Module 6 Global hub ports competition in North East Asia

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Outline

1. Definition of hub ports
2. Features of global hub ports
3. Reviews of global logistics hub port policies
4. Comparison of global logistics hub port policies
5. Conclusions
1. Definition of hub port

- Maritime logistics encompasses shipping (including shipping and ports), traditional logistics functions (including storage, warehouse, and distribution center service), and integrated logistics services (value-added services including labeling, assembly, and maintenance) (Nam and Song 2011).

- Low et al. (2008) suggest that maritime logistics chiefly involves shipping companies, port operators, and freight forwarders.
Modern ports consequently not only play a conventional ship cargo loading and unloading role, but also meet customers' need for value-added logistics services. Port services can be divided among general logistics services and value-added logistics services, and the latter operating activities, in particular, can be regarded as characteristic of a maritime port logistics center (UNCTAD 2004). Global logistics hub ports will be established when an international container port in a country becomes a hub port for transshipment and value added logistics in the region.
2. Features of global hub ports

- This paper recognized that the global logistics hub port represents international container port in the country to become hub port for the region’s main transshipment and valued added logistics.
- Global logistics hub port can be expressed by “global logistics hub port = global logistics + hub port”.
The global logistics hub port refers to the port being located in a favorable geographical location interchanged by main trunk and feeder systems, establishment of logistic park or free trade and economic zone in the port hinterland in order to value-added logistics, in addition to a traditional import, export and transit cargo, this area lay more emphasis on value added logistics and economic activity generated by the real entity within the port area and its hinterland area.
Robinson (2002) proposed that a port should be regarded as an important component of global value chains, because integration of global production and distribution processes occurs in port areas. Lee et al. (2008) suggested that transport development, integrated logistics, and maritime industries in port hinterland areas, and the continuous expansion port roles, has redefined supply chain roles and resulted in a new style of goods distribution.
3. Reviews of global logistics hub port policies

3.1 Japan

Japan implemented its so-called "super-hub port policy" in 2006 with a goal of reducing cost and improving service to the same level as that of other comparable major Asian ports within a 3-5 year period. Specific policy objectives included

- (1) reducing harbor costs by 3%, putting them on a par with costs at the ports of Busan and Kaohsiung; and (2) reducing service lead time from the current 3-4 days to 1 day, which would port the port on the same level as the port of Singapore (Ministry of Land, Infrastructure, Transport and Tourist 2011).
• the Japanese government provides the following incentives:

• (1) According to the National Property Act and the Local Government Act, firms can enjoy the lease of container quay and terminal space for a maximum of thirty years.

• (2) When a terminal operator installs gantry cranes and other equipment in a container terminal, the government will finance 80% of the required funds without interest with a 20-years repayment period.

• (3) Equipment and facilities will enjoy a reduction in fixed asset tax and city planning tax by one-half.
The port of Tokyo has also provided some incentives connected with the "super-hub port policy," including:

1. **Gantry crane usage fee**: If container handling volume increases in comparison with the previous year, the increased volume will enjoy a 50% reduction in gantry crane usage fees.
2. **Port entering, mooring, and unmooring fees** will be reduced by approximately 30% for existing container volume.
3. **Larger ships calling on the harbor and coastal container transport vessels** enjoy a 50% reduction in port facility usage fees.
(4) Vessels carrying transshipment cargo enjoy a 50% reduction in gantry crane usage fees.

(5) Carriers opening a new shipping route enjoy a 50% discount in port entering fees during the first year.

(Ministry of Land, Infrastructure, Transport and Tourist 2012)
According to the two principles of “selection and concentration,” and to implement a new growth strategy and strengthen main trunk lines, enabling them to reduce costs by drawing on cargo sources over wide areas, the Hanshin ports (Port of Osaka and Kobe) and Keihin ports (Port of Tokyo, Yokohama, and Kawasaki) were designated strategic international container ports (MLIT harbor Bureau 2011).
• The development plan proposed by Tokyo's Keihin port group is summarized below:
• The container handling volume of these ports will be increased from 7 million TEU in 2011 to 10 million TEU in 2015, which will preserve their status as the main ports of East Japan, allowing them to compete with Korea's port of Busan port and ultimately reach the goal of becoming a hub port in East Asia.
• Reduced container terminal operating costs and leasing costs will support the improvement container terminal productivity.
Implementation of a cargo collection system. Subsidies for ship construction and exemptions from oil and coal taxes will be provided for feeder ships on domestic routes. Measures to support trunk routes will include the establishment of a Metropolitan Expressway discount system and early construction of designated highways.

