The Distortionary Effects of Classifications on Aid Allocation Decisions

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Motivation
Dissertation Project

Classifications coordinate the perceptions and behaviors of influential actors in the global economy.

▶ **Evidence?** Cross-national statistical analysis and interviews show that MICs receive less aid but are rated as more democratic and creditworthy than LICs

▶ **Why?** Classifications (1) simplify *cognitive* decision-making and (2) allow certain actors to *strategically* justify their decisions

▶ **So what?**
  ▶ Helps us understand power of IOs *(Barnett and Finnemore 1999, 2004)*
  ▶ Illustrates why beliefs and ideas affect market behavior *(Blyth 2002; MacKenzie 2006; Shiller 2017)*
  ▶ Fits into broader literature on labels, metrics, indicators in governance *(Buthe 2012; Cooley and Snyder 2015; Gray 2013; Brooks, Cunha and Mosley 2015; Kelley and Simmons 2015)*
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Explaining Aid Allocation

Why would donors use classifications to allocate aid?

▶ **Puzzle:** Classifications do not convey any private or expert information

1. **Cognitive**
   - Classifications simplify or distill information (Kahneman 2011)
   - Conflicting information about developing countries (Jerven 2013)

2. **Strategic**
   - Using classifications created by credible third party improves appearance of impartiality
   - “When we can show that most of our aid is benefiting Least Developed Countries, this helps our numbers.”
     — U.S. Treasury official
Allocation Activity

Timor-Leste
GNI per capita: $3120
GDP growth: 5.9%
Undernourished: 27.9%
MMR: 231 per 100k

Zambia
GNI per capita: $1750
GDP growth: 4.7%
Undernourished: 48%
MMR: 231 per 100k

El Salvador
GNI per capita: $3780
GDP growth: 1.4%
Undernourished: 12.6%
MMR: 54 per 100k

South Africa
GNI per capita: $6800
GDP growth: 1.6%
Undernourished: 5%
MMR: 140 per 100k

Tonga
GNI per capita: $4280
GDP growth: 2.1%
Undernourished: NA%
MMR: 127 per 100k

Gross National Income (GNI) per capita (Atlas method, 2014)

Timor-Leste $_____
Zambia $_____
South Africa $_____
Tonga $_____
El Salvador $_____

Development Classifications and Aid Allocation

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Allocation Activity: Classifications Treatment

Lower Middle Income
- Zambia
  - GNI per capita: $1750
  - GDP growth: 4.7%
  - Undernourished: 48%
  - MMR: 231 per 100k
- Timor-Leste
  - GNI per capita: $3120
  - GDP growth: 5.9%
  - Undernourished: 27.9%
  - MMR: 231 per 100k

Upper Middle Income
- El Salvador
  - GNI per capita: $3780
  - GDP growth: 1.4%
  - Undernourished: 12.6%
  - MMR: 54 per 100k
- South Africa
  - GNI per capita: $6800
  - GDP growth: 1.6%
  - Undernourished: 5%
  - MMR: 140 per 100k
- Tonga
  - GNI per capita: $4280
  - GDP growth: 2.1%
  - Undernourished: NA%
  - MMR: 127 per 100k

Gross National Income (GNI) per capita (Atlas method, 2014)
- Timor-Leste: $_______
- Zambia: $_______
- South Africa: $_______
- Tonga: $_______
- El Salvador: $_______
Identifying the Classification Effect

Classifications

Treatment

Control

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Distinguishing the Mechanism

- Classifications treatment captures **cognitive** effect because treatment and control groups face identical incentives.
- Introduce second treatment (factorial design) to vary the **strategic** incentives participants face.
- **Control:** Randomly selected participants receive prize.
- **Treatment:** Randomly selected participants receive prize only if a “judge” approves of their allocations — “The judge will be an intern (i.e. an entry-level staffer) in the office of a politician (i.e., a congressperson/MP) in a major donor country. The judge is NOT an expert on development.”
Factorial Design

Classifications

Treatment

Control

Judges

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Identification Strategy

- How to operationalize a participant’s allocation?
- **Ideal:** Amount given to country if classified as lower-middle income versus amount given to country if classified as upper-middle income
- **Obstacles:** Country-specific characteristics, no deception
- **Solution:** Exploit variation in data
  - GNI figures revised over time
  - Identify instances when various estimates put above/below threshold
  - Circulate both versions (to different participants)
  - Compare allocations made by participants seeing “just-below” version to those seeing “just-above” version
Example

- Paraguay’s 2013 GNI per capita, reported in WDI in November 2014: $4,040
- Paraguay’s 2013 GNI per capita, reported in WDI in September 2015: $4,190
- 2013 threshold separating LMICs from UMICs: $4,125
Example

Bhutan
- GNI per capita: $2330
- GDP growth: 2.2%
- Undemocratic: NA%
- MMR: NA per 100k

Paraguay
- GNI per capita: $4190
- GDP growth: 14%
- Undemocratic: 11.6%
- MMR: 136 per 100k

Colombia
- GNI per capita: $7560
- GDP growth: 4.8%
- Undemocratic: 10.3%
- MMR: 67 per 100k

