Backward linkages of Korean multinationals to local small and medium-sized enterprises in the automobile and textile sectors in Brazil and Guatemala

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1. Introduction

• Evolution of Economic relations between Asia and Latin America
  – Trade between the two regions grew 17% per year, on average, from 2000 to 2013.
  – Asian foreign direct investment (FDI) in Latin America also increased considerably average annual rate of 103% since 2000

[Hypothesis] FDI in the manufacturing sector tends to attract SMEs as local suppliers
Korea's FDI flows to LAC has increased significantly

More than 8 times

US$3 billion Sept. 2000

US$25 billion Sept. 2014

▲ Share by country

▲ Share by sector
The pattern of Korean investors’ strategies toward LAC is stereotyped.
2. Investments by the Hyundai Motor Company in Brazil

- Brazil is the world’s fourth largest automobile market in 2013 with 3.6 million units sold
  - China (18.7 million), the United States (15.6 million) and Japan (4.9 million).

- Brazil is the sixth largest producer after China, Japan, the United States, Germany and the Republic of Korea.
  - 3.6 million car units, corresponding to a 4.7% share of global production.
2. Investments by the Hyundai Motor Company in Brazil

- HMB in Brazil @ Piracibana, Sao Paulo
  - The first automobile manufacturing investment in LAC from Korea with the investment of US$700mil with production capacity of 150,000/year
  - Began localized model production from 2012

- BH20 as the 2013 Car of the Year (Auto Esporte)
- BH20s voted as the Best Small Car in 2013 (Carro)
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2. Investments by the Hyundai Motor Company in Brazil

- In 2013, HMB manufactured three models exclusively for the Brazilian market, amounting to 167,000 units:
  - HB20 (hatchback, 117,000 units)
  - HB20s (sedan, 40,000 units)
  - HB20x (cross-over, 10,000 units).

- Hyundai’s sales of domestically produced and imported cars rose from 108,000 units in 2012 to 213,000 units in 2013, making the company the sixth largest manufacturer in the country, overtaking Toyota and Honda.

- HMC market share: 3.0% (2012), 5.9% (2013), 6.6% (1/4 2014)
# Hyundai Motor Brazil’s domestic sourcing structure

<table>
<thead>
<tr>
<th>Name of supplier</th>
<th>Products supplied</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subsidiaries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyundai MOBIS</td>
<td>Modules and parts</td>
<td>Hyundai sister company that produces high value added inputs</td>
</tr>
<tr>
<td>Hyundai Dymos</td>
<td>Power trains</td>
<td>Hyundai sister company that produces most power trains</td>
</tr>
<tr>
<td><strong>Primary parts suppliers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doowon</td>
<td>Heating and air conditioning equipment</td>
<td>Partnership with HMC that began in the 1980s</td>
</tr>
<tr>
<td>Hanil E-Hwa</td>
<td>Electrical devices</td>
<td>Supplies not only Hyundai, but also Ford, Nissan and Volkswagen</td>
</tr>
<tr>
<td>Hwashin</td>
<td>Chassis</td>
<td>One of the largest HMC suppliers</td>
</tr>
<tr>
<td>Mando</td>
<td>Braking and steering</td>
<td>One of the global leaders in braking and steering systems, with multiple clients</td>
</tr>
<tr>
<td>MS Autotech</td>
<td>Car frames</td>
<td>Accompanied Hyundai’s overseas investments in India</td>
</tr>
<tr>
<td>THN Corporation</td>
<td>Wire-harness</td>
<td>Wire-harnesses connect electric control systems; more than 90% of THN Corporation’s domestic production goes to Hyundai Motors and Hyundai MOBIS</td>
</tr>
<tr>
<td><strong>Secondary/tertiary parts suppliers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyundai Hysco</td>
<td>Raw materials</td>
<td>Supplies all raw materials (mainly iron ore) directly from Brazil to HMB and vendors</td>
</tr>
</tbody>
</table>

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### Hanil: 2nd Tier local sourcing structure for HMB