The national government will subsidize the dredging of areas alongside quays to a depth of -18 meters.
To establish an integrated special zone system in the Keihin ports, the Ministry of Transport designated relevant port areas "integrated special port zones," which will serve as demonstration areas promoting a series of port reforms aimed at enhancing operating flexibility and competitiveness.
3.2 Korea

- Korea's Northeast Asian logistics hub strategy of April 2003 had a vision of transforming Busan and Gwangyang ports and their hinterlands to become "the gateway to Northeastern Asian for the world's goods, information, and people." The main content of this strategy can be divided into three aspects (Ji 2012):
  
1. **Busan Port and Gwangyang Port** are to become hub ports for Northeast Asia by way of port development and the expansion of hinterland and inland transport facilities.
2. Use of logistics information system integration and specialized logistics enterprise training to strengthen competitiveness.

3. Expansion of maritime cooperation among Korea, China, Japan, the North and South and Korea Railroad, the Chinese land bridge overpass, and other Siberian railway land bridge links to consolidate transport logistics networks in Northeast Asia.
In addition, the port of Busan has also proposed the following incentive measures (Li 2011):

1. **Reduced handling fees**: Busan Port’s handling charges will be reduced from the original 5 to 6 million won to 30,000 won; Gwangyang Port’s handling fees will be 60% lower than those of the port of Busan.

2. **Reductions in ships' port fees** will encourage shipping companies to **open up new routes**.
3. **Joint venture companies** in which foreign enterprises and foreign investment accounts for more than 1% of total investment will **enjoy fifty years of land leasing fees at an annual rate of US$0.8 per square meter**; this rate is only **one-fifteenth** of the corresponding rate at the port of Shanghai.
In order to attain the goal of establishing a high value added logistics hub and strengthen Busan Port as a container hub port in Northeast Asia, the container terminal will be expanded to **17 larger container berths and six feeder berths**, **dock depth** will be dredged to -17 meters, **logistics space increased**, and the hinterland access transport network improved.

Due to intense competition between ports in Northeast Asia and the need to attract transshipment containers, many ports have been offering a wide range of incentives. The port of Busan began implementing an incentive system in January 2004, and offers highly competitive prices for transshipment containers. The port of Busan extended incentives to **small and medium-sized shipping companies** in 2007 and **coastal shipping companies** in 2009.
3.3 Taiwan

- Major efforts to expand and improve the port of Kaohsiung have been undertaken as part of the Asia-Pacific Regional Operations Center project in 1995, the Global Logistics Development Program in 2002, and the Free Trade Zone Plan in 2003.

- The establishment of free trade zones in Taiwan was listed as an important item by the “Challenge 2008—Six-Year National Development Plan,” and the government promulgated the "Act for the Establishment and Management of Free Trade Zones" (hereafter referred to as Taiwan’s FTZ Act) in July 2003.
This Act is intended to foster the development of new operating models for international logistics and management schemes, accelerate trade liberalization, enhance national competitiveness, and facilitate national economic development.
The main goals of Taiwan's free trade zones are to extend the current functions of the Global Logistics Development Program, respond to intense competitive pressure from the external environment, *deregulate current operating procedures for transshipment and re-export after processing, and realize the economic potential of seaport and airport hinterlands.*

As specified by the Council for Economic Planning and Development, Administrative Yuan, the essential characteristics of free trade zones are simplified business transaction procedures, free flow of commodities within the FTZ, exemption from customs administration and customs clearance procedures, *72-hour landing visas for foreign persons* engaging in business activities within the FTZ, and other preferential measures (Taiwan International Ports Corporation 2012).
The Executive Yuan approved in 2013 the first phase of the Council for Economic Planning and Development’s (CEPD) plan for establishing free economic pilot zones (FEPZs) in Taiwan. To generate wider economic benefits, these zones will allow “inside national territory but outside of customs” and “store in the front, factory in the back” business models, which will establish linkage with nearby industrial parks and local businesses.

