Logistics – Part II

The Development of PRD & the Hong Kong Logistics

Waiman Cheung
Director
Li & Fung Institute of SCM & Logistics
The Chinese University of Hong Kong
Importance of Guangdong Economy to China

Note: The GDP is calculated at current prices
Source: China Statistical Yearbook 2003 and Guangdong Statistical Yearbook 2003
Gross Domestic Product of China & Guangdong - 2004

Other Provinces 88.1%
Guangdong Province 11.9%

Note: The statistics is calculated at current prices
Source: China Statistical Yearbook 2005, Guangdong Statistical Yearbook 2005
Gross Industrial Output Value of China & Guangdong - 2004

Note 1: The statistical covers all state-owned enterprises and non-state-owned enterprises with annual sales above 5 million yuan.
Note 2: The statistics is calculated at real prices
Source: China Statistical Yearbook 2005, Guangdong Statistical Yearbook 2005
Total Export Value of China & Guangdong - 2004

Source: China Statistical Yearbook 2003, Guangdong Statistical Yearbook 2005
# Top 5 Commodities in Export Values – Guangdong Province

<table>
<thead>
<tr>
<th></th>
<th>2001 (US$ 100 m)</th>
<th>2002 (US$ 100 m)</th>
<th>2003 (US$ 100 m)</th>
<th>2004 (US$ 100 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic and Electrical Products*</td>
<td>240.12</td>
<td>308.40</td>
<td>481.74</td>
<td>664.64</td>
</tr>
<tr>
<td>Garments and Clothing Accessories</td>
<td>86.92</td>
<td>100.61</td>
<td>116.72</td>
<td>126.92</td>
</tr>
<tr>
<td>Footwear</td>
<td>43.42</td>
<td>46.38</td>
<td>51.82</td>
<td>61.78</td>
</tr>
<tr>
<td>Textiles</td>
<td>34.33</td>
<td>42.12</td>
<td>48.34</td>
<td>51.65</td>
</tr>
<tr>
<td>Toys</td>
<td>36.88</td>
<td>39.55</td>
<td>83.6</td>
<td>89.8</td>
</tr>
</tbody>
</table>

* Electronic and electrical products includes electric machinery, electric equipment, TV sets and sound appliances

Source: Guangdong Statistical Yearbook 2005
Proportion of Commodities Export Value in Guangdong

**2001**

- Other commodities: 53.6%
- Garments and Clothing Accessories: 9.1%
- Footwear: 4.6%
- Textiles: 3.6%
- Toys: 3.9%
- Electronic and Electrical Products: 25.2%

**Total export value: 95.42 billion US dollars**

**2002**

- Other commodities: 54.7%
- Garments and Clothing Accessories: 8.5%
- Footwear: 3.9%
- Textiles: 3.6%
- Toys: 3.3%
- Electronic and Electrical Products: 26.0%

**Total export value: 118.46 billion US dollars**

*Note 1: Other commodities include plastic articles, furniture, boxes and bags and travel goods, etc.*

Source: Guangdong Statistical Yearbook 2003
Proportion of Commodities Export Value in Guangdong

2003

- High-Tech Products, 31.49%
- Footware, 3.39%
- Toys, 5.46%
- Garment and Clothing Assesories, 7.63%
- Textiles, 3.16%
- Others, 48.88%

Total Export Value: 152.99 Billion USD

2004

- High-Tech Products, 34.70%
- Footware, 3.23%
- Toys, 4.69%
- Garment and Clothing Assesories, 6.61%
- Textiles, 2.70%
- Others, 48.08%

Total Export Value: 191.56 Billion USD

Note 1: Other commodities include some machineries, plastic articles, furniture, boxes and bags and travel goods, etc.

Source: Guangdong Statistical Information Net and China Statistical Bureau Website
Selected Cities & Industries in the PRD

1. Cities
   - Dongguan,
   - Shenzhen,
   - Guangzhou, and
   - Zhongshan

2. Industries
   - Electronics,
   - Garment,
   - Textile,
   - Footwear, and
   - Toys
Problems of the Current SCM

Physical Flow

Telephone/Fax/Email

Information Flow

Shortage

Whole seller

Delay
Studying Supply Chain Structures

1. Physical flows
2. Information flows
3. Decisions
4. Financial arrangement

- 1st tier suppliers
- 2nd tier suppliers
- Manufacturer
- Customers

Inbound logistics
Outbound logistics
Parameters for Sketching a SC Structure

1. Customers
   - Market locations (% Asia, % USA, etc.)
   - Top customers (locations, %shares, etc.)
   - Types (% manufacturer, % wholesaler, etc.)
   - Information sharing (type of info., frequency, & means)
   - Process integration
   - Relationship

