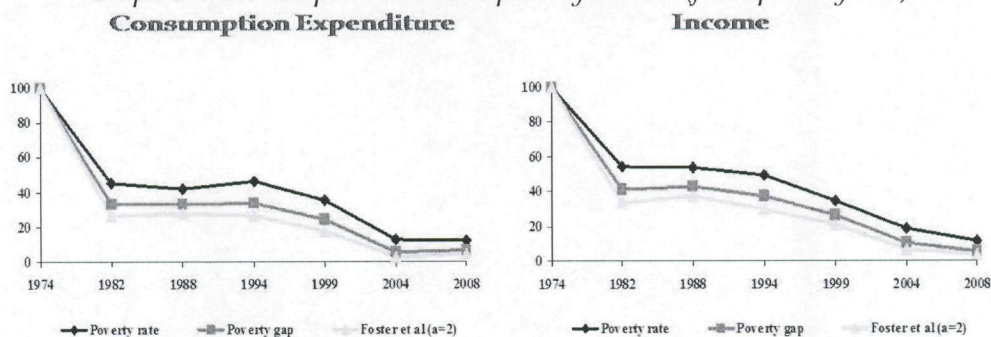
Regarding the structure of inequality, results not shown here suggest that, unlike what is often mentioned in the public discourse, inequality emanates primarily from differences “within” rather than “between” socioeconomic groups. Even when the population is grouped in over 100 very homogeneous groups using simultaneously a number of grouping criteria, less than a third of total inequality is attributed to disparities “between” groups.

Turning to poverty trends, a distinction should be made between changes in “relative” (when the poverty line is determined with respect to the contemporary distribution) and “absolute” (when the poverty line is adjusted only for changes in the price level) terms. Graph 3 shows that, unlike what is usually heard in the public discourse, overall, relative poverty declined non-monotonically in the period under examination and the changes are larger when indices other than the poverty rate are utilized. Taking into account that the average living standard improved markedly during the period under examination it is not surprising that in Graph 4, where the poverty line is held constant all indices record a spectacular decline in poverty. These results are also confirmed using ECHP and EU-SILC data.

Graph 3. Inter-temporal trends in poverty indices (contemporaneous poverty line)



Graph 4. Inter-temporal trends in poverty indices (fixed poverty line)

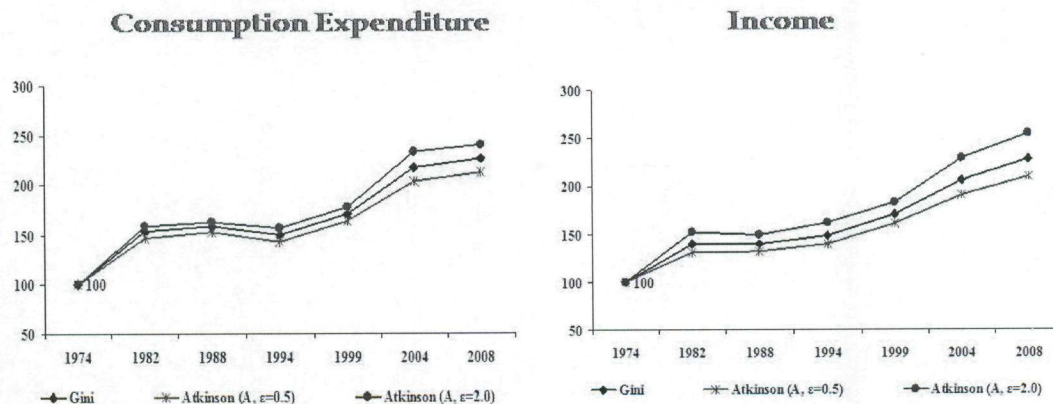


Throughout the period, poverty is associated with low educational qualification, residence in rural areas, employment in the agricultural sector, old age (more strikingly when consumption expenditure is used instead of income) and, in more recent years, unemployment. Changes in the structure of poverty reflect primarily changes in the structure of the population. Poverty is gradually shifting from the urban to the rural areas and from the younger to the elderly.

In the literature it is usually assumed that aggregate welfare is a positive function of the mean of the income or consumption distribution and a negative function of the level of inequality of this distribution. Graph 5 presents results of the inter-temporal trend in aggregate welfare for the period 1974-2008, using alternative indices of inequality.

According to these estimates, aggregate welfare more than doubled during this period, although in some sub-periods welfare was declining.

