The World Fleet and the Participation of Developing Countries in the Supply of Maritime Transport

By
Jan Hoffmann
Chief, Trade Facilitation Section
Trade Logistics Branch
Division on Technology and Logistics
UNCTAD
The world fleet and the participation of developing countries in the supply of maritime transport

Globalised production of "maritime transport"
Globalised production of "maritime transport"

Rep. of Korea and China 74%

1. Building
2. Owning
3. Registration
4. Operation
5. Scrapping
6. Financing
7. Classification
8. Insurance services (P&M)
9. Seafarers
10. Container terminal operators

Ship building in 2012 (GT)

- China; 40.6%
- Republic of Korea; 33.0%
- Japan; 18.3%
- Philippines; 2.8%
- Rest of World; 5.2%

Source: DRAFT UNCTAD Review of Maritime Transport 2013 (forthcoming), based on data provided by Clarkson Research Services
Globalised production of "maritime transport"

Greece, Japan: 29%  
(January 2013)

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Main types of vessels
million dwt

<table>
<thead>
<tr>
<th>Year</th>
<th>Container</th>
<th>General cargo</th>
<th>Oil Tanker</th>
<th>Bulk carriers</th>
<th>Roll-on Roll-off</th>
<th>Containerized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>44</td>
<td>105</td>
<td>222</td>
<td>123</td>
<td>172</td>
<td>202</td>
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<tr>
<td>1985</td>
<td>50</td>
<td>110</td>
<td>235</td>
<td>140</td>
<td>175</td>
<td>216</td>
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<tr>
<td>1990</td>
<td>55</td>
<td>115</td>
<td>240</td>
<td>145</td>
<td>180</td>
<td>220</td>
</tr>
<tr>
<td>1995</td>
<td>60</td>
<td>120</td>
<td>243</td>
<td>150</td>
<td>185</td>
<td>225</td>
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<tr>
<td>2000</td>
<td>65</td>
<td>125</td>
<td>248</td>
<td>155</td>
<td>190</td>
<td>230</td>
</tr>
<tr>
<td>2005</td>
<td>70</td>
<td>130</td>
<td>253</td>
<td>160</td>
<td>195</td>
<td>235</td>
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<tr>
<td>2010</td>
<td>75</td>
<td>135</td>
<td>258</td>
<td>165</td>
<td>200</td>
<td>240</td>
</tr>
<tr>
<td>2013</td>
<td>80</td>
<td>140</td>
<td>263</td>
<td>170</td>
<td>205</td>
<td>245</td>
</tr>
</tbody>
</table>

Source: DRAFT UNCTAD Review of Maritime Transport 2013 (forthcoming), based on data provided by Clarkson Research Services
Globalised production of "maritime transport"

Panama, Liberia, Marshall Islands: 42%

|-------------|-----------|-----------------|--------------|-------------|--------------|
Globalised production of "maritime transport"

Denmark and Switzerland 30%

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7. Classification
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Globalised production of "maritime transport"

India, Bangladesh, China, Pakistan 94%

Globalised production of "maritime transport"

Financial and other services: UK, Scandinavia
Globalised production of "maritime transport"

Philippines, Indonesia, ...

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Globalised production of "maritime transport"

Hong Kong, Netherlands, Singapore, UAE: 44%

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What could explain this specialization?

- Clusters: synergies from geographical concentration
- Labour costs and productivity: Some sectors require more/less qualified (and more/less expensive) human resources than others.
- First mover: Know-how and economies of scale
- Captive markets: A national or regional basis
- Policies: industrial policies and government support to establish and expand the exports of, for example, ships, port operating services, or seafarers.
Focus: Container shipping

Introducing containerization leads to more trade

The Economist

The humble hero

Containers have been more important for globalization than freer trade

(Bernhofen et al, 2013)
Containerization of trade, and access to containerized transport services are important determinants of countries' trade competitiveness.

How can we measure this?

10th LSCI issued on 17 June 2013

UNCTAD's "Liner Shipping Connectivity Index" (LSCI): An indicator for the supply of liner shipping services

5 components, based on the deployment of ~6000 container ships:

- Ships
- TEU capacity
- Shipping companies
- Services
- Maximum ship sizes

Data from: Lloyd's List Intelligence
The position of the world's containerships on 17 June 2013

"Liner Shipping Connectivity"

| Title: | Liner shipping connectivity index, annual, 2004-2013 |
| Author: | UNCTAD |
| Category: | Maritime transport |
| Keywords: | merchant, fleet, ship, maritime, transport, connectivity, ports, connections, index |

Notes:

LSCI is generated from five components: (a) the number of ships; (b) the total container-carrying capacity of those ships; (c) the maximum vessel size; (d) the number of services; and (e) the number of companies that deploy container ships on services from and to a country's ports. The data are derived from Containerisation International Online. The index is generated as follows: For each of the five components, a country's value is divided by the maximum value of that component in 2004, and for each country, the average of the five components is calculated. This average is then divided by the maximum average for 2004 and multiplied by 100. In this way, the index generates the value 100 for the country with the highest average index of the five components in 2004.

9.185 -
Higher Liner Shipping Connectivity leads to lower trade costs

Figure 1. Relative Impact of Different Sources of Trade Costs
(normalized regression coefficients ["betas"] against the indicator measuring the cost component)

Cost of starting a business
Logistics performance index
Air connectivity
Liner shipping connectivity
Exchange rate
Tariffs
Same country
RTA
Common language
Common border
Distance

(Arvis et al, 2013)
Some examples
Developments over the last 10 years...
"The long term picture as regards the global liner shipping network is mixed. On the positive side, larger ships and a higher total TEU carrying capacity can cater for the growing global trade in manufactured goods, and economies of scale help to reduce costs."

"...On the other hand, the larger ships also pose a challenge to smaller ports as regards the necessary investments in infrastructure. The network as such is not expanding in terms of companies or services. The trend seems to be towards lower costs but also towards less choice for shippers."
A lot of interesting analysis that can be done with the data, both on-line, and in the RMT.

Thank You

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