## Excessive inequality and economic growth: estimating thresholds and tolerance levels<sup>1</sup>

George Petrakos, Spyros Niavis, Dimitris Kallioras, Alexandra Sotiriou and Kleoniki Natalia Petrou

Department of Planning and Regional Development

University of Thessaly, Greece

## **Abstract**

The goal of this paper is to discuss theoretical frameworks explaining why inequality may become harmful for an economy after some critical threshold and empirically assess the critical level beyond which desirable diversity in household income turns into undesirable or harmful inequality. In addition, the paper examines to what extent this threshold varies across types and dimensions of actual or perceived measurements of inequality and what are the policy implications of these. The analysis is based on secondary data and an expert survey conducted exclusively within the framework of the ESSPIN project. The results suggest that income inequalities have a non-linear impact on growth performance. Lower or modest levels of inequality appear to have a positive impact on growth, which is related to the benefits of extra effort, profit seeking endeavours, innovative ideas and persistence. However, after some level, inequality turns out to have a negative impact on growth. This turning point tends to vary with the level of development, as in more advanced countries income inequality becomes a growth barrier at earlier levels of inequality. These results have also been supported by an experts' survey providing robust evidence for a non-linear relationship between income inequality and economic performance.

## **Executive summary**

Income and wealth inequalities have increased significantly over the last decades, so has the interest of the scientific community to measure, understand and explain the phenomenon. Large bodies of literature have shed light into the levels and types of inequality around the globe, the drivers shaping them and their impact on the economy and society. Excessive inequality is a particular aspect of inequality that refers to the concentration of income and wealth to the very top of the distribution, usually the 1% richest people, and includes typically a global elite that owns a

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disproportionately large share of income and wealth. According recent reports, just 62 people own the same wealth as the bottom 3.6 billion people. In addition, the evidence shows that billionaires are proportionally taxed far less than ordinary citizens are, a fact that may have already undermined trust in democratic institutions and values.

Excessive inequality has often been associated with social discontent and political instability, as it increases the probability of native poor or marginalized groups to vote for radical right-wing parties. As a result, inequality may affect the performance of an economy, suggesting that particular extreme allocations of income and wealth may affect economic efficiency and overall welfare.

Academic interest in inequality typically coexists with political debates, even conflict, as the issue is directly related to policies and calls for redistribution. This conflict mirrors of course class structures and interests, but often is based on weak understanding of the mechanisms that produce inequalities and their implications for aggregate welfare (Piketty, 2015). Public opinion and policymakers may be more willing to consider the size of some big slices of the cake, if it was evident that after some point inequality reduces the size of the whole cake (Piketty, 2015).

The fact that inequalities increase over time, especially in the advanced economies does not fit well with the Kuznets celebrated position about the eventual decline of income inequalities. According to him, inequalities follow a bell shaped curve and are eventually bound to diminish with the level of development. However, the downward slopping part may not be due to a natural process, but rather the outcome of the introduction of progressive estate tax and the progressive income tax that allowed for a major redistribution of income. Therefore, the Kuznets curve is not the end of the discussion on inequalities, but rather a historical episode in the relation of between inequality and development that depicts the combined effects of the early stages of industrialization with the introduction of strong tax-based redistributive policies.

The goal of this paper is to discuss theoretical framework explaining why inequality may become harmful for an economy after some critical threshold and empirically assess the critical level beyond which desirable diversity in household income turns into undesirable or harmful inequality. In addition, the paper examines to what extent this threshold varies across types and dimensions of actual or perceived measurements of inequality and what are the policy implications of these.

The analysis is based on secondary data and an expert survey conducted exclusively within the framework of the ESSPIN project. Our results suggest that income inequalities have a non-linear impact on growth performance. Measuring inequality as the Rich-to-Poor (RTP) ratio we find that lower or modest levels of inequality may have a positive impact on growth, which is related to the benefits of extra effort, profit

seeking endeavors, innovative ideas and persistence. However, after some level, inequality turns out to have a negative impact on growth.

This turning point tends to vary with the level of development, as in more advanced countries the turning point is lower and income inequality becomes a growth barrier at earlier levels of inequality. These results have also been supported by an experts' survey providing robust evidence for a non-linear relationship between income inequality and economic performance, estimating limits beyond which income inequality is harmful for growth and welfare. Despite different methodologies, the quantitative and qualitative approaches have remarkable similarities, as they both provide robust evidence for the non-linear relationship between income inequality and economic performance, estimating limits beyond which income inequality is harmful for growth and welfare.

Interestingly, the tolerance level in the expert survey is estimated to be much lower than in the ones derived from the secondary data models, which indicates that experts, on average, estimate that the adverse effects of income inequality will appear much earlier. One reason is that in their evaluation, they take into consideration the impact of inequality not just on growth performance, but also on *social welfare*, which is very likely to be inversely related to inequality and lead to a lower threshold. A second reason, however, may also be that the experts, in their evaluation of the impact, take into consideration in a more realistic way the complexity of the interacting forces and the conditional factors that the model based on secondary data attempts to do with limited success.

Our analysis has explored a number of research hypotheses, many of them with significant policy relevance. We have provided evidence that the single market and the single currency are generating opportunities and threats that, on balance, seem to impede growth. This raises questions about the mix of macroeconomic policies that may need to reorient their goal, strength and direction, especially in view of widespread dissatisfaction and discontent in the EU.

Our findings also have some implications about wage policy, where an optimum mix satisfying both aggregate supply (costs) and aggregate demand (consumption) requirements would have to combine a relatively low starting level of wages and a relatively generous pace of wage growth that are both confined by lower and upper limits. Besides the apparent impact of wage rises on income distribution, the evidence here suggests that it also contributes to growth by maintaining aggregate demand.

The results indicate that investment inducing public spending should be based on an efficient governance system that is highly transparent in order to have an impact on growth. This finding indicates that institutional quality is a precondition for an effective use of public investment and Structural Funds.

A policy area with immediate effects on income distribution and inequality, but also on economic growth, is that of taxation. The results of the analysis indicate that taxing profits, in a clearly more progressive way in order to account for the incomes of the super-rich, has a positive effect on growth, presumably through the boost in public services and aggregate demand that will follow the deepening of the tax base. On the other hand, an increase in household taxes has a negative impact on growth, presumably through the reduction of income and consumption of the great majority of population.

These findings seem to indicate that tax interventions targeting the wealthier part of the population, with an emphasis on extreme wealth, can be an effective policy option that will promote growth and at the same time reduce inequalities. This recommendation is not that far away from implementation as one may think. Already, international organizations like the UN, OECD and the EU are taking action to prevent multinationals from artificially shifting profits into tax havens and impose a minimum tax of 15% that will broaden the tax base, reduce inequality and boost growth.

**Key words**: income inequality, growth, tolerance levels, Rich to Poor ratio