Examining the Political Economy of the Firm: The Dynamics of State Aggression in Georgian-Russian Trade, 1996-2014

Research Problem: Firms at times export to national adversaries

- China-Taiwan Economic Integration (Lee, 2014)
- Russia-Ukraine Trade (Forbes, 2015)
- Japan-China Trade (Time, 2013)

But what about the “public good” of international stability (e.g., Kindleberger, 1986)? Firms care about this, no?

Research Question: How does state aggression influence a firm’s export decision?
<table>
<thead>
<tr>
<th>Hegemonic Stability Theory</th>
<th>International Trade Theory</th>
<th>Risk-Aversion Literature</th>
</tr>
</thead>
</table>
| • Iteration 1: Trade policy outcomes explained. | • Macro-level: Gravitationalism  
  • Trade based on proximity and distance  
  • Additional factors such as colonial ties matter  
  • Micro-level: Theory of the Firm  
  • Productivity heterogeneities | • Behavioral Economics  
  • Systematic market irrationalities  
  • Analysis of heuristics, e.g., overreaction, **risk-aversion**  
  • Application of behavioral principles to economics at level of market actors |
| • Iteration 2: Peace → Stability → Certainty → Ability to do business → Int’l trade (Smith, Gilpin, Nye, Keohane, Kindleberger et al) | **Missing: Political heterogeneities among firms** | **Missing: International trade theory** |
| • **Missing:** Firm-level analysis | | |
A Dynamic Approach: Constructing the International Political Economy of the Firm

Figure 5.2: The Fluid Dynamic of Export Decision Processes as a Response to State Aggression

Catalyst: Act of State Aggression

State-Induced Market Restriction

Redefined Export Possibilities

Market Factors for Export

Firm Thought Process

Firm-Level Instability Assessment

Final Outcome: Export Decision

Export
- Firm A
- Firm B

No Export
- Firm C
- Firm D
## Research Design: Case Selection, Methods and Data Overview

### Case Justification
- Processes & Mechanisms of export behavior
- Selection: Georgian exports to Russia, 1996-2014
  - “Good” case
  - Data-rich
  - State aggression presence
  - Embargo on agricultural goods, 2006-2012

### Mixed Methods Design
- Critical Juncture analysis of the embargo
  - Process-tracing of firm decision-making
- Economic analysis of Georgian trade flow pattern changes as result of embargo

### Data
- Qualitative:
  - Interviews with Seven Georgian Firms
  - Interviews conducted Summer 2015 in Tbilisi, Georgia & over email January 2016
  - Limitation: Sample size
- Quantitative:
  - Georgian export flows to Russia and other Post-Soviet countries
  - Source: UN Comtrade Database (comtrade.un.org)
Figure 1.3 Research Question Breakdown and Chapter Divisions

Research Question:

How does state aggression affect firm export decisions?

Sub-questions:

Through what process do firms change their export practice in response to state aggression (e.g., in response to an embargo)?

Chapter 4, Differences-in-Differences Quantitative Study

Factor x

Factor y

How do firms factor political instability and the resulting risk into their export decisions in response to state aggression?

Chapter 5, Process-Tracing Analysis of Firm Interviews

Process A

Process B

EFFECT OF STATE AGGRESSION ON EXPORT DECISIONS
Results: Differences-in-Differences Analysis I: Treatment Basis Confirmation

- “Substitution” effect?

- Potential Drivers of substitution:
  - Business networks
  - Product familiarity in non-Russia countries
  - Post-Soviet connections

Figure 4.2: Differences-in-Differences Model for Agricultural and Industrial Export Volume. In Millions USD.

