Measuring Inequality in Party Representation of Social Groups across Nations and Time using Survey and Administrative Data

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Aim of this presentation

Present the idea to construct a simple & replicable measure of
-- inequality in party representation
-- of social groups (gender, age, education)
-- across nations and time
using
-- high quality and publicly available
-- survey and administrative data.

We plan to present the idea, the problems in data collection, and what the data look like now.
Party Representation of Social Groups

Party representation is a form of political voice, defined as the expression of needs and interests within the political system (e.g. Verba, Schlozman, & Brady 1995).

“The closer parties are to their voters, it is assumed, the more likely they transform citizens' interests into policy outcomes” (Lehman and Schultze 2012: 8).

Empirical studies of mass-elite congruence suggest that parties and legislatures more strongly represent the top of the stratification system rather than its whole (e.g. Bartels; Gilens; Lupu and Warner).

Inequalities intersect. We expect that groups disadvantaged socially and economically would also be politically unequal.

To what extent do social groups have unequal party representation?
Measures of Party Representation

Votes to Seats

The relationship between percent of votes each party received and the percent of seats each party has in parliament. Calculated with official election data. **Problem**: difficult to calculate for social groups.

Issue Congruence

The relationship between mass political preferences and elite issue positions. Preferences and positions measured with left-right scales. Calculated with survey (masses and elites) and party manifesto data. **Problem**: comparability of left-right scales.

*(for critiques, see Golder and Stramski 2010 and Caughey et al 2019)*
A Proposed Different Measure of Unequal Party Representation

-- A comparison of two distributions.
-- One is retrospective vote choice of parties (from European Social Survey – ESS).

*MARPOR Voter-Party Data Set mixes retrospective and prospective vote choice with left right scales and manifesto data to create an aggregate level representation score.*

-- The other is the distribution of parliamentarians in parties (from ParlGov).

-- Dissimilarity Index (DI) range 0 to 100

\[
DI = \frac{1}{2} \sum_{i=1}^{N} \left| \frac{a_i}{A} - \frac{b_i}{B} \right|
\]

a<sub>i</sub> is the number of seats Party A gained in a given country elections
A is the total number of seats in this country’s parliament
b<sub>i</sub> is the number of ESS respondents who named Party A as the party they voted in the last parliamentary election in a given country
B is the total number of ESS respondents who answered the retrospective vote question.
## DI for Poland, All Voters in ESS 2016 (no specific social groups)

<table>
<thead>
<tr>
<th>Poland</th>
<th>ParlGov 2015</th>
<th>ESS 2016</th>
<th>Absolute Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KORWiN</td>
<td>0</td>
<td>3.64</td>
<td>3.64</td>
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<tr>
<td>Kukiz’ 15</td>
<td>9.13</td>
<td>10.50</td>
<td>1.37</td>
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<tr>
<td>Nowoczesna</td>
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<td>5.43</td>
<td>0.66</td>
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<tr>
<td>Platforma Obywatelska RP</td>
<td>30</td>
<td>26.61</td>
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<tr>
<td>Polskie Stronnictwo Ludowe</td>
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<td>4.32</td>
<td>0.84</td>
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<tr>
<td>Prawo i Sprawiedliwość</td>
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<td>8.17</td>
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<tr>
<td>Razem</td>
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<td>1.19</td>
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<tr>
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<td>5.09</td>
</tr>
<tr>
<td>Mniejszość niemiecka w Polsce (Not in ESS)</td>
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<td>0</td>
<td>0.22</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.3</td>
<td>0.30</td>
</tr>
</tbody>
</table>

**DI = 12.44**
# DI for Poland, Young Adults (18 – 29 yo)

<table>
<thead>
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<th>Poland</th>
<th>ParlGov 2015</th>
<th>ESS 2016</th>
<th>Absolute Value</th>
</tr>
</thead>
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<tr>
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<tr>
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<td>Prawo i Sprawiedliwość</td>
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<td>Razem</td>
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<tr>
<td>Mniejszość niemiecka w Polsce (Not in ESS)</td>
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<tr>
<td>Other</td>
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<td>0.69</td>
<td>0.69</td>
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</table>

**DI = 37.06**
Assumptions of the Measure

-- Surveys are social constructions. Respondents may or may not be accurate reporters of their past political behavior. We assume that most respondents accurately report how they think and feel at the time of the survey.

-- Parties have an identifiable ideology that voters know about. Parties, once they get to the parliament, use this ideology in an attempt to represent the interests of the voters.

-- Survey designers know about the political system of their country and thus what parties they should list in their retrospective vote choice items.
Interpretations

-- Retrospective vote choice is a measure of political behavior.

-- Political behavior of this kind captures party preferences, and indirectly the ideological or policy preferences of social groups.

-- The DI measures the extent of inequality of voice with regard to party representation.

-- If one takes the subjective route, and argues that surveys inadequately capture political behavior, we can interpret the measure as about how social groups feel about the parties that were in parliament.
Difficulties

ESS-related problems

In some countries:

- The survey documentation did not specify what elections they asked about.

- Some countries provide a card of parties to choose from, others not.

Unknown content in the categories of Other, Blank, Null or Invalid. (usually less than 1 percent of total, but in rare cases, it can be high)

ESS and complicated electoral situations (e.g. France asks only about parties from first round of two-round electoral system)
Difficulties

Matching ESS to ParlGov

Not all ESS cumulative file countries are in ParlGov (e.g. Ukraine and Russia)

ParlGov contains very small minor parties (e.g. ethnic quota parties) and often times these were not mentioned specifically by ESS respondents. Including them boosts DI score.

Time distance from “last election” to ESS fieldwork period. Parties can change names or enter coalitions (ParlGov records name changes).

-- Time distance may also impact survey respondents’ retrospective vote choice.

-- For ESS round 6 (2012) Min = 7 months; Max = 49 months; Average = Two Years
Time distance:
“the last election” in ParlGov to the ESS “2012” fieldwork period
What We Collected

-- country as a whole, i.e. all respondents in ESS sample who say that they voted and also what party they voted for
...for
-- 6 social groups
  Gender: Women and men
  Age: young adults (18-29 yo), the middle aged (40-65 yo)
  Education: lower educated (high school diploma and below) and higher educated (above high school diploma). Using EISCED.

-- 30 European countries
-- 8 ESS waves (2002-2016; min waves per country =2; max waves per country =8)
-- 112 national elections (1999-2016; min elections per country n=1; max elections per country n=5)
-- 201 observations (country-years)
DIs for countries in ESS 2012

- Created with Datawrapper
The higher the number, the larger the representation inequality of women compared to men.
What’s Next

Investigate & resolve difficulties. Possible expansion of countries and time.

Compare this measure to other party representation measures

Analyze relationship between dimensions of political voice: political participation and party representation

Analyze the relationship with economic inequality and political and economic institutions
V-Dem: “Considering all disadvantaged social groups in the country, how well represented are these groups, as a whole, in the national legislature?”
Democracy Barometer's "Representation" in Four Countries, 1991 - 2016

- United Kingdom
- United States
- Poland
- Chile