2. Suppliers
   - Top Suppliers (locations, %shares, etc.)
   - Information sharing (type of info., frequency, & means)
   - Process integration
   - Supplier selection & evaluation
   - 2nd tier suppliers
   - Relationship
Parameters for Sketching a SC Structure

3. Outbound Logistics
   • Types of payment term (L/C, FOB, Open account, etc.)
   • Product destinations (%, regions)
   • Modes of transportation (% thru HK, lead time, costs)
   • 3PL (% usage, share of info., evaluation, etc.)
   • Services needed (Hub Mgt., customs clearance, information, etc.)
   • Who makes the decision

4. Inbound Logistics
   • Types of payment term
   • Origins of supplies
   • Modes of transportation
   • 3PL
   • Services needed
   • Who makes the decision
Imports to Guangdong Province from Different Countries

Source: Guangdong Statistical Yearbooks, 2000 - 2003

Year 2002

http://ccl.baf.cuhk.edu.hk
Exports from Guangdong Province to Different Countries

Note: Calculated in hundred million USD
Source: Guangdong Statistics Information Net, Guangdong development and reform committee and Guangdong Custom
Physical Flow: A Macro View

- Japan
- S. Korea
- Taiwan
- Hong Kong
- U.S.A.
- Europe

Arrows indicate the flow of materials and products.
Typical Physical Flow of a Factory in PRD
Push-Pull Boundary & DMU

- Semi-assembled parts, Parts
  - Standard materials (Plastic, Cotton, etc.)
    - Specialized materials (Accessories)
      - Push
      - Pull
  - Components
  - Finish products

Inbound logistics

Outbound logistics
A Case of a Electronic Company
Dealing with Customers

A Case of a Electronic Company
Dealing with suppliers

A Case of a Electronic Company
Cross Border Logistics
Economic Value Analysis – Sea Freight

Sea Exports via HK

<table>
<thead>
<tr>
<th></th>
<th>Via Hong Kong</th>
<th>Via Yantin</th>
<th>Key Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trucking Cost</td>
<td>$3,500</td>
<td>$1,200</td>
<td>$2,300</td>
</tr>
<tr>
<td>Terminal Cost</td>
<td>$3,245</td>
<td>$2,715</td>
<td></td>
</tr>
<tr>
<td>Freight Cost</td>
<td>$5,300</td>
<td>$6,300</td>
<td></td>
</tr>
<tr>
<td>Freight Rate</td>
<td>29.1%</td>
<td>11.7%</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>$12,045</td>
<td>$10,215</td>
<td></td>
</tr>
<tr>
<td>Total Cost Rate</td>
<td>29.1%</td>
<td>11.7%</td>
<td></td>
</tr>
</tbody>
</table>

Sea Exports directly from PRD

<table>
<thead>
<tr>
<th></th>
<th>Via Hong Kong</th>
<th>Via Yantin</th>
<th>Key Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trucking Cost</td>
<td>$3,500</td>
<td>$1,200</td>
<td>$2,300</td>
</tr>
<tr>
<td>Terminal Cost</td>
<td>$3,245</td>
<td>$2,715</td>
<td></td>
</tr>
<tr>
<td>Freight Cost</td>
<td>$5,300</td>
<td>$6,300</td>
<td></td>
</tr>
<tr>
<td>Freight Rate</td>
<td>29.1%</td>
<td>11.7%</td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>$12,045</td>
<td>$10,215</td>
<td></td>
</tr>
<tr>
<td>Total Cost Rate</td>
<td>29.1%</td>
<td>11.7%</td>
<td></td>
</tr>
</tbody>
</table>

Key Differences:
- $2,300 (no significant difference)
- $530 (no significant difference)
## Connectivity Analysis

**Sea Freight**

### Sailing Schedule Comparison

<table>
<thead>
<tr>
<th></th>
<th>From Hong Kong</th>
<th>From Yantian</th>
<th>To Hong Kong</th>
<th>To Yantian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo, Japan</td>
<td>111</td>
<td>12</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Los Angeles, USA</td>
<td>57</td>
<td>32</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Rotterdam, Netherlands</td>
<td>87</td>
<td>43</td>
<td>31</td>
<td>17</td>
</tr>
<tr>
<td>Buenaventura, Columbia</td>
<td>24</td>
<td>9</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Port Elizabeth, South Africa</td>
<td>14</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Port Louis, Mauritius Island</td>
<td>17</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Time frame: October 2004
Source: HK Shipping Gazette
## Connectivity Analysis

