The Role of Services in Global Value Chains

ASEAN SERVICES FORUM

REGIONAL INTEGRATION OF SERVICES IN ASEAN COUNTRIES: PROGRESS AND CHALLENGES
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Hong Kong
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1. Services - Poorly Understood but Becoming More Important
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- Historical neglect and fears about low productivity growth
- Data are difficult
- 70% of GDP and growing
- Almost 50% of trade and underestimated
1. Services- Poorly Understood but Becoming More Important

Sources of higher services growth relative to other sectors

- In production globalization, servicification
- Consumers more demanding, customization is services-intensive

Services as innovation

- Services an important source of process innovation, as well as in bundled combination with goods-driven R&D
2. Trade in Value-Added
2. Value-Added: What Are We Measuring?

- Trade measured in terms of flows in value-added is to be contrasted with gross trade flows.

- The value-added calculation captures what happens at each stage in a production process.

- It tracks inputs into the production process all the way down the line until the final product emerges.
2. How does value-added measurement of trade work?

**Figure 1. Value added trade: how it works**

- **Value chain**
  - Participating countries
  - Raw material extraction
  - Processing
  - Manufacturing
  - Final demand

### Table:

<table>
<thead>
<tr>
<th>Gross exports</th>
<th>Domestic Value Added</th>
<th>Double-counting</th>
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Source: UNCTAD.
2. Value-Added Trade Data

- The import content of trade is rising globally (some two-thirds of merchandise imports are intermediate goods)
- Single products are produced in multiple countries
- The last country of production is but a link in the chain, one among several contributions to value-added
- This has profound implications for how we think about trade and interdependency
- It carries significant policy implications
2. Value-added measurement reveals more about trade
2. An iPhone “Exported” From China to the USA

Total price: US$178.96
Recorded in USA as import from China
Real Chinese value exported: US$2.20

COMPONENTS AND LABOUR COME FROM:

- Japan: 33%
- Other: 27%
- China: 4%
- Germany: 17%
- United States: 6%
- South Korea: 13%

Source: Xing, Y and N. Detert, ADBI Working Paper 257 (2010),
3. Case Study: A Suit Made in China and Sold in the US

Fung Global Institute: Li & Fung Case Study

Cost Breakdown by Country

- USA: 86%
- China: 5%
- Japan: 4%
- Hong Kong: 4%
- Korea: 1%

Manufacturing Costs and Invisible Assets

- Manufacturing
- Invisible Assets
  - Services (retail, logistics, banking, etc.)
  - Intellectual Property
  - Profits
  - Other Unknowns
3. Case Studies
3. Case Studies

• A cautionary note                What we do and do not learn from case studies
  • Specificity: a blessing and a curse
  • Sample size
  • Shaping hypotheses

• 12 case studies across many manufacturing sectors
  (aircraft parts; auto-parts; car manufacture; construction machinery; die makers; home appliances; oil and gas extraction; power plant; server manufacturer; wastewater treatment; watch manufacturer; welding alloys)
3. Case Studies as Discovery

Define the Value Chain
- Beginning, end and first-tier outsourced suppliers

Map the services according to production stages
- Establishment, pre-production, production, post-production, back-office, after-sales

Study outsourcing, bundling, innovation

Identify impact of policy on location, configuration and operation of the value chain
4. Numerous Services Enter the Value Chain
4. Numerous services enter the value chain

<table>
<thead>
<tr>
<th>Establishment Stages</th>
<th>Pre-manufacturing</th>
<th>Manufacturing</th>
<th>Post-manufacturing</th>
<th>Back-office and recurrent</th>
<th>After-sales</th>
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<tbody>
<tr>
<td>3. Information and statistical services</td>
<td>8. Quality inspection services of inputs</td>
<td>18. Cleaning services of factory</td>
<td>33. Engineering Services</td>
<td>40. Internal auditing</td>
<td>65. Information services for customers</td>
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<td>13. Conception and design of product</td>
<td>23. Workers’ dormitory</td>
<td>38. Medical services</td>
<td>45. Corporate communications</td>
<td>70. Repair and maintenance of machines for customers</td>
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<td>14. Patent acquisition</td>
<td>24. Recreation facilities and services for workers</td>
<td>39. Employees transportation services</td>
<td>46. Courier, postal and local delivery services</td>
<td>71. Buy back services to buy used parts and machines from customers</td>
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<td>15. Product development/ R&amp;D for new technology</td>
<td>25. Catering services</td>
<td>40. Medical services</td>
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# 4. Numerous Services Enter the Value Chain