During the first phase of development, the FEPZs will focus on, but not be limited to, intelligent logistics, international medical services, value-added agriculture, and industrial cooperation. Any promising industry suitable for deregulation and internationalization may also be considered for inclusion inside the FEPZs (Council for Economic Planning and Development 2013).
Despite a recent decline in ranking number, Kaohsiung Port was the world’s 13th largest container port in 2012, and also Taiwan’s largest international commercial port. In addition to serving as a container transshipment hub port, Kaohsiung is also Taiwan's leading port in terms of bulk cargo imports and exports.
The Comprehensive Development Plan for International Ports in the Taiwan Area (2012-2016), which was approved on June 20, 2011, specified the following development directions for the port of Kaohsiung:

1) Container transshipment hub port;
2) Comprehensive value-added logistics port;
3) Import/export center for major energy, heavy industry and petrochemical materials and a logistics center for petroleum products;
4) International tourism and commercial service port.
4. Comparison of global logistics hub port policies

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<tr>
<th>Countries</th>
<th>Measures</th>
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<tr>
<td>Taiwan</td>
<td>Implement free trade zones (FTZs) at the international container ports. Simplify business transaction procedures, promote free flow of commodities within a FTZ. ✓ Exempt customs administration ✓ Customs clearance procedures ✓ Grant 72-hour landing visas for foreign persons engaging in business activities within a FTZ ✓ Offer other preferential measures (Taiwan international ports corporation 2012).</td>
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<tr>
<td>Japan</td>
<td>Super hub port establishment program International strategic port plan ✓ Endeavored in reducing costs and ✓ Improving service for users by providing users with incentives for receiving fee reductions ✓ Improving operational efficiency ✓ The establishment of integrated special port zones in keihin ports (port of Tokyo, Yokohama and Kawasaki) to enhance operational flexibility and competitiveness for logistics service provided (MLIT harbor bureau 2011).</td>
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<td>Korea</td>
<td>Establishing a high value added logistics hub under the Korea's Northeast Asian Logistics Hub Port Program Ji (2012) stated that the two major container ports, Busan and Gwangyang... ✓ Enhance port logistics infrastructure (software and hardware) ✓ Improve efficiency and reduce costs of port logistics process ✓ Leading to a global logistics hub port</td>
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5. Conclusions

- There are several implications of this paper extend to the practical industrial sector.
- **First of all**, according to traditional harbor development concepts, ports were regarded solely as places of cargo stevedoring and storage by government. As a result of this perspective, existing container terminals in Taiwan face space shortages, and lack sufficient room for logistics services, processing, production, and other functions. This lack of space is especially severe at the port of Kaohsiung and port of Keelung.
Nevertheless, the important role that can be played by port hinterlands has been gradually recognized by the central government and individual port authorities, who have incorporated this perspective in port development work. As a result, container terminal No. 6 at the port of Kaohsiung and one container terminal at the port of Taipei have begun to establish huge logistics parks behind their container handling areas.
Second, in line with its *export-driven economic policies*, the government of Taiwan should place greater emphasis on integrated port hinterland development in the international ports, which will strengthen various functions including *processing, assembly, distribution, and value-added logistics*. However, the functions of port hinterland should be designed and organized subject to the economic development characteristics of the local area. For instance, the port of Taipei has established a *car distribution park reflecting* the nearby location of *auto assembly lines and the high concentration of potential car-buyers* in northern Taiwan.
Third, the introduction of new shipping routes will increase ships’ sailing frequency and container handling volume, which is why Japan and Korea has provided many incentives to encourage the opening of new routes; these incentives include reduction or exemption from dockage charges, wharf fees, or equipment usage fees, and even the provision of marketing assistance measures. Taiwan Ports Corporation can learn from these approaches when formulating appropriate strategies to encourage shipping companies to open new routes to the port.
Finally, blue Highway plan promoting shipping between different ports in Taiwan will enhance the transshipment container volume of international commercial ports, while also achieving great reductions in carbon emissions. Japan and Korea have offered coastal feeder vessels favorable terms that include reduced harbor usage fees, and the Japanese government also preferential financing for the construction of feeder vessels. If Taiwan's port management company can learn from these examples and provide feeder operators with reduced harbor fees and transshipment cargo incentives, we believed this will have the positive effect of reducing the operating costs of feeder operators and increasing their willingness to provide service.
Thank you for listening