Large Cross-national Data sets: Analysing Media Effects

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Objectives:

• European Election Study 2009
  – Voter Study
  – Media Study
• Structure of Data
• Linking Data
• Researchers Beware: Strategies depend on
  – Dataset dimensions, cross-sample properties and researchers’ goals [Franzese 2005]
PIREDEU & EES 2009

‘Providing an Infrastructure for Research on Electoral Democracy in Europe’
– Feasibility study of an infrastructure for the EES
Audit of electoral democracy in Europe
– Continuity with past EES data collection efforts
– Open to new themes & proposals
  • Proposals for questions & coding categories
– www.piredeu.eu
Data components

1. **Voter survey**: post-election survey in all member states of the EU

2. **Candidate survey**: candidate survey of all candidates standing for EP elections

3. **Media study**: content analysis of news during the campaign

4. **Manifesto study**: content analysis of all party manifests

5. **Contextual data study**: collection of contextual variables
EES 2009 - The electoral links

- Mass Media
  - inform
  - mediate

- Voters
  - mobilize
  - vote for

- Candidates
  - instruct/constrain
  - recruit

- Parties
  - define

- Election Manifestos
  - instruct/constrain
1999, 2004, 2009 EES Media Content Analysis

- 1999: 15 countries, 2 broadcasts, 3 newspapers [2 weeks broadcast] – 2 different data sets
- 2004: 25 countries, 22 languages, 2 television news program and 3 national newspapers from each country, in total we cover all 25 countries
  - (except television news in Cyprus for technical reasons and Luxembourg for linguistic reasons).
- New in 2004 – interior page of newspaper, all European related stories in print, use of MedienTenor
- 2009: 21 days, 27 countries; 84 newspapers, 59 broadcast outlets
Types of Research Questions

Variation in Media Coverage?
- What drives media coverage?
  - Media Effects? Campaign Effects?
  - Observational data problematic

Cross-level interactions?
- Conditional effects
Types of Analysis:

Individual
– Preferences & behavior – results of individual characteristics

Aggregate
– Country level outcomes – results of country level indicators

Multi-level
– Preferences & behavior – individual, higher level indicators and the interaction of these
Multi-Level Data

- a 2 level nested data structure:
  - $j = 1, \ldots, N$ countries
  - $i = 1, \ldots, n_j$ individuals

- a 2 level nested data structure:
  - $j = 1, \ldots, N$ countries
  - $i = 1, \ldots, n_j$ outlets

- a 3 level nested data structure:
  - $j = 1, \ldots, N$ countries
  - $k = 1, \ldots, N$ outlets
  - $i = 1, \ldots, n_j$ individuals

see Jones and Steenbergen [1999] where parties are a macro-level unit
Issues

• Measuring probability of exposure
  – News habits & visibility
• Linking to media content/message
• Under what conditions?
  – Individual level [e.g. interest]
  – Contextual variation in types of media systems
    [e.g. partisan press]
Linking data – identifying probability of exposure

- Country level
  - media content as a country level indicator
- Main_tv
  - 25,569 identified out of 27,069
- TV1 = 26,264 and TV2 = 26,067
  - Of those 1,476 identify watching another outlet more often
  - Can weight by days viewed 1 thru 7
Visibility of EU news in television newscasts

- Percentage of EU and EU election news of overall TV news in all 27 EU member countries (length-based).
Aggregate Analysis: Turnout & Media

![Graph showing the relationship between Visibility of European Parliament Elections in the News and Turnout Change from Last National Election. The graph includes data points for various countries, such as Slovakia, Lithuania, Portugal, Czech Republic, and Greece, among others. The data points are spread across a scatter plot with the x-axis representing Visibility of Elections in the News and the y-axis representing Turnout Change. The graph highlights a trend where higher visibility of elections is associated with a decrease in turnout change.]
## Individual Level: Turnout 2009

