Reputation and Investment under Ambiguity

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Investment

• Investment is Inherently Risky
• Investment Treaties Encourage Investment, but How?
  • Deterrence/Punishment
    • Provide recourse to investors\(^1\)
    • Attach Reputation Costs/Shadow of Future\(^2\)
  • Provide Information
    • Enhance Assessment of Reputation

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\(^1\) Elkins, Guzman, and Simmons, 2006.
\(^2\) Axelrod, 1984.
Some Considerations:

- Violation is comparatively rare
  - ICSID cases < 700
  - about 200 unique BITs cited (about 5% of total)
- As many as 44% of Greenfield Investment announced w/o covering treaty
- Suggests more reputation/information based mechanism for effect of BiTs

- But how can Bit’s provide information if membership is broad and *untested*?
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- But how can Bit’s provide information if membership is broad and *untested*?
Reputation

- Reputation is beliefs about actor’s type based on observed prior behavior\(^3\)
  - Implies at least 2 actors: State and Firm
- Reputation comes from specific sequence:
  1. State joins agreement
  2. State demonstrates (non)compliance with treaty obligations
  3. State is observed demonstrating (non)compliance by Firm
  4. State comes to hold a reputation for (non)compliance with that Firm

- What happens if step 2 doesn’t happen? If alliance is untested?
- How can this help the State’s reputation?

\(^3\) Dafoe, Renshon, and Huth, 2014; Tomz, 2007, and others.
Entry Endorsement

- Entry into prior agreement *benefits* State, even if untested
  - Reason: entry endorsement
  - Concept: Entry into agreement is indication of partner State’s belief in reliability of the State
  - Ex. Meeting someone who worked at Google

- Expectation: Mere entry into BiT benefits reputation via *entry endorsement*
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- **Expectation:** Mere entry into BiT benefits reputation via *entry endorsement*
Endorsement Quality

- Not all endorsement is created equal
- Quality of endorsement based on characteristics of endorser
- Punishment for signing violated agreements motivates endorsement quality
  - Makes endorser State more selective
  - Makes endorsement stronger because it is more selective
Endorsement Quality

- Two potential channels for vulnerability⁴:
  - Electoral Vulnerability → electoral institutions
  - Interest Vulnerability → Economic interests/importance of FDI to economy

- Expectation: Reputation benefit from endorsement is greater when endorser is *more vulnerable* to punishment

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⁴Grossman and Helpman, 1996.
Endorsement Quality

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Decay

- Value of information fades with time
- Importance of Endorsement fades with time, relative to last test of commitment

- Expectation: Reputation benefits from endorsement are greater when endorsement occurred *more recently.*
Decay

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Implications and Testing

• Implications for reputation observable in terms of investment, specifically the announcement of new (greenfield) projects:
  • Entry into an agreement confers reputational benefit via entry-endorsement, but decays over time. States that have recently entered into untested agreement are more likely to host new FDI projects than (1) States who have less recently entered into untested agreements and (2) States whose most recent agreements were tested by arbitration
  • Endorser quality enhances the benefits from entry-endorsement. States are more likely to host new FDI projects when they have recently entered an agreement with an endorsing state that is (1) Democratic and/or (2) where foreign assets are large part of the economy
Models and Measurement

- **DV:** Greenfield Investment Project Announcements (FDI Markets, Monthly 2003-2014, Bilateral)

- **Crucial Measures:**
  - Ambiguity: Has claim been brought against host state since last agreement signing? (0,1)
  - Entry Recency: Time of entry-endorsement relative to last ICSID arbitration claim and investment date
  - Audience Costs: (2 measures):
    - Voter pressure (Polity)
    - Special Interest Pressure (FDI Assets/GDP, IMF IFS data)

- **Other Controls:**
  - Yr Splines, GDP (source, host, endorser), host foreign asset/GDP, destination, source polity
Alliance Formation \(_{ijt} \sim Poisson(\log(XB + ZC + \epsilon_{jit}))\) \hspace{1cm} (1)

\[ X = \begin{bmatrix}
\text{TESTED}_{it} \\
\text{ENTRY RECENTY}_{it} \\
\text{TESTED}_{it} \times \text{ENTRY RECENTY}_{it} \\
\text{ENDORSER FDI ASSETS/GDP}_{it} \\
\text{ENDORSER FDI ASSETS/GDP}_{it} \times \text{TESTED}_{it} \\
\text{ENDORSER FDI ASSETS/GDP}_{it} \times \text{ENTRY RECENTY}_{it} \\
\text{ENDORSER FDI ASSETS/GDP}_{it} \times \text{TESTED}_{it} \times \text{ENTRY RECENTY}_{it} \\
\text{ENDORSER POLITY}_{it} \\
\text{ENDORSER POLITY}_{it} \times \text{TESTED}_{it} \\
\text{ENDORSER POLITY}_{it} \times \text{ENTRY RECENTY}_{it} \\
\text{ENDORSER POLITY}_{it} \times \text{TESTED}_{it} \times \text{ENTRY RECENTY}_{it}
\end{bmatrix} \hspace{1cm} (2)