<table>
<thead>
<tr>
<th>Type of input</th>
<th>Name of Supplier</th>
<th>Name of specific items</th>
<th>Mode of Production</th>
<th>Origin of raw materials</th>
<th>Location and distance from Hanil</th>
<th>Location</th>
<th>Distance (km)</th>
<th>Delivery time (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection Moulding</td>
<td>TBI</td>
<td>Door trim, console, subparts</td>
<td>Made in plant (MIP)</td>
<td>Local</td>
<td>Nova Odessa</td>
<td></td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>Painting</td>
<td>Plascar</td>
<td>Armrest</td>
<td>MIP</td>
<td>Local</td>
<td>Jundiai</td>
<td></td>
<td>100</td>
<td>1.5</td>
</tr>
<tr>
<td>Plastic Components</td>
<td>COPLAC</td>
<td>Dashboard insulator</td>
<td>Outsourced</td>
<td>Local</td>
<td>Itu</td>
<td></td>
<td>90</td>
<td>1.5</td>
</tr>
<tr>
<td>Formtap</td>
<td>Inylbra</td>
<td>Headliner, luggage mat</td>
<td>MIP</td>
<td>Local</td>
<td>São Paulo</td>
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<td>180</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Inylbra</td>
<td>Floor carpet, dashboard insulator</td>
<td>MIP</td>
<td>Local</td>
<td>São Paulo</td>
<td></td>
<td>180</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Plascar</td>
<td>Plastic trays</td>
<td>MIP</td>
<td>Local</td>
<td>Varginha</td>
<td></td>
<td>300</td>
<td>5</td>
</tr>
<tr>
<td>Product assembly document</td>
<td>Better’s</td>
<td>Manual</td>
<td>MIP</td>
<td>Local</td>
<td>Cajamar</td>
<td></td>
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<td>2</td>
</tr>
</tbody>
</table>
Hanil: 2nd Tier local sourcing structure for HMB

Backward linkages of Korean multinationals by J. Kwak
2. Investments by the Hyundai Motor Company in Brazil: Implications on corporate strategies

1. SAME SUPPLIERS HOME AND ABROAD: The company encouraged its first-tier Korean suppliers to invest in establishing supply bases in the vicinity of its manufacturing plant in Brazil, while also creating two new subsidiaries.

2. OUTSOURCING TO LOCALS AT SECOND/THIRD LEVEL: some first- and second-tier companies have been actively outsourcing to local firms. In a context of fierce competition in the global car market, differentiated outsourcing strategies are necessary for survival.

3. Brazilian SMEs are ABSENT at least up to the second tier. Most participants in the HMB value chain are large, leaving little opportunity for local SMEs to actively engage in the local value chain.

“In Korea, the company supported more than 2,500 local SME suppliers to upgrade their finances, human resources and R&D. It spent around US$ 600 million per year on these SME support initiatives.”
3. Korean Investment in the Guatemalan Textile and Apparel Sector: Background

- In 1995, the Agreement on Textiles and Clothing (ATC) replaced the Multi-Fibre Arrangement. By 2005, the ATC agreement had expired, along with its quota system.
- China’s textile and clothing exports to the United States increased 39% in 2005, with exports of goods whose quotas were relaxed.
- The CAFTA-DR 2004 rules on textiles and apparel intended to support trade within the region. Most apparel enters the region under a “yarn forward” rule of origin, which requires the member country to use member-produced yarn in textiles in order to receive duty-free access.
- Korean textile firms started investing in Guatemala in 1995.
- From 2005 to 2013, Korean investment in the CAFTA-DR’s textile and apparel sector totalled US$ 98 million.
- Currently, 120 out of 200 clothing factories in Guatemala are owned by Korean companies.
Textile and Apparel Value Chain

Backward linkages of Korean multinationals by J. Kwak
3. Korean Investment in the Guatemalan Textile and Apparel Sector: Background

- All Korean textile companies have adopted similar production strategies.
  1. Decisions on production locations are made in consultation with their clients like Gap and Nike.
  2. Korean companies that invest in Latin America also invest in Asia. This helps to solve unexpected regional supply shortages: when factories in one region fail to meet demand, they can increase supply in the other.
  3. Production is located in several regions, but global marketing is centralized at the companies’ headquarters.
  4. Value chain is created within Korean business circles both inside and outside the countries.

In Guatemala, there are eight local mills producing knits, woven fabrics and yarns. In the downward segment of the value chain, most of the 169 apparel factories are Korean owned.

