Economic Development and Income Inequality

A European Case of Study

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1. Introduction

Economic development is understood as an improvement on the well-being. Nevertheless, empirical evidence suggest that it might generate inequalities. The objective of this work is to study the relationship between economic development and income inequality in 29 European countries during the period from 1995 to 2018.

2. Review of literature

Goals of development:
Reducing inequality used to be a goal of development. However, the world has moved towards a poverty approach and the only goal is reduce deprivation (poverty).

Causality of the relationship:

Effect of: Economic Development

On: Income Inequality

Conceptual framework:

- **Ricardo, Marx and the scarcity principle.** Economic growth will tend to accumulate capital in fewer hands, generating inequality.
- **Kuznets and the inverted "U" curve.** Development first increases and then decreases inequality, with the course of industrialization.
- **Piketty's first fundamental law of capitalism.** Since the rate of return of capital is higher than economic growth, inherited wealth grows faster than output and income, generating inequality.

3. Data & Methodology

To test for the effect of economic development on income inequality different linear mixed effect models have been produced. They look like:

$$Y = \alpha + \beta X + \upsilon + \varepsilon$$

where Y is the inequality measure, α is the constant, β the vector of parameters, X the matrix of dependent variables, υ is the random intercept, and ε is the parameter of the random errors.

Proxies utilized:

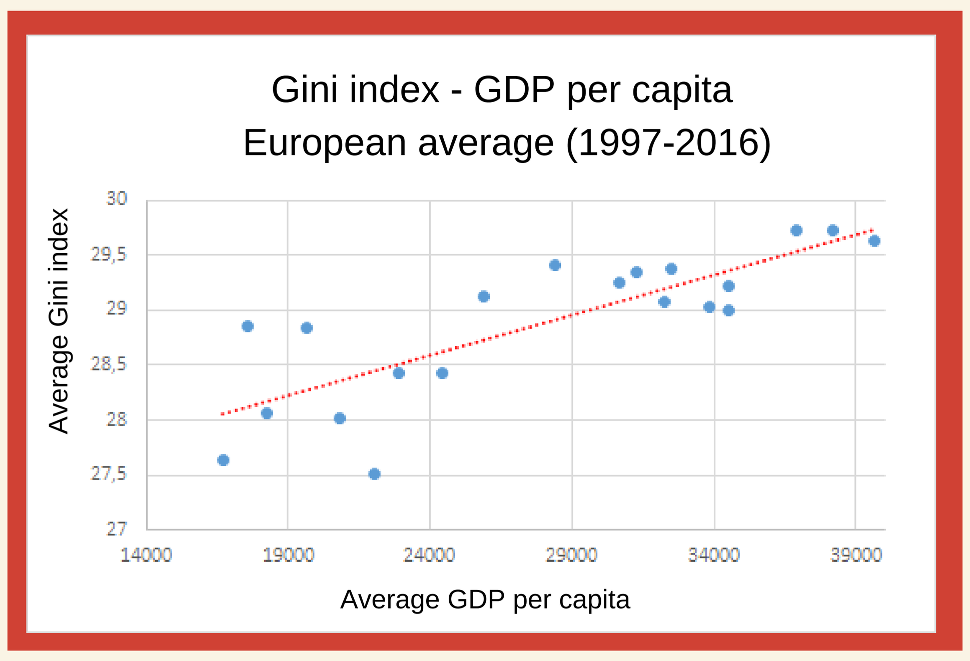
- Economic Development: GDP per capita
- Income Inequality: Gini idex, Income shares of Top 1%, Top 10% and Bottom 50% income earners.

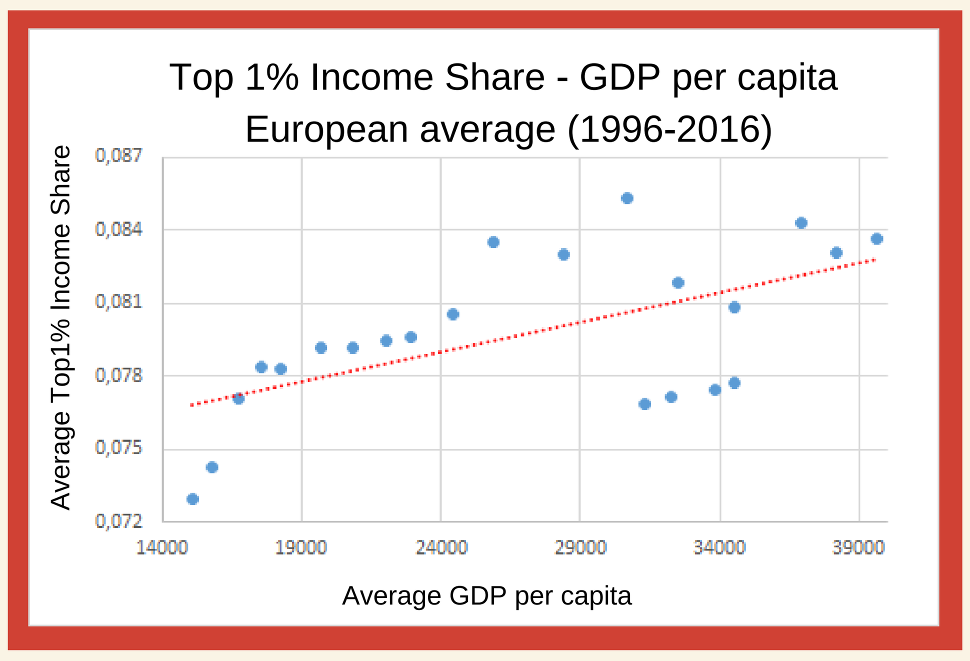
Control Variables:
Gross domestic savings, inflation, GDP growth, urbanization rate & government expenditure to GDP ratio.

Data from:
Eurostat, World Bank Data & World Inequality Database.

4. Results

- There is a statistically significant negative relationship between economic development and income inequality, before and after introducing the control variables.
- The effect and significance of the control variables depends on the proxy utilized to measure income inequality (Gini index or shares received by different income earners).





Models Results

	Gini	Top1%	Top10%	Bot50%
GDP per capita	0.03* (0,016)	0.03* (<,0001)	0.06* (<,0001)	-0.05* (<,0001)
Savings	Not in the model	-0,02* (0,042)	-0,05* (0,023)	0,02* (0,0004)
Inflation	-0,12 * (<,0001)	0,16 (0,435)	0,14 (0,967)	0,71 (0,063)
GDP growth	0,08 (0,676)	0,06* (0,006)	0,08* (0,007)	-0,05* (0)
Urbanization rate	-0,06 (0,885)	0,97* (0,001)	0,02 (0,001)	-0,06* (<0,0001)
Gov. Expenditure	-0,02 (0,481)	-0,07* (<0,0001)	-0,09* (<0,0001)	0,04* (0)
GDP*GDP growth	-0,002* (0,023)	-0,09 (0,989)	-0,14 (0,594)	-0,35 (0,630)

5. Conclusions

The evidence found suggest that:

- Kuznets' curve does not seem to exist.
- Piketty's fundamental law might apply to the countries and period analyzed.
- The control variables utilized could explain how economic development affects income inequality.
- The fact that Gini is after transfers and taxes migh explain differences in significance across models.

Nevertheless, further research should be done on the mechanisms through which economic development affects income inequality to understand the dynamics.