### Air Freight

## Air Flight Schedule Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HKG</td>
<td>NRT</td>
<td>85</td>
<td>CAN</td>
<td>NRT</td>
<td>14</td>
<td>SZX</td>
<td>NRT</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>BKK</td>
<td>129</td>
<td></td>
<td>BKK</td>
<td>14</td>
<td></td>
<td>BKK</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ICN</td>
<td>60</td>
<td></td>
<td>ICN</td>
<td>16</td>
<td></td>
<td>ICN</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SYD</td>
<td>26</td>
<td></td>
<td>SYD</td>
<td>2</td>
<td></td>
<td>SYD</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>JFK</td>
<td>7</td>
<td></td>
<td>JFK</td>
<td>X</td>
<td></td>
<td>JFK</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>LAX</td>
<td>14</td>
<td></td>
<td>LAX</td>
<td>5</td>
<td></td>
<td>LAX</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>SFO</td>
<td>21</td>
<td></td>
<td>SFO</td>
<td>X</td>
<td></td>
<td>SFO</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>CDG</td>
<td>14</td>
<td></td>
<td>CDG</td>
<td>11</td>
<td></td>
<td>CDG</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>AMS</td>
<td>12</td>
<td></td>
<td>AMS</td>
<td>X</td>
<td></td>
<td>AMS</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>LHR</td>
<td>45</td>
<td></td>
<td>LHR</td>
<td>X</td>
<td></td>
<td>LHR</td>
<td>X</td>
</tr>
</tbody>
</table>

Source: www.airlineplanning.com
Flight schedule for the month of October 2004
North Asia Pacific Economic Zone

Why thru HK?

- **Customs Declaration & Formality Certainty**
  - Minimize hold-up by Customs - Breakbulk in HK for re-exports to China to avoid risk of hold up by customs
  - Cross-Border Efficiency - Shenzhen border is more certain & efficient, particularly for those unpopular items)
  - Tax & Duty Planning – HK Corporate Tax, Import Tax / VAT to China

- **Connectivity (Frequent Flight Schedule)**
  - Air Freight ;
  - Sea Freight;
  - Land / Trucking
Findings

• Import mostly thru HK but significant part of export go direct
• North East Asia economic zone established
• Passive & low risk manufacturing leads to limited decision power & competition on cost
• Service gap indicates potential
• Need high value added services to justify high cost
• Mainland’s complex tax system gives room to HK 3PLs
What is CEPA?

• Beyond China’s WTO commitments
• Preferential access to China for HK
Trade in Goods

• Products of Hong Kong origin export to the Mainland will enjoy zero tariff from 1st January 2004

• Annual savings in tariffs estimated to be HK$ 750 million
Trade in Services

- CEPA III covers 10 services area (legal, accounting, construction, distribution*, banking, tourism, transport* etc.)
- CEPA allows HK companies operate on a wholly-owned basis
- CEPA lowers the thresholds of entry
CEPA & Cargo Logistics Industry

- Faster/easier market access for selected services sectors
  1. Logistics related services
  2. Trade services
# Timetable for Establishing Wholly-owned Enterprises

<table>
<thead>
<tr>
<th>Service</th>
<th>WTO Commitment</th>
<th>Under CEPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight forwarding</td>
<td>January 2006</td>
<td>January 2004</td>
</tr>
<tr>
<td>Storage and ware housing</td>
<td>January 2005</td>
<td>January 2004</td>
</tr>
<tr>
<td>Freight transport by road</td>
<td>January 2005</td>
<td>January 2004</td>
</tr>
<tr>
<td>Freight transport by rail</td>
<td>January 2008</td>
<td></td>
</tr>
<tr>
<td>Courier services</td>
<td>January 2006</td>
<td></td>
</tr>
<tr>
<td>Maritime transport</td>
<td></td>
<td>January 2004</td>
</tr>
<tr>
<td>Logistics services</td>
<td></td>
<td>January 2004</td>
</tr>
</tbody>
</table>

Source: Trade Development Council (July, 2003)
Qualifying Criteria

Regardless the nationality of its investors or shareholders, a company must:

1. be registered in Hong Kong, and have operated substantively for a specified number of years.