- Interactions make for difficult interpretation\(^5\)
- Simulations used to calculate average treatment effect (ATE) using observed cases\(^6\)
- Graphical interpretation

\(^5\text{Ai and Norton, 2003.}\)
\(^6\text{Hanmer and Ozan Kalkan, 2013.}\)
Influence of Mere Membership and Time Since Entry:

![Graph showing the expected number of new greenfield projects per month in relation to entry recency at levels of tested/untested. The graph illustrates a positive correlation with tested entries showing a higher expected number compared to untested entries.](slide_image)
Influence of Voter Audience

Expected Number of New Greenfield Projects/Mo

Entry Recency @ levels of Polity

Low Polity (2)
High Polity (10)

Tested
Untested

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Influence of Investment Audience

The graph shows the expected number of new greenfield projects per month (Y-axis) at different levels of entry recency (X-axis) for high and low investment audiences. The graph is divided into tested and untested categories.

- **High Investment Audience**: The line for high investment audience is consistently higher across all entry recencies, indicating a higher expected number of new greenfield projects.
- **Low Investment Audience**: The line for low investment audience is lower compared to the high investment audience, indicating a lower expected number of new greenfield projects.

The tested category shows a more pronounced upward trend compared to the untested category, suggesting a stronger influence of investment audience on expected project numbers in the tested scenario.
Implications

- Generally, support for role of entry endorsement
- Suggests that mere-membership in agreement matters
- Suggests indirect influence of BITs on reputation
- Potential implications for cheap talk
Influence of Voter Audience Costs by Entry

![Graph showing the relationship between Endorser Polity @ levels of Entry Recency and Expected Number of New Greenfield Projects/Mo.](image_url)
Influence of Investment Audience

- Expected Number of New Greenfield Projects/Mo
- Tested and Untested
- Investment Audience Size @ levels of Entry Recency

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Influence of Investment Audience

Expected Number of New Greenfield Projects/Mo vs Entry Recency @ levels of Investment Audience Size

Untested
Influence of Investment Audience by Entry

Plots

Decay

Tables

-8 -4 0
Investment Audience Size @ levels of Entry Recency

Expected Number of New Greenfield Projects/Mo

Tested

Untested

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Influence of Investment Audience by Entry

Expected Number of New Greenfield Projects/Mo @ levels of Entry Recency

Investment Audience Size

−8 −4 0
Untested
Influence of Investment Audience

The graph illustrates the expected number of new greenfield projects per month (in $Mo$) in relation to entry recency for both tested and untested projects. The x-axis represents the entry recency, ranging from 0.00 to 1.00, indicating the timeline of project entries. The y-axis shows the expected number of projects, ranging from 1.4 to 2.2. The graph compares the expected number of projects for low and high investment audiences, with tested and untested projects distinguished by color and style. The graph suggests that as entry recency increases, the expected number of projects also increases, with tested projects generally having a higher expected number of projects compared to untested projects.
Decay

• Strength of entry-endorsement decays over time
• Decay driven by potential for change over time
  • That the state is not the same today as it was yesterday
• Decay rate modeled on Observer expectations about frequency of change (reliable, unreliable)
• Same effect as typical decay term, except:
  • Decay rate endogenous to Observer’s perspective
  • Decay rate varies from Observer to Observer
  • Bad reputations are forgiven over time (not tested here)
## Core Model:

<table>
<thead>
<tr>
<th>Term</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tested</td>
<td>0.210</td>
<td>(0.110)</td>
</tr>
<tr>
<td>Foreign Assets/GDP</td>
<td>0.008</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Entry Recency</td>
<td>-0.001</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Endorser Polity</td>
<td>-0.012</td>
<td>** (0.004)</td>
</tr>
<tr>
<td>Tested:Foreign Assets/GDP</td>
<td>0.025</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Tested:Entry Recency</td>
<td>-0.249</td>
<td>** (0.111)</td>
</tr>
<tr>
<td>Foreign Assets/GDP:Entry Recency</td>
<td>-0.0002</td>
<td>(0.0001)</td>
</tr>
<tr>
<td>Tested:Endorser Polity</td>
<td>-0.030</td>
<td>** (0.012)</td>
</tr>
<tr>
<td>Entry Recency:Endorser Polity</td>
<td>0.0001</td>
<td>(0.0002)</td>
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<tr>
<td>Tested:Foreign Assets/GDP:Entry Recency</td>
<td>-0.029</td>
<td>* (0.015)</td>
</tr>
<tr>
<td>Tested:Entry Recency:Endorser Polity</td>
<td>0.048</td>
<td>** (0.012)</td>
</tr>
<tr>
<td>Constant</td>
<td>-15.593</td>
<td>** (0.134)</td>
</tr>
</tbody>
</table>

| Observations                  | 30,505      |

*Note:* * p < 0.1; ** p < 0.05; *** p < 0.01

Control Variables Omitted for space considerations