International Supply Chains, Trade in Value-Added and Economic Development: 
A Small Economy’s Perspective

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International Supply Chains, Trade in Value-Added and Economic Development: A Small Economy’s Perspective

Outline of the Presentation

1. Introduction: Opportunities
2. Definition of concepts and measures: a simple example
3. Upgrading challenge: The options from the business perspective
4. Upgrading challenge: The options from a policy perspective
5. Conclusions
New Opportunities:
Trade in Tasks creates trade flows and activities that would never have existed before

In a Classic Model (Ricardo) countries exchange final goods and commodities following their comparative advantages

• In order to avoid so-called ‘regressive specialization’, large developing countries put in place Import Substitution Industrialization or Natural Resources Based Industrialization policies.

• Small developing economies were not able to successfully implement similar policies and were constrained to export natural resources.

Global Value Chains: New model based on international outsourcing of tasks and trade in intermediate goods

• Trade creation: Today’s trade concern not only primary goods (minerals, oil, agricultural products) or final goods (for consumption or investment) but also intermediate goods (parts and components) connecting various segments of the global manufacturing process

• Trade in tasks enables small countries to develop competitive industrial activities: They can establish themselves as regional or international production for a particular segment of the value-chain.
Trade in “intermediate inputs” is one of the indicators of insertion into Global Value Chains.

Developing Countries and LDCs show an increasing trend in intermediate trade.

Source: WTO. Oil excluded.
Trade along Global Value Chains

**Definition and Example**

**Outsourcing, Offshoring and Fragmentation:**

Splitting a production process into two or more steps that can be undertaken in different locations but that lead to the same final product.
Global Value Chains create trade opportunities
(a) **Traditional Trade** Pattern in Commodities and Final Goods
Global Value Chains create trade opportunities
(b) **Global Value Chain**: C outsource to D
International fragmentation of Textile & Clothing

- Design and Branding
- Yarns
- Knitted Fabrics
- Merchanting Distribution
- Pattern-Cutting
- Sewing

Consumers
A simple example: International fragmentation of Textile & Clothing

Matrix representation of tasks and trade flows in final goods and in intermediate inputs (goods and services)

<table>
<thead>
<tr>
<th>Country</th>
<th>Production 1</th>
<th>Production 2</th>
<th>Production 3</th>
<th>Production 4</th>
<th>Production 5</th>
<th>Final Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Demand</td>
</tr>
<tr>
<td>Italy</td>
<td>Merchandising</td>
<td></td>
<td>Cotton Yarns</td>
<td></td>
<td></td>
<td>Shirt</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>Cotton Yarns</td>
<td></td>
<td></td>
<td></td>
<td>Shirt</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Cutting,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shirt</td>
</tr>
<tr>
<td>Hong Kong</td>
<td></td>
<td></td>
<td>Merchandising</td>
<td>Logistics</td>
<td></td>
<td>Shirt</td>
</tr>
<tr>
<td>Japan</td>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Shirt</td>
</tr>
</tbody>
</table>
International fragmentation of Textile & Clothing: Difference between **Gross** and **Value Added** Trade

<table>
<thead>
<tr>
<th>Country</th>
<th>Value Added</th>
<th>Output</th>
<th>Gross value includes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>15</td>
<td>15</td>
<td>Yarns, Cloth</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>5</td>
<td>20</td>
<td>plus Confection</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>20</td>
<td>70</td>
<td>plus Italy royalties and merchanting</td>
</tr>
<tr>
<td>Japan</td>
<td>30</td>
<td>100</td>
<td>Retail value</td>
</tr>
</tbody>
</table>

**Gross Trade**

- **Trade in Goods (CIF)**: 105 (15 + 20 + 70)
- **Trade in Services**: 30

**Trade in Value Added**: 70 (30 + 15 + 5 + 20)

Gross trade figures **(135)** include many double counting along the value chain.
Value-Added trade figures **(70)** reflect only the domestic content at each step of the chain.

**OECD-WTO** launched in January 2013 a database on **Trade in Value-Added (TiVA)** building on previous efforts from IDE-JETRO, USITC, WIOD and other researchers...
### Agriculture
- **Inputs:** seeds, fuel, fertilizers, agronomic and business services
- **Value added:** wages, taxes, investment, profits (landlord, sharecropper)

### Manufacturing
- **Inputs:** basic goods from agriculture and mining, energy, parts and components, business services
- **Value added:** wages, taxes, investment, profits (shareholders)

### Services
- **Inputs:** energy, non-durable goods from agriculture and manufacturing, business services
- **Value added:** wages, taxes, investment, profits (shareholders)

**More generally:**
Each sector of activity produces **output** by transforming **domestic and imported inputs**, generating in the process **value-added** (the difference between the value of output and the cost of intermediate inputs). This value added turns into **income revenue** (wages, profits, taxes).
For example, in the 4 countries network presented before, the following intermediate goods and services are exchanged:

Country B:
- Natural resources
- Extractive activities

Country C:
- Branding
- Research and development
- Complex industrial components

Country D:
- Light manufacture
- Assembly
- Logistics

Country A:
- Marketing
- Distribution
- After-sale services

GVCs: beyond Value-Added

GVCs not only create jobs for small developing country C, but also attract investment and promote the transfer of technologies and know-how.
New Challenges:
Small Developing Countries need not only to join a Global Value Chain, but also up-grade and incorporate more value-added.

