

**EXECUTIVE SUMMARY**

# A Study on Shipping Business Models and Competitiveness Advantages

---

## 1. Purpose

- ▶ The purpose of this study is to present the design of the classification system for shipping business models and to extract competitive advantage factors as well as measures to reinforce competitiveness. In doing so, this study ultimately aims to support the survival and development strategies of shipping companies, while enhancing the effectiveness of government policies.

## 2. Methodology and Feature

### 1) Methodology

| Research flow   | Detailed contents   | Methods   | Job assignment           |
|---|---|---|--------------------------|
| ↓   | ↓   | ↓   |                          |
| Overview  | Research overview<br>Differentiating contents   | Review of preceding studies   | KMI                      |
| ↓   | ↓   | ↓   |                          |
| Classification of shipping business models                              | Review of existing classification systems of shipping business models<br>Extract and apply a new criteria for business model classification<br>– Present 7 models following the methods of securing transportation capability, type of shipping contracts and market exposure | Literature re-view<br><br>Interview with experts<br>Analysis of foreign cases                           | KMI                      |
| ↓   | ↓   | ↓   |                          |
| Domestic and foreign cases  | Domestic cases<br>– Analyze financial statements of national flag carriers  | Internal data of shipping companies<br>Consultation with experts  | KMI,<br>Nikos<br>Nomikos |
|   |   |   |                          |
| ↓   | ↓   | ↓   |                          |
| Extracting competitiveness advantage factors by shipping business model | Analysis of foreign cases<br><br>Analyze factors affecting the business performance of shipping companies<br>– Analyze the impact between factors based on causal loop map  | Literature re-view<br>Management analysis tool (Business Canvas)<br>Consultation with experts<br>Survey | KMI                      |

|   |   |                           |     |
|---|---|---------------------------|-----|
|   | Importance analysis on core factors of shipping business models<br>- Importance of shipping business models<br>- Importance of competitiveness advantage factors by model   |                           |     |
| ⇓   | ↓   | ↓                         |     |
| Measures to strengthen core competitiveness advantage factors of shipping business models | Identify the present status of national flag carriers and extract strengthening measures<br>- Market analysis and risk management measures<br>- Capital structure and financing measures<br>- Legal/contractual management and measures to strengthen operational expertise | Consultation with experts | KMI |
| ⇓   | ↓   | ↓                         |     |
| Conclusion and policy suggestions   | Conclusion<br>Policy suggestions  | -                         | KMI |

자료: Written by authors

## 2) Feature

- ▶ Moving away from the existing classification system by ship type, this study presents new standards for classifying shipping business models. Furthermore, the study applied the new classification system to Korean shipping companies to analyze the changing trends of shipping business models.
- ▶ To be specific, various types of models were suggested including the ‘Shipowner Model’ and the ‘Freight Trader Model’, while departing from a cargo-based shipping business models. Therefore, this study bears its significance by providing a basic

---

framework for promoting the long-term development of the Korean shipping industry.

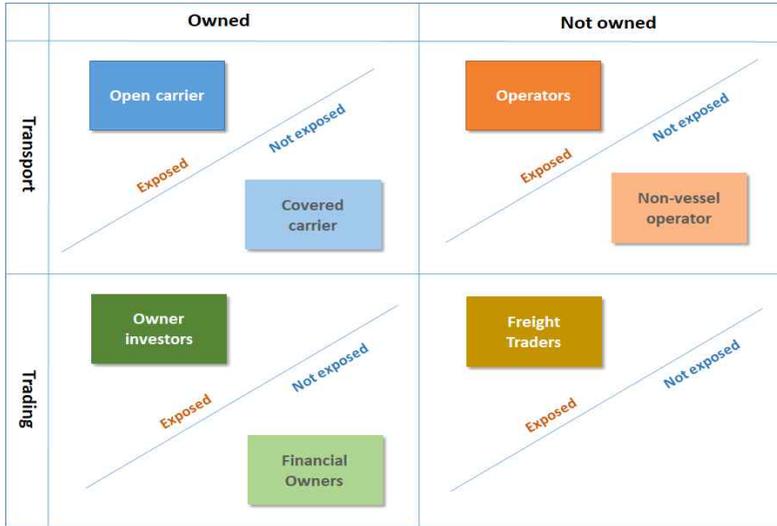
- ▶ Several cases of foreign business models were analyzed with joint research between Korea Maritime Institute and Professor Nikos Nomikos of the Cass Business School, University of London to suggest strategic directions for Korean carriers.
- ▶ This study intends to extract the core factors contributing to competitive advantages of shipping business models through expert survey, and present measures to strengthen them. In doing so, it will contribute to establishing a long-term direction for the development of Korean shipping while boosting their competitiveness.

