Income inequality and participation: A comparison of 24 European countries

Bram Lancee and Herman van de Werfhorst

University of Amsterdam
Department of Sociology
Amsterdam Centre for Inequality Studies

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Introduction

- There are many studies on inequality and undesirable outcomes like bad health, low trust, housing, crime, etc.
- Also for participation.

- Main arguments:
  “The direct effect of inequality on participation arises when inequality of resources leads people in lower economic brackets to refrain from participating, either because they have fewer resources or because they believe that getting involved will be fruitless because the system is stacked against them.” (Uslaner and Brown)
Contribution of this paper

- Study the impact of different levels of inequality at the bottom and at the top of the distribution.
- Examining macro-level inequality and micro-level resources separately: One’s individual position in the income distribution has different implications for social engagement under different levels of societal inequality.
- Separate ‘resources argument’ from ‘sociological argument’ by controlling for the availability of resources on both macro and micro level.
Three forms of participation

- **Social**: frequency of interaction with friends and family.

- **Civic**: involvement in and membership of organizations and activities that constitute ‘civil society’.

- **Cultural**: engagement in cultural activities, like attending cinema, going to live performances, or visits to cultural sites.
Sociological (inter-individual) theory

Inequality depresses participation because certain conditions for social interaction are not met:

- people have diverging statuses and therefore fewer opportunities to meet and to share common goals.
- Status differences trigger status competition and that causes feelings of threat, anxiety and stress. (Richard Wilkinson, epidemiologist)

→ As a consequence, people will opt out of civic and social interaction.
Resources theory (1/2)

It is the availability of resources (micro and macro) that determines participation.

- Micro: individual resources (income, education) enable participation.
Resources theory (2/2)

Macro:

- in more generous welfare systems there may be more opportunities to receive subsidy.

- More generally, in strong welfare states many services are available to everyone; depressing income effects.

- Essential in the resource explanation of inequality effects is that equal societies not only have a more equal income distribution, but also provide all kinds of services more equally to members of society that make it easier for the poor to participate in various domains of life.
Hypothesis 1: Income inequality is negatively associated with participation, even when controlling for individual income.
Inequality and individual income

- No previous study on participation allows for income and inequality to interact.

- If inequality matters for participation it is likely that one’s individual position in the income distribution matters as well.

- That is, to be poor in an unequal country is different from being poor in an equal country.
Hypothesis 2

- We argue that in countries where there is more inequality, participation is more likely to be determined by income.
- Conversely, in societies where income is distributed in a more equal manner, income is less important:

\[ H2: \text{In countries where income inequality is larger, the association between income and participation is stronger.} \]
Psychological versus resources theory

- If only resources explain inequality effects, there should be no inequality effects on participation once we hold constant for income, education, welfare state expenditure and GDP.

- If, on the other hand, there is a psychological effect of inequality, H1 and H2 should hold even when controlling for the availability of individual and collective resources.
The sociological theory of inequality effects predicts that

\[ H3: \text{The effect of inequality and the interaction effect of income and inequality on participation hold even when controlling for the availability of resources on the macro and micro level.} \]
Income inequality

- Regular measures (gini, p-ratios) two disadvantages:

  1. They are true macro-level variables in which the position of individual households is unclear.

  2. P-ratios tell us little about varying distributions, as the sizes (densities) of the tails are fixed.
Inequality as Mean Distance to the Median Income

- The Mean Distance to the Median Income (MDMI) is a macro indicator that reflects the mean ‘distance’ of a household income relative to the median household income in a respective country.

- To be able to compare between countries, this number is standardized by the median household income.
\[ MDMI_{a,b} = \frac{1}{n} \sum \left( \frac{|H - medH|}{medH} \right) \]

- Where:
  - \( H \) = Equivalized Disposable Household income (for each individual, and corrected for household non-response)
  - \( medH \) = the median of a country’s \( H \)
  - \( n \) = number of individuals in the country/sample
  - Separately below and above median, subscripts a and b.
Data and measurement

- EU-SILC 2006, 24 countries
- 137,000 individuals, age 25-65 that were included in module social participation.
- Household sample → one HH member randomly drawn out of each HH to account for clustering.
- Controls: Gender, age (and squared), education, marital status, population density, labour market status.
- Macro: MDMI, GDP, Social expenditure.
MDMI below Median and p5010
MDMI above Median and p9050
Bivariate macro plot MDMI and Participation

Social

Cultural

Civic
Results: H1

- When estimating a full model, inequality as such only has a significant effect on civic participation.

- Where inequality (above and below the median) is higher, civic participation is lower.
### Effect of inequality on civic participation

<table>
<thead>
<tr>
<th></th>
<th>Below median Inequality</th>
<th>Above median Inequality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual income</td>
<td>.196***</td>
<td>.196***</td>
</tr>
<tr>
<td>MDMI above median</td>
<td>-1.891*</td>
<td></td>
</tr>
<tr>
<td>MDMI below median</td>
<td></td>
<td>-9.402***</td>
</tr>
<tr>
<td>MDMI above median*income</td>
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<tr>
<td>MDMI below median*income</td>
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<tr>
<td>Social expenditure*income</td>
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<tr>
<td>Social expenditure</td>
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<td>.028</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>.009***</td>
<td>.010***</td>
</tr>
</tbody>
</table>

*Plus Individual level control variables*

Random intercept logit model
N=136.780.
* p<0.05, ** p<0.01, *** p<0.001, two tailed tests.
H2

- **Social participation**: effect of income indeed stronger in more unequal societies (both in terms of above and below the median inequality).

- **Cultural and Civic participation**: effect of income indeed stronger when inequality below the median income is higher (but not for above).
Effect of income on social participation

Effect of income on social participation as MDMI above the median changes

Effect of income on social participation as MDMI below the median changes
Cultural participation

Effect of income on cultural participation as MDMI below the median changes

- Effect of income
- 95% Confidence Interval
Civic participation

Effect of income on civic participation as MDMI below the median changes
Dependent variable: civic participation

Effect of income

MMDMI below the median income
H3

- When controlling for resources (social expenditure * income), effect remains significant, although it is smaller.
Discussion

- Both sociological and resources theory explain why inequality detrims participation, and why it magnifies the effect of income on participation.

- Arguments have not been empirically separated before.
Most of direct effect inequality explained by individual resources.

Inequality magnifies effect of income on all forms of participation.

This is most pronounced when taking inequality below the median income.

Effects remain once controlling for the availability of resources, supporting the idea that inequality also affects people through non-material processes.
Issues to deal with

- Why are the effects of inequality below median more pronounced than above the median?

- Resources theory convincingly controlled for? How to improve?
Interested? Paper available on

- [www.bramlancee.eu/](http://www.bramlancee.eu/)

And on

- [www.gini-research.org](http://www.gini-research.org)