• Joining a GVC is already a challenge for most LDCs that do not have adequate infrastructure or efficient institutional environment.

• Most LDCs join a GVC because of cheap labour (assembly) in activities where the value-added per unit is lowest.

• The next challenge is up-grade and adapt enabling economic policies that can attract investment, foster trade and incorporate more value-added, know-how and technology.
**Up-grading is perceived as the major public policy objective**

**The Aid for Trade Survey Results for LDCs**

<table>
<thead>
<tr>
<th>What are your government's priorities to expand export of goods and services? (1 being the most important)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer Options</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>4</strong></td>
<td><strong>5</strong></td>
<td><strong>6</strong></td>
<td><strong>Response Count</strong></td>
</tr>
<tr>
<td>Adding value to your exports</td>
<td>20</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td><strong>33</strong></td>
</tr>
<tr>
<td>Addressing export competitiveness issues</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td><strong>34</strong></td>
</tr>
<tr>
<td>Developing new export markets</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td><strong>32</strong></td>
</tr>
<tr>
<td>Developing new export products</td>
<td>3</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td><strong>30</strong></td>
</tr>
<tr>
<td>Promoting an enabling business environment</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>13</td>
<td>0</td>
<td><strong>33</strong></td>
</tr>
<tr>
<td>Promoting specific trade policy objectives or agreements (e.g. Free Trade Agreements)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>19</td>
<td><strong>29</strong></td>
</tr>
<tr>
<td>Total LDC partner respondents</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>
UPGRADING STRATEGIES:

- **On the intensive margin:** economies of scale and scope
- **On the extensive margin:** Higher value-added per unit of output
Great depth in value-added at the intensive margin, but isolated business niche.
Reduced depth in value-added but high business density
Upgrading Strategies: Firms are not Countries

Firms:
• Value-Added is not the main criterion but return on investment
• GVC governance may limit the possibility of moving into new segments (oligopolistic nature of GVCs)

Countries:
• Attract GVC and FDI through enabling export-oriented policies (incl. EPZs)
• Then foster inter-industry linkages to create a dense forest of trees.
  -- The domestic translation of GVC are the ‘industrial clusters’ of complementary firms coordinated to produce marketable output (agro-industry, tourism, mining, ...)
  -- In the classic approach, manufacture is the most promising sector due to strong up and downstream linkages
  -- Today, trade in tasks blurs the limits between industry and services: investment in tourism may enable exports of high value agricultural products or the development of health services
Specific policies to promote GVCs in small developing countries

### The business perspective

<table>
<thead>
<tr>
<th>Agri-food</th>
<th>Information, Communication and Technology (ICT)</th>
</tr>
</thead>
</table>
| • Standards compliance  
  • Business and policy environment  
  • Access to finance  
  • Trade facilitation | • Trade policy and regulatory issues  
  • National supply-side constraints, including ‘hard’ and ‘soft’ infrastructure  
  • Trade facilitation |

<table>
<thead>
<tr>
<th>Textiles and Apparel</th>
<th>Tourism</th>
</tr>
</thead>
</table>
| • Skills and productivity  
  • Skills  
  • Border issues and trade facilitation measures | • Business environment  
  • Infrastructure  
  • Skills and productivity  
  • Visa regimes |

| Transport and Logistics | | |
|-------------------------|---------|
| • Customs and other border procedures  
  • Infrastructure bottlenecks  
  • Monopolies and private sector development | The above are some of the broad categories that emerged out of the sector specific surveys where support would be most effective in helping LDC firms connect to the sector value chains |

Source: WTO-OECD, AFT Survey for LDCs, Sector-specific findings
## The Aid For Trade Survey for LDCs: Private Sector Results

<table>
<thead>
<tr>
<th>LDC Suppliers</th>
<th>Lead Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most effective support in helping enter, establish or move up value chains?</td>
<td>Most effective support to bring new developing country and LDC suppliers into your value chain(s)? Top 5 issues.</td>
</tr>
<tr>
<td>Top 5 issues.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response</th>
<th>Answer Options</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better market access</td>
<td>72.5%</td>
<td>Trade facilitation measures</td>
<td>44.1%</td>
</tr>
<tr>
<td>Better access to finance</td>
<td>56.3%</td>
<td>Better market access</td>
<td>43.7%</td>
</tr>
<tr>
<td>Incentives for investment (domestic and foreign)</td>
<td>51.3%</td>
<td>Better public-private dialogue with national authorities</td>
<td>42.7%</td>
</tr>
<tr>
<td>Labour force training schemes</td>
<td>51.3%</td>
<td>Investment in infrastructure</td>
<td>42.3%</td>
</tr>
<tr>
<td>Investment in infrastructure</td>
<td>46.3%</td>
<td>Support to improve business environment</td>
<td>34.3%</td>
</tr>
</tbody>
</table>

**Source** WTO-OECD, AFT Survey for LDCs
Conclusions

• New trade and development opportunities call for new policy
• The network dimension in global manufacture and trade should be also reflected in the way domestic policies are designed and implemented:
  – Public-Private dialogue with actors and stakeholders (CSR is now part of business)
  – Vertical coordination within the public sector (local-regional-central authorities)
  – Horizontal coordination across ministries and agencies
• And incorporate the international dimension:
  – From the business perspective: GVC governance, comparative advantages within the supply chain
  – From the policy-maker perspective: increased international linkages call for improved regional and international coordination
• Services matter as much as manufacture:
  – GVCs blur the frontier between sector and products