- Established in 1982. Sales in 2010 reached US$ 850 million. Its main clients were Gap, Nike, Target and Wal-Mart.
- Maintains manufacturing operations (in order of decreasing presence) in China, Viet Nam, Indonesia, Guatemala and Nicaragua.
- In Guatemala, Hansae has two local subsidiaries: Hansae Global (based in Zona 17 of Guatemala City) and Hansae Guatemala (based in San José Pinula).
- Subcontracts their printing services to Guatemalan companies that are owned by Koreans.
- The company has consistently grown over the last five years, with estimated sales of US$ 100 million in 2013.

- Founded in Guatemala in 2004.
- It is the only Korean producer in Latin America and the Caribbean with its own complete production line (including a spinning mill): yarning, knitting, dyeing, sewing and printing (embroidery) activities.
- Has 40 Korean employees and between 800 and 1,000 Guatemalan employees.
- Produces women’s fashion garments for Wal-Mart, Kohl’s, Express, Carter’s and Old Navy.
- All INT designs are developed at the company’s design department in the United States, so that the firm can keep pace with local fashion trends.
- From 2004 to 2013, the company recorded steady growth, and sales totalled around US$ 60 million in 2013.
3. Korean Investment in the Guatemalan Textile and Apparel Sector: Sae-A

- One of the largest apparel manufacturers in the world, with annual exports of US$ 1.8 billion in 2013, operating 41 production facilities in 10 countries and maintains 24 offices.
- The company was one of the first Korean investors in Guatemala in 1998.
- Pioneer of original design manufacturing (ODM), with an in-house design team.
- In Guatemala, Sae-A maintains 73 knitting lines, including a printing facility to produce T-shirts, polo shirts and trousers, all produced by six subsidiaries: Sae-A Texpia I, II, III, Winners, Centexsa and Glovia (printing).
- In Costa Rica, it has invested US$ 50 million in a yarn production plant to be opened in 2015. As a result, it is one of the few Korean apparel companies that operates a complete global vertical production network.
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- The subsidiaries of Korean textile and apparel companies in Guatemala operate within global value chains. Based on orders from brand companies, they either manufacture products in-house or subcontract to other companies.
  - Existing OEM companies usually separate the manufacturers from the brand company. Companies compete over prices.
  - A rising trend in ODM is to allow companies that design and manufacture specified products to eventually authorize other firms to rebrand and sell them. In this type of arrangement, the company can regulate its suppliers, branding company and vendors.

• Most textile companies in Guatemala follow similar sourcing patterns.
  – Knitting and dyeing processes are mainly subcontracted, as they require advanced technology and skilled workers.
  – They predominantly collaborates with Korean subcontractors (In 2014, 80% of VESTEX member companies were Korean owned.)

• Why NOT with locals?
  – local domestic production capacity is insufficient to meet supply chain requirements.
  – poor safety record in Guatemala
  – lack of business creditworthiness of local companies
  – absence of effective government policies to improve the productivity of domestic suppliers.

- Nevertheless, Guatemalan-owned firms have started to absorb some of the advanced techniques from their Korean peers—for example, bundling, cellular manufacturing, advanced quality control procedures and fabric dyeing.
  - Hiring Korean managers or establishing business links through local business associations (VESTEX).
- The benefits of Korean ownership have thus extended beyond the Korean-owned companies.
  - Koreans still reserve the highest value added activities for themselves and triangulate production between Guatemala and other countries.
- Korean and Guatemalan firms have cross-fertilized each other’s styles and tools to a high degree. Korean investment may not have established a local value chain in the Guatemalan textile industry due to its enclave nature, but it has contributed to the industry’s development.
4. Conclusion

• The case studies presented in this chapter do not support the hypothesis that “FDI contributes to the creation of backward linkages with local producers”.

• Instead, Korean investors rely on their own enclave economy, which has mostly benefitted international suppliers rather than local companies.
  – Foreign investors are confronted with weak domestic suppliers
  – Host governments have not created business linkage programmes or provided sufficient support to local SMEs. In the absence of government initiatives, especially industrial policies to promote linkages between local SMEs and large investors, it is unlikely that business linkages will emerge automatically.
  – Both large and small Korean investors tend to regard FDI activities as extensions of their existing modes of production in Korea. This has resulted in minimizing the participation of local suppliers.
  – “INDUSTRIAL CONDOMINIUMS, in car industry: suppliers provide modules, and the assembler controls assembly”