<table>
<thead>
<tr>
<th>Stages/Cases</th>
<th>Total Number of Services</th>
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</thead>
<tbody>
<tr>
<td>Aircraft parts, Philippines</td>
<td>53</td>
</tr>
<tr>
<td>Automotive components, Japan</td>
<td><strong>37</strong></td>
</tr>
<tr>
<td>Car manufacturer, Philippines</td>
<td>70</td>
</tr>
<tr>
<td>Construction machinery, Japan</td>
<td>72</td>
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<tr>
<td>Die makers, Thailand</td>
<td>38</td>
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<tr>
<td>Home appliance Japan</td>
<td>55</td>
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<tr>
<td>Oil and gas extraction equipment, Singapore</td>
<td>55</td>
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<tr>
<td>Power plant equipment, Japan</td>
<td><strong>77</strong></td>
</tr>
<tr>
<td>Server manufacturer, Taiwan</td>
<td>53</td>
</tr>
<tr>
<td>Wastewater treatment, Thailand</td>
<td>54</td>
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<tr>
<td>Watch manufacturer, Hong Kong</td>
<td>43</td>
</tr>
<tr>
<td>Welding Alloys, Thailand</td>
<td>38</td>
</tr>
</tbody>
</table>

*Source: Case studies*
4. Numerous Services Enter the Value Chain

- Establishment: 38 (6%)
- Pre-production: 117 (18%)
- Production: 169 (26%)
- Post-Production & Sales: 56 (9%)
- Back-office and recurrent services: 213 (33%)
- After Sales & Support: 52 (8%)
5. Outsourcing
5. Outsourcing

- Outsourcing is quite common. In the sample an average of 59% of all services inputs were outsourced – 40% was the least and 77% the most (caution with the count).

<table>
<thead>
<tr>
<th>Universally outsourced on a discretionary basis</th>
<th>Never completely outsourced</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Telecoms</td>
<td>- Ongoing Management</td>
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<td>- Freight</td>
<td>- Book-keeping</td>
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<td>- Insurance</td>
<td>- Engineering</td>
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<td>- Security</td>
<td>- Product Design</td>
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</table>
5. Outsourcing

• Reasons for outsourcing, or not: trading off

**Efficiency**
- Comparative advantage
- Internal economies of scale
- External economies
- Networks

**Transaction Cost**
- Recurrent interaction (supervision, managerial time)
- Search costs

**Risk**
- Unforeseen third-party actions
- Reputation
- Compliance risk

**Obligatory Outsourcing**
- Legal obligations
- Proprietary third-party rights
6. Bundling
6. Bundling

- Various products (goods and/or services) are typically bundled together as single offerings in arm’s-length exchanges.

- Reduce costs
- Differentiate products – competitive edge
- Facilitate Innovation
- Higher sales values
6. Bundling

Bundling has the interesting property of rendering all producer services potentially tradable.

Governments may want to reconsider policy and sources of comparative advantage.
7. What Does Policy Do or Not Do to Attract GVCs?
7. Policy and Services in GVCs

- Policy intervention on goods vs. policy intervention on services

**Goods**
- Less intense intervention
- Lower levels of protection

**Services**
- More intense intervention
- Higher levels of protection
- Mostly regulations

Because production is international and intermediate products cross frontiers several times, policies have a multiplicative effect on production costs.
7. Policy as added value, subtracted value and innovation

**Policy Interventions**

**Policy as added value**
- Efficient public policy:
  - health
  - safety
  - environment etc.

**Policy as subtracted value**
- Protectionism:
  - discriminatory taxes
  - exclusions
  - regulations
  - others
- Deadweight losses:
  - procedures
  - inefficiencies
  - under-investment
  - corruption
- Less growth...
- Development...
- ...........jobs

**Policy as innovation**
- Efficiency through:
  - openness
  - streamlining
  - learning
  - best practice
  - governance

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7. What Does Policy Do or Not Do to Attract GVCs?

The policy environment:

**Policy certainty and consistency**

- The costs of frequent and often unannounced policy and regulatory changes
- Policy inconsistencies between local and central government
- Misuse of discretionary authority at the level of implementation
- Transactions costs associated with navigating uncertainty
- Implications for SMEs
7. What Does Policy Do or Not Do to Attract GVCs?

Policy areas where the supply of manufacturing-related services is directly affected by restrictive policy:

1. Labor Market Restrictions
   - Visas, length of stay
   - Hiring, demonstration of local unavailability
   - Sectors closed for foreign labor

2. Foreign Equity Restrictions
   - Direct restrictions on share of foreign equity
   - Indirect barriers, such as uncertainty in policy regime and excessive administrative burdens
7. What Does Policy Do or Not Do to Attract GVCs

3. Customs Regimes
   - Inefficient administration and complicated procedures
   - Compulsory appointment of customs agents

4. Intellectual Property
   - Compulsory to transfer IP to local partner
   - Efficacy of counterfeit controls
   - Insufficient or non-existent IP protection
7. What Does Policy Do or Not Do to Attract GVCs?

5. Health, Safety and Environmental Regulations

- Costly Compliance
- Compulsory Appointment of Specific Company

6. Inadequant Infrastructure

- Development of human capital
- Physical infrastructure
7. What Does Policy Do or Not Do to Attract GVCs and SME Participation?

Measures for Services

- Infrastructure
- Tax Breaks
- Training Support
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