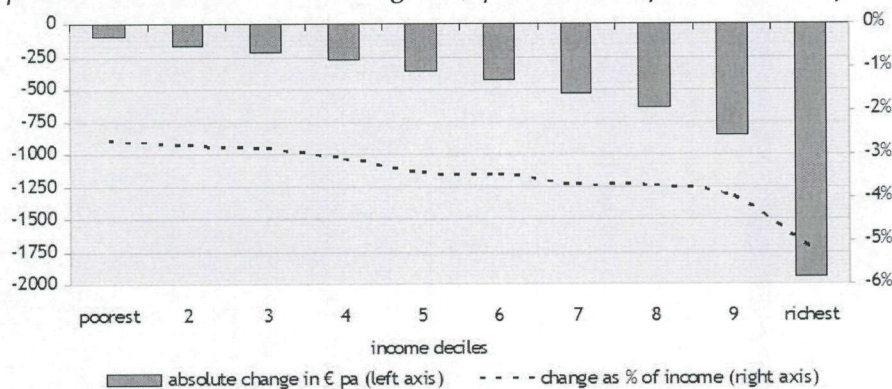
Graph 5. Inter-temporal trends in aggregate welfare



The evidence presented so far suggests that, unlike what was observed in most OECD and EU countries (OECD, 2008), during the period under consideration inequality and poverty were declining in Greece. However, various international comparisons show that even after these decreases the levels of inequality and (relative) poverty in Greece are substantially higher than in most developed countries.

The above estimates cover the period until the beginning of the current crisis. No real data to examine in detail the distributional effects of the crisis and the measures taken to fight it will be available for at least two more years. However, estimates can be derived using tax-benefit microsimulation techniques. Using such techniques, Matsaganis and Leventi (2011) model the most important of the austerity measures adopted in 2010 (cuts in salaries of public sector employees and pensions, new personal income tax schedule, introduction of pensioners' solidarity contribution, lump-sum taxes on high incomes and increases in VAT a) as well as the effects of the recession on the level and the structure of employment, unemployment and private sector incomes. The resulting disposable income distribution for 2010 is, then, compared with the baseline (2009) distribution.

Graph 6. Absolute and relative change in (equivalised) disposable income per decile

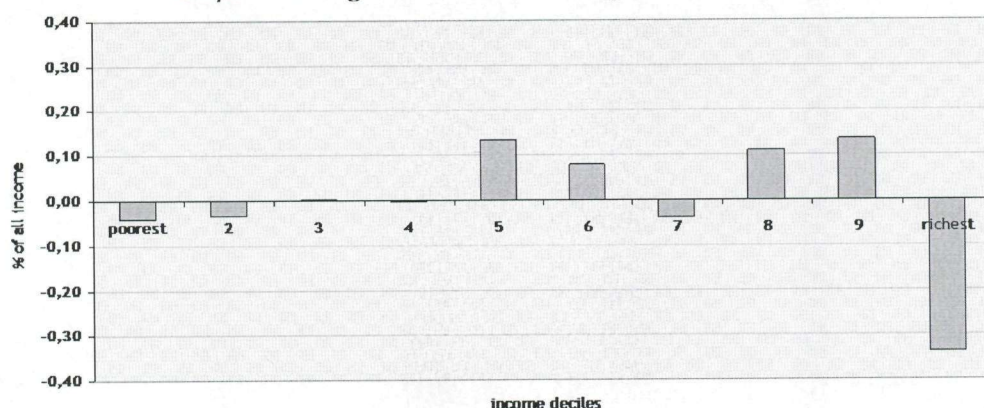


The perceived wisdom is that the distributional effects of the crisis were very adverse, hitting disproportionately the bottom of the distribution and leading to increases in inequality and poverty. A first look at the evidence in Graph 6 does not seem to provide support to this view. Between 2009 and 2010 the average (equivalised) disposable income of all deciles declined substantially. In absolute terms the decline was close to 2000 euros per capita for the top decile, but less than 200 euros for the two bottom deciles. In proportional

terms the decline in the income of the top decile was close to 5% while the corresponding figure was less than 3% for the three bottom deciles.

Finally, Graph 7, also taken from Matsaganis and Leventi (2011) takes into account the effects of both the austerity measures and the resulting decline in economic activity as well as the re-rankings of population members due primarily to the increased unemployment and depicts the changes in decile income shares. The evidence is not clear and the changes are rather mild. The income shares of the bottom two, the seventh and, particularly, the top decile decline, while those of the middle income deciles, apart from the seventh, rose (but nowhere near some of the changes reported in Graph 1). As a result of these changes, the Gini index declines by 0.3%, the relative poverty rises from 20.1% to 20.9% but when the poverty line is fixed at its 2009 level in real terms, there is a substantial increase in poverty from 20.1% to 25.1%, while considerable changes are observed regarding the structure of poverty.

Graph 7. Changes in income shares by decile: 2009-2010



4. Conclusions

The paper analysed distributional trends in Greece in the period after the restoration of democracy and the distributional effects of the current economic crisis. Several of the findings run contrary to claims frequently made in the Greek public discourse. Unlike most western countries, inequality and poverty in Greece declined during the last four decades, but still remain higher than the EU average, while the first round of the distributional effects of the crisis was rather neutral, despite the fall in the living standards of the population.

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