2. have substantive business activity in Hong Kong:
   - engage in same business in Mainland
   - pay Hong Kong profits tax
   - own or rent business premises in Hong Kong
   - employ in 50 % or more Hong Kong staff.
Cargo Logistics Services

- China's WTO commitments related to logistics are made on an individual industry basis.
- “Integrated” logistics services between Hong Kong and each province on the Mainland allowed.
- Demands for “logistics centers”
- Migration from transport logistics to supply chain logistics
- Use of IT to manage logistics resources in both HK & PRD
Joint Venture or Wholly-owned

- Which one is better?
- In a DHL study, over 80% respondents emphasized “wholly-owned” is key for moving to Mainland
Customs

• Zero tariff introduces new commodity category for customs clearance.
• New customs procedures can be introduced. Speed up customs reform?
### Status of HK Service Supplier Certificate Application

<table>
<thead>
<tr>
<th>Industries</th>
<th>Approved 02/04</th>
<th>Approved 04/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Logistics</td>
<td>62</td>
<td>478</td>
</tr>
<tr>
<td>2 Distribution</td>
<td>21</td>
<td>253</td>
</tr>
<tr>
<td>3 Advertising</td>
<td>4</td>
<td>79</td>
</tr>
<tr>
<td>4 Construction</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td>5 Management</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>6 Telecom.</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Bank, Insurance &amp; Securities</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>1,063</td>
</tr>
</tbody>
</table>

As of April 2007 according to TDC HK
Hong Kong Airport Cargo Consolidation Center by HKACCC in PRD

1st leg transportation

Shippers/agents send cargo to HKACCC

1. Manufacturers in PRD

2. Cargo Consolidation

3a. Export directly to ST1

3b. Send to AAT

3c. Agent pick up from ST1

2nd leg transportation

HKACCC send truck to pick up Goods (instructed by shippers/agents)

Consol Truck

Options

- Airlines
- Agent Warehouse
- AAT
- Release to Agent

China

BORDER

Hong Kong

Agent Warehouse

AAT

Release to Agent

http://ccl.baf.cuhk.edu.hk
### Timing Comparison

#### Current mode of Transport

- **Shippers' Factory** → **Huanggang Custom**
  - Time required: 2 hours
  - 1.5 hours Queuing Time
- **Huanggang Custom** → **Agent Warehouse**
  - Time required: 1 hour
- **Agent Warehouse** → **ST1**
  - 45 mins Queuing/Cargo Reception
- **ST1** → **Total: 9 hours**
  - 3 hours Cargo Handling
  - Loading/Unloading
  - Dimension/Weight taking
  - Labeling

#### Proposed Transport mode of HKACCC

- **Shippers' Factory** → **HKACCC**
  - Time required: 2 hours
- **HKACCC** → **ST1**
  - 1 hour
  - Cargo Handling
  - Loading/Unloading
  - Dimension/Weight taking
  - Labeling
  - EDI customs declaration
- **ST1** → **Total: 5 hours**
Location of HKACCC

- Located in the Futian Free Trade Zone in Shenzhen.

* With CEPA similar wholly-owned facilities can be setup more rapidly in PRD.
Kerry Logistics Network Limited

- A subsidiary of the Hong Kong-listed Kerry Properties Ltd.

- Services include: contract logistics, distribution centers, air & sea freight forwarding, transportation, distribution & value-added services.

- Operates in 8 provinces and JV with
  - JV with Beijing Holdings Ltd.
  - JV with Caohejing Hi-tech Park Development Corp
  - JV with Shenzhen Yantian Port Group
Kerry Logistics Network Limited

- Certificated HK Service Supplier
- Opening a wholly owned multiple purposes logistics center
- Taking advantage of the newly opened Guangzhou Baiyun International Airport
- Acquired majority share of a large forwarding company in China
Airocean Group Limited

- Listed in the Singapore Exchange
- Services
  - International freight forwarding
  - General sales agency for major international airlines
  - Airport cargo ground handling
**LIMA-UBI Transport Intl.**

- Hong Kong based company
- US$ 3 millions registered capital
- Licensed international freight forwarder
- Non-Vessel Operating Common Carrier (NVOCC)
- Class A air-freight forwarding in Beijing, Shanghai, & Dalian
- 22 branches in various cities in China
- 400 employees
Airocean Group Limited

- Acquired all shares of UBI with US$ 9 millions
- Quickly penetrates China market
- Saves time and cost for licensing
- Further to take advantage of CEPA
  - Set up wholly-owned branches 2 years earlier
  - Lower capital investment
  - Earlier capture of market share
Li & Fung Limited

• A listed company in Hong Kong since 1992
• From a trading company developed into a major distribution and Supply Chain Management
• Provides an one-stop service - from product development, through production management, to customs clearance and delivery, etc.
• Global Network of 69 offices in 40 countries and territories
• Granted export license on Jan. 7, 04
Li & Fung Limited

• Under CEPA
  – Applied Certificate of HK Service Supplier
  – Licensed to import & to distribute in China

• Benefits:
  – Full range of services
  – First access to market as a foreign company
  – Estimated saving of HK$600 millions on tax rebates