Trade Policy Restrictiveness in Transportation Services

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Agenda

1. WB Services Policy Restrictiveness Database
   - Measurement of transport policies
   - Quantification

2. Global Patterns of Protection

3. Examples of policy impact

4. Questions to kick off discussion
Services Policy Database: Coverage

Services trade database coverage (102 countries)
Database Coverage

• 102 countries: 78 developing countries surveyed, comparable data for 24 OECD countries

• Six broad services sectors; different modes of supply where applicable

• Multiple policy dimensions but focus on discriminatory policy measures

• Mostly cross-validated by governments

⇒ more than 3,000 country-subsector-mode combinations
## Coverage: Transportation

<table>
<thead>
<tr>
<th>Sector/Sub-sector</th>
<th>Mode 1</th>
<th>Mode 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air passenger domestic</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Air passenger international</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Maritime shipping international</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Maritime auxiliary services</td>
<td></td>
<td>x</td>
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<tr>
<td>Road freight domestic</td>
<td></td>
<td>x</td>
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<tr>
<td>Rail freight domestic</td>
<td></td>
<td>x</td>
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</table>
### Coverage Transportation — Mode 3 —

<table>
<thead>
<tr>
<th>Regulatory Category</th>
<th>Measures considered</th>
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</thead>
<tbody>
<tr>
<td><strong>1) Market Entry</strong></td>
<td>• License limit / quota on market entry</td>
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<tr>
<td></td>
<td>• Significantly discriminatory licensing</td>
</tr>
<tr>
<td><strong>2) Ownership, Legal Form</strong></td>
<td>• Greenfield, acquisitions, subsidiary, branch, JV</td>
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<td>• Foreign equity participation limits</td>
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<td><strong>3) License procedures</strong></td>
<td>• Discrimination in licensing criteria</td>
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<td></td>
<td>• Allocation</td>
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<tr>
<td></td>
<td>• License length, renewal and due process for rejection</td>
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<tr>
<td><strong>4) Aspects of Operations</strong></td>
<td>• Nationality requirement for board of directors</td>
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<td></td>
<td>• Nationality requirement for employees</td>
</tr>
<tr>
<td></td>
<td>• Restrictions on repatriation of earnings</td>
</tr>
<tr>
<td><strong>5) Regulatory environment</strong></td>
<td>• Regulatory authority</td>
</tr>
<tr>
<td></td>
<td>• Appeal of decisions, prior notice.</td>
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</tbody>
</table>
## Coverage Transportation

— Mode 1 —

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Measures considered</th>
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</thead>
<tbody>
<tr>
<td>Maritime shipping</td>
<td>• Cargo preferences</td>
</tr>
<tr>
<td></td>
<td>(Liner / Bulk / Private / Government cargo)</td>
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<tr>
<td></td>
<td>• Liner conferences exempt from competition law</td>
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<tr>
<td>Air passenger transport</td>
<td>• WTO’s Air Liberalization Index (ALI)</td>
</tr>
</tbody>
</table>
Quantification: STRI Score

- Word Bank’s STRI: expert judgment
  - Policy summary + scoring rules
  - Mapping on 5-point scale: [0, 25, 50, 75, 100]

- Aggregation by weights
  - Modal weights: sector-specific
  - Sector weights: value-added based

- Problems: cardinality, subjectivity, non-additivity across modes
Restrictiveness of Services Trade Policy, 2008/09

Note: median transport STRI = 31.4, based on 102 countries.
Source: Borchert, Gootiiz and Mattoo (2010), World Bank: mimeo
STRI by Transport Sectors

Transport STRIs

- Air: 37.6
- Maritime: 16.5
- Road: 32.3
- Rail: 29.1
- Mar Auxiliary: 46.5

Source: Borchert, Gootiiz and Mattoo (2010), World Bank: mimeo
Example: competition in air transport

Higher STRI scores are associated with fewer airlines servicing a country:

![Partial regression plot (IV estimation)](image)

Covariates: log GDP, log GDP p.c., percent urban pop, pop density, landlocked dummy, Sub-Saharan Africa dummy, num large airports, air transport STRI.

Source: Borchert, Gootiiz, Grover and Mattoo (2010), World Bank
Example: logistics prices

More restrictive transport policies are associated with lower availability of competitively priced logistics services (LPI 2009):

Covariates: log GDP, log GDP p.c., percent urban pop, pop density, landlocked dummy, Sub-Saharan Africa dummy, air transport STRI.

Source: Borchert, Gootiiz, Grover and Mattoo (2010), World Bank
Example: logistics quality

More restrictive transport policies are associated with poorer quality of logistics services (LPI 2009):

Covariates: log GDP, log GDP p.c., percent urban pop, pop density, landlocked dummy, Sub-Saharan Africa dummy, air transport STRI.

Source: Borchert, Gootiiz, Grover and Mattoo (2010), World Bank
Services reform vital for trade facilitation

- Landlocked countries’ air transport policies almost twice as restrictive as in coastal countries
- “Trade-facilitating” investments will earn a poor return unless accompanied by meaningful services reform
  → 77% of IDA’s transportation funding over last decade ($8.6bn) committed to roads, highways
- But countries (including the landlocked) cannot unilaterally reform international transport
  → exclusion of transportation from a “Doha development round” would be a serious omission
What Other Aspects of Policy?

• Imperfect competition
  → ‘Tour de rôle’ in African trucking
  → Fink/Mattoo/Neagu (2002): private anticompetitive practices have greater impact on shipping prices than restrictive policies
  ↔ Nov 9, 2010: EU commission imposes >$1bn in fines on air cargo cartel

• ‘External effect’ of not enforcing competition policy
  → 12 countries still exempt liner conference from comp law
  → Not clear how far air transport services are subject to competition disciplines

• Other prudential / impartial regulation
  → e.g. airport slot allocation (Cairo)
Questions

1. Do preliminary results look reasonable?

2. Get policy measure interactions right:
   a) Across modes of supply
   b) Across modes of transport (multimodal, logistics supply chain)
   c) Other policy areas outside services

3. Get regulatory impact right

4. How to measuring policy discretion, uncertainty?
Taking Stock

• For the first time describe policy patterns around the world; with focus on discriminatory trade policies

• Demonstrate how these measures matter

• Refinements regarding linkages across measures and across the logistics supply chain

➢ Today’s discussion!

Thank you for your attention!