Is China Winning?

Chinese Aid as Effective Soft Power Instrument

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Introduction
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Figure 1: Mansa-Luwingu Road Project, Zambia

Photo: Chinese Embassy in Zambia
June 18, 2016: Road officially opened

Figure 2: Ambassador Youming

Figure 3: President Lungu

Photo: Lusakatimes.com
Introduction

Win-Win Cooperation?

Chinese Ambassador Yang Youming:

- The Mansa-Luwingu Road [...] will improve the road network [...], facilitate easy travel for the local people, and inject vitality into the economy of this region.
- ...improved the economic development of Zambia and the livelihood of Zambian people, but also further promoted the China-Zambia economic cooperation.

President Lungu:

- ...especial thanks to the Chinese government for the consistent support and assistance to the social and economic development of Zambia.
- ...the Mansa-Luwingu Road will bring great convenience to the travel of the local people, and stimulate the economic development.
What is the impact of the Mansa-Luwingu Road?

- Growth and regional spread of economic activity
  Civellia et al. 2018, Bluhm et al. 2020, Dreher et al. 2020
- Lower chance of lethal conflicts
  Gehring et al. 2019
- Increase in local corruption in project regions
  Isaksson & Kotsadam 2018
- Higher child mortality rates near project sights
  Cruzatti et al. 2020
How does the population perceive the Mansa-Luwingu Road?

- Approval of the government
  - Conventional wisdom: foreign aid undermining state legitimacy
  - No impact on government approval or incumbent votes
    Blair & Roessler 2018, Knutsen & Kotsadam 2020
How does the population perceive the Mansa-Luwingu Road?

- Approval of the donor
  - Money & development finance key element of Chinese soft power
    Kurlantzick 2007, Shambaugh 2015
  - Positive perception of Chinese aid on African continent
    Afrobarometer 2016
  - Negative local impact of aid in Africa, no impact in Latin America
    Jones 2018, Eichenauer et al. 2018, Blair et al. 2019
Worldwide analysis.

Global data on Chinese aid projects and the approval of China.
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Contribution

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Global data on Chinese aid projects and the approval of China.

**Country level.**
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**Micro data.**
Individual-level data for 1.5 million respondents on province level.
## Contribution

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## Contribution

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| **Precise dates.** |
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| **Causal identification.** |
| Identification via Event Study and Instrumental Variable approach. |
Data
Chinese Official Finance

- Aiddata’s Global Chinese Official Finance Data
  Bluhm et al. 2020, Dreher et al. 2020
- 3,485 projects worth USD 273.6bn implemented between 2000 and 2014
- 2,092 geocoded projects at least on the province level
- Includes both concessional and non-concessional official financing
- We collected information on project level dates
Gallup World Poll

- Survey data covering 140 countries from 2006 to 2018
- Repeated cross-section, 1.5m respondents
- Representative of the resident population of 15 years and older
- Question on approval of China:
  
  *Do you approve of the job performance of the leadership of China?*

- Tagged with exact interview date
- Data includes spatial identifier, we coded on province level
Empirical Strategy
Gallup World Poll

- Interview waves per country and year
- All provinces interviewed within consecutive weeks
- 1100 individuals per country and year
- Average time window of 4 - 6 weeks
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Chinese development projects

- We analyze the opinion on China around project completion
- Compare individuals interviewed one month before to after completion
- Timing of the survey relative to project completion is random
- Use high dimensional fixed effects to control confounding factors
Event Study Results
## Event Study Results

### Table 1: Project Completion and Approval of China

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>All Projects</th>
<th>Large Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post</td>
<td>0.0348*</td>
<td>0.0558**</td>
</tr>
<tr>
<td></td>
<td>(0.0205)</td>
<td>(0.0268)</td>
</tr>
<tr>
<td>Observations</td>
<td>15,465</td>
<td>7,865</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.210</td>
<td>0.157</td>
</tr>
<tr>
<td>Individual Controls</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Survey Controls</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Region-Year FE</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>SE clustered by province-year</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*** p&lt;0.01, ** p&lt;0.05, * p&lt;0.1</td>
<td></td>
</tr>
</tbody>
</table>
Summary

• Advantages
  • Random treatment: interviews independent of project completion
  • Fixed effects allow us to control for confounding factors
  • Allows us to identify average positive effect of aid on opinion

• Disadvantages
  • Limited number of projects that fall in GWP interview period
  • Throw away many observations
  • Few projects drive results
Instrumental Variable
Instrument Variable Approach

Following Bluhm et al. (2020) and Dreher et al. (2020)

• Shift-share instrument Werker et al. 2009, Nunn & Qian 2014

• Indicator of foreign aid that varies over time:

• Input factors
  • Chinese raw material production as main input of aid
  • Aluminum, cement, glass, iron, steel, and timber
  • Time series lagged, detrended and combined by first common factor

• Interacted with variable varying between countries:
  the country-specific probability of receiving aid: \( \mu_c = \frac{1}{15} \sum_{t=1}^{15} \)
IV Results
### Table 2: Project Implementation and Approval of China

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Country panel</th>
<th>(2) Country panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid</td>
<td>0.00733 (0.0117)</td>
<td>0.00206** (0.000973)</td>
</tr>
<tr>
<td>Observations</td>
<td>452</td>
<td>452</td>
</tr>
<tr>
<td>F-stat</td>
<td>3.210</td>
<td>11.375</td>
</tr>
<tr>
<td>Country FE</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Year FE</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Country level predictions</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Province level predictions</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

SE clustered by country

*** p < 0.01, ** p < 0.05, * p < 0.1

First Stage Amounts Sectors
Conclusion
Conclusion

Findings

• Event Study approach based on months around project date
  • Chinese development project has positive impact of approval of China
  • Project completion increases likelihood to approve China by 5.6 pp
  • Effect driven by large projects and young, male, poor, & rural population

• Instrumental variable estimation
  • Positive impact of aid on approval of China confirmed
  • Additional project increases likelihood to approve China by 0.2 pp
  • Effect grows with project size

• Chinese aid is an effective soft power instrument