<table>
<thead>
<tr>
<th></th>
<th>Lo</th>
<th>Med</th>
<th>Hi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voted</td>
<td>60.9</td>
<td>68.9</td>
<td>76.7</td>
<td>Visibility/country</td>
</tr>
<tr>
<td>Voted</td>
<td>66.2</td>
<td>69.6</td>
<td>69.7</td>
<td>Visibility/main outlet</td>
</tr>
<tr>
<td>Voted</td>
<td>75.9</td>
<td>62.6</td>
<td>71.3</td>
<td>[TV1]</td>
</tr>
</tbody>
</table>

Reminder – Talk about mechanisms
## Abstention Conditional on 1st Order Voting

### Country level visibility

<table>
<thead>
<tr>
<th>Visibility</th>
<th>lo</th>
<th>med</th>
<th>hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Abstained in both</td>
<td>21.9</td>
<td>12.4</td>
<td>10.2</td>
</tr>
<tr>
<td>Noncompul/Yoked</td>
<td>21.9</td>
<td>12.9</td>
<td>11.2</td>
</tr>
</tbody>
</table>

### Outlet level visibility

<table>
<thead>
<tr>
<th>Visibility</th>
<th>lo</th>
<th>med</th>
<th>hi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlet</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Abstained in both</td>
<td>16.4</td>
<td>11.7</td>
<td>13.5</td>
</tr>
<tr>
<td>Noncompul/Yoked</td>
<td>17.2</td>
<td>12.7</td>
<td>14.4</td>
</tr>
</tbody>
</table>
Do We Know Media Mobilise?

• Co-variation
• Change?
  – Move from low probability to vote
• Is it the media?
The Problem

• Data Set 1
  – EES 2009 voter survey and media content
    • Voted
    • PTV Governing Party

• Data Set 2
  – EB 64 from Laurie’s exercise

• Download Data
  – http://www.banducci.com/MCITN/turnout.do
Variables

- `pvt_gov` – prob. To vote for governing party
- `eu_dist` – distance from govt. party on eu
- `main_vis, tv1_vis` - outlet visibility
- `Visibility` - country level
- `Voted_ep, voted`
- `Impact of eu_dist mediated by visibility?`
- `Higher levels T102 [country] main_tv [outlet]`

- do files here turnout.do medialink.do
Explaining Variations in Turnout – Mobilization by Media

• Media
  – Visibility of the campaign in the media can increases the amount of information in the electoral environment
  – lowering the costs of voting or can increase the salience of the election in the minds of voters

• Altering the costs and benefits
  – Information
  – Importance/perceived benefits
  – Increased EU support, identity
  – Shift in agenda, EU seen as important issue
Days Pay Attention to News

<table>
<thead>
<tr>
<th>Days</th>
<th>Prob Voting/</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Day</td>
<td></td>
<td>265</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47.83</td>
</tr>
<tr>
<td>2 Days</td>
<td></td>
<td>384</td>
</tr>
<tr>
<td></td>
<td></td>
<td>42.62</td>
</tr>
<tr>
<td>3 Days</td>
<td></td>
<td>593</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41.3</td>
</tr>
<tr>
<td>4 Days</td>
<td></td>
<td>545</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.93</td>
</tr>
<tr>
<td>5 Days</td>
<td></td>
<td>719</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34.3</td>
</tr>
<tr>
<td>6 Days</td>
<td></td>
<td>332</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27.24</td>
</tr>
<tr>
<td>7 Days</td>
<td></td>
<td>4,547</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24.43</td>
</tr>
</tbody>
</table>

Individual Level:

- By country
  - Higher visibility lower reported voting
- By outlet
  - Higher visibility lower turnout
- Aggregate 2009
  - Higher visibility less drop-off
Multi-Level Data

• *Not interested in estimating a separate model for each country*

• $y_{ij}$ responses depend on:
  - $x_{ij}$ individual level explanatory variable
  - $w_k$ outlet level explanatory variable
  - $z_j$ country level explanatory variable

• $y_{ij}$ are correlated within each country, outlet

• ordinary multiple regression is not adequate here:
  - independence assumption for $y_{ij}$ violated
  - how to include country/outlet -level expl. vars. $z_j & w_k$?