Micronesia
- GNI per capita: $3270
- GDP growth: -3.6%
- Undemocratic: NA%
- MMR: 104 per 100k

Macedonia, FYR
- GNI per capita: $4260
- GDP growth: 2.9%
- Undemocratic: NA%
- MMR: 8 per 100k

Lower Middle Income

Upper Middle Income

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“Just-Below” Randomization

Classifications

Treatment

Control

Judges

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Identifying Equation

\[ Y_{ij} = \alpha + \gamma C_i + \lambda JB_j + \sigma J_i + \]
\[ \delta_1 (C_i \ast JB_j) + \delta_2 (J_i \ast JB_j) + \delta_3 (C_i \ast J_i) + \]
\[ \delta_4 (C_i \ast M_i \ast JB_j) + \mu_j + \rho_j + \epsilon_{ij} \]

\( \delta_1 = \text{Total effect of classifications} \)
\( \delta_4 = \text{Strategic effect of classifications} \)
\( \delta_1 - \delta_4 = \text{Cognitive effect of classifications} \)
\( \mu_r = \text{Round F.E.} \)
\( \rho_r = \text{Country identity F.E.} \)

Standard errors clustered at participant level
Sample

- Fielded September 2017 at International Conference for Sustainable Development (side meeting of UN General Assembly)
- Fielded online and in person
- 232 participants (2088 rounds)
Effects on Allocation to Threshold Country

![Graph showing allocation to threshold country for different treatments and classes.](image)

- **treat_judge**: 0, 1
- **treat_class**: 0, 1

Development Classifications and Aid Allocation

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## Effects on Allocation to Threshold Country

<table>
<thead>
<tr>
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<th>Allocation to threshold country (logged)</th>
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<tbody>
<tr>
<td><strong>TreatClass<em>TreatJudge</em>JustBelow (δ₄)</strong></td>
<td>0.269</td>
</tr>
<tr>
<td></td>
<td>(0.174)</td>
</tr>
<tr>
<td></td>
<td>p=0.12</td>
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<tr>
<td><strong>Strategic effect</strong></td>
<td>0.158</td>
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<tr>
<td></td>
<td>(0.161)</td>
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<tr>
<td></td>
<td>p=0.32</td>
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<tr>
<td><strong>TreatClass*JustBelow (δ₁)</strong></td>
<td>−0.068</td>
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<tr>
<td></td>
<td>(0.121)</td>
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<tr>
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<td>p=0.57</td>
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<tr>
<td><strong>Total effect</strong></td>
<td>−0.046</td>
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<tr>
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<td>(0.115)</td>
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<td><strong>TreatClass</strong></td>
<td>−0.028</td>
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<tr>
<td></td>
<td>(0.106)</td>
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<tr>
<td><strong>TreatClass*TreatJudge</strong></td>
<td>−0.213*</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
</tr>
<tr>
<td><strong>JustBelow</strong></td>
<td>0.093</td>
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<tr>
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<td>(0.072)</td>
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<tr>
<td><strong>TreatJudge*JustBelow</strong></td>
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<td>(0.106)</td>
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<tr>
<td><strong>TreatJudge</strong></td>
<td>0.074</td>
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<td>(0.093)</td>
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| Observations             | 2088                                      |
| Num. Participants        | 232                                       |
| Threshold Country F.E.?  | No                                        |
| Round F.E.?              | Yes                                       |

**Note:** *p<0.1; **p<0.05; ***p<0.01
Effects on Overall Allocation Behavior

![Graph showing allocation behavior across country positions for different treat_class categories. The graph illustrates how the allocation changes with position for both control and treatment groups.](image)
Effects on Overall Allocation Behavior

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Conclusion and Next Steps

- Classifications distort donors’ aid allocation behavior in favor of lower income countries
- Distortion primarily driven by strategic incentives

Additional analysis
- Heterogeneous treatment effects?
- Observational determinants of allocations?

Additional data collection
- Other development conferences in spring 2018?
- Create online sample of development experts?
Extra Slides
# Countries Used to Populate Graphics

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<td>PNG</td>
<td>Ukraine</td>
<td>Guyana</td>
<td>Cuba</td>
<td>Iraq</td>
</tr>
</tbody>
</table>

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Randomization

N.B. Both treatments balanced on gender, age.
Descriptives: Education

![Bar chart showing education levels]

- High school degree
- Bachelor degree
- Masters degree
- Doctoral degree
- NA

Development Classifications and Aid Allocation

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Descriptives: Current Occupation

Development Classifications and Aid Allocation
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Descriptives: Years of Experience in Development
Descriptives: What Country Are You From?

- Representatives of 48 countries
- Largest delegations from...
  - USA (40%)
  - India (9%)
  - China (7%)
  - Nigeria (4%)
  - Japan (4%)
  - Germany (3%)
  - Colombia (3%)
Descriptives: Knowledge About Development

“What does a GINI coefficient measure?”
(\textbf{Inequality} / Democracy / State Fragility / Corruption / Don’t Know)
  - 74\% answered correctly

“DFID is an aid agency of which national government?”
(France / \textbf{UK} / Germany / Japan / Don’t Know)
  - 56\% answered correctly