Source: Data from UN Comtrade Database
<table>
<thead>
<tr>
<th>Export Market</th>
<th>Substitution Coefficient ($\theta/\lambda$)</th>
<th>Sector Coefficient ($\psi$) (in millions)</th>
<th>Constant ($\kappa$) (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>-0.81**</td>
<td>50.7***</td>
<td>19.5*</td>
</tr>
<tr>
<td></td>
<td>(0.36)</td>
<td>(16.9)</td>
<td>(10.6)</td>
</tr>
<tr>
<td>Moldova</td>
<td>-0.05*</td>
<td>3.22**</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(1.34)</td>
<td>(0.88)</td>
</tr>
<tr>
<td>Belarus</td>
<td>-0.1</td>
<td>8.65***</td>
<td>1.78</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(2.99)</td>
<td>(1.89)</td>
</tr>
<tr>
<td>Estonia</td>
<td>-0.01*</td>
<td>0.49**</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.19)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Latvia</td>
<td>-0.025*</td>
<td>1.89***</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.63)</td>
<td>(0.42)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-0.05</td>
<td>2.53</td>
<td>3.06**</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(1.89)</td>
<td>(1.21)</td>
</tr>
<tr>
<td>All of the Above Aggregated</td>
<td>-1.04*</td>
<td>37*</td>
<td>56.6</td>
</tr>
<tr>
<td></td>
<td>(0.56)</td>
<td>22.7</td>
<td>(29.6)</td>
</tr>
</tbody>
</table>

***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.
# Results: Firm Interview Decision-Making Matrix

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Industry / Background</th>
<th>Market Factors For Export</th>
<th>Outlook on Russian Market</th>
<th>Non-Russian Export Markets</th>
<th>Embargo Experience</th>
<th>Outlook on Risk</th>
<th>Russia Export?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaucasTransExpress</td>
<td>Transportation</td>
<td>Macroeconomics; contact relationships</td>
<td>——</td>
<td>Rest of Former Soviet Union</td>
<td>no direct embargo exposure</td>
<td>Category I Risk-Type</td>
<td>NO</td>
</tr>
<tr>
<td>Rustavi Steel</td>
<td>Heavy metals</td>
<td>Good networking, strength of contacts</td>
<td>positive outlook</td>
<td>Azerbaijan, China, Ukraine, Turkey, etc.</td>
<td>no direct exposure</td>
<td>Category II Risk-Type</td>
<td>YES</td>
</tr>
<tr>
<td>Poti Free Industrial Zone</td>
<td>Logistics</td>
<td>Brand, scale</td>
<td>mixed outlook</td>
<td>Armenia, Azerbaijan, Central Asia etc.</td>
<td>direct exposure</td>
<td>Category II Risk-Type</td>
<td>YES</td>
</tr>
<tr>
<td>Shumi Wine Company</td>
<td>Agriculture / wine</td>
<td>Brand</td>
<td>positive outlook</td>
<td>Ukraine, Moldova, Japan, etc.</td>
<td>direct exposure</td>
<td>Category III Risk-Type</td>
<td>YES</td>
</tr>
<tr>
<td>Tbilisi Wine Cellar</td>
<td>Agriculture / Wine</td>
<td>Brand familiarity, volume</td>
<td>positive outlook</td>
<td>Ukraine, Belarus, Kazakhstan, etc.</td>
<td>partial exposure</td>
<td>Category III Risk-Type</td>
<td>YES</td>
</tr>
<tr>
<td>Anlex Logistics</td>
<td>Logistics</td>
<td>Network strength</td>
<td>Positive outlook</td>
<td>Armenia, Azerbaijan</td>
<td>no direct exposure</td>
<td>Category IV Risk-Type</td>
<td>NO</td>
</tr>
<tr>
<td>MnGeorgia</td>
<td>Chemical processing</td>
<td>Close business ties</td>
<td>Positive outlook</td>
<td>Hungary, Germany</td>
<td>no direct exposure</td>
<td>Category IV Risk-Type</td>
<td>YES</td>
</tr>
</tbody>
</table>
Results: Firm Interview Categorizations

Figure 1. The types of export decision-making processes

Firms that account for instability

Firms that do not account for instability

No4 Export
Evaluate4 Options
Export4 Anyway

Example: &
CaucasTransExpress

Examples: &
RustaviSteel
Poti Zone

Examples: &
Anlex
MnGeorgia

Examples: &
Shumi
Tbilisi&Wine

Examples: &
Anlex
MnGeorgia
Implications

• Theoretical Significance
  • Market circumstances, personal outlook drive export decisions in consideration of state aggression
  • Nuance added to our theories of stability

• Methodological Contributions
  • Mixed methods, quantitative economics + process-tracing
  • Observation of fluid *dynamic* processes for firm decision-making
  • Further research within economics using mixed methods
“Trade along with war has been central to the evolution of international relations.”

–Robert Gilpin