### 3. Results

#### 1) Summary

- ▶ Moving away from existing classification systems based on shipping services (liner shipping, tramp shipping) or cargo (container/bulk/tanker), this study designs 7 shipping business models under the following criteria: securing shipping capacity, type of shipping contracts and market exposure.
- ▶ For instance, the General Carrier Model is a model to which businesses directly participate in ship ownership and cargo transportation, while being exposed to market changes. This model includes container-shipping liners that are participating in the cargo transportation market.

## Attribute Based Shipping Business Model



자료: Written by authors

- ▶ The 'Business Model Canvas' tool was utilized to specify core elements of competitive advantages for shipping business models. Through this endeavor, the study extracted 18 core factors of competitive advantages (5 common factors/13 functional factors) by specifically identifying core activities and resources for creating values.
  - The five common factors include business structure, capital structure, governance, corporate culture, and global capability. In addition, 13 functional factors are strategic alliance, legal /contractual management, reputation/brand, market risk management, market analysis/forecasting, controlling the front and back end modes, financing, maritime technology, navigational expertise, operation IT, pricing, sales and customer management.

- ▶ The study derived the relative importance of seven shipping business models as well as core factors of competitive advantages per model.
  - According to the results of the importance analysis of the seven shipping business models classified by this study, the importance follows in the order of carrier model, shipowner model, and operator model.
  - In regards to core factors of competitive advantages per model, the general carrier model considers business structure as a core factor, while the exposed carrier model considers capital structure/ financing as core factors. Market risk management was analyzed to be important to general operator model, and the non-exposed carrier model considers global capacity and sales as core factors for gaining competitive advantages. In addition, the shipowner model considers capital structure as an important factor.

## 2) Policy suggestions and relevant activities

- ▶ Based on the results, the study presents policy suggestions as follows to strengthen the competitiveness by shipping business model:
- ▶ First, it is necessary to foster commercial financial institutions equipped with expertise in the maritime sector in order to reinforce the capital structure of shipping companies. In addition, relevant authorities should come up with tax benefits for investors to allow private equity funds (PEF) to make long-term investments to shipping companies.

- Another measure is to nurture operators and shipowners by separating the ownership and operation of vessels to diversify the market risk as well as investment risk.
- ▶ Second, the study proposes a government project for the development and distribution of a standard system to strengthen the forecasting ability and response to market risks. In this process, public research institutions should serve their role by offering capacity.
- ▶ Third, the establishment of the ‘Maritime Expertise Support Center’ is suggested as an affiliate organization to a public institution in an effort to boost the legal and contractual management of shipping companies.
  - The center may provide legal consultation, education on cargo knowledge and translation of professional materials. For these purposes, retired experts and English lawyers can be utilized. This, in turn, may improve the employment stability of early retirees.

### 3) Expected benefits including policy contribution

- ▶ This study contributes to a systematic classification of shipping business models, extracting competitive advantage factors by model, providing future prospects of the national shipping industry and specifying policies to achieve future goals.
  - As illustrated in the ‘5-Year Plan for the Reconstruction of the Shipping Industry’, and the ‘Long-term Development Plan for the Shipping Industry’, shipping policies have not classified business models reflecting the attributes of the shipping business.

- 
- ▶ Companies are concentrating on securing competitive advantages in each business area to acquire stability and growth. In this process, understanding of business models allows companies to correctly identify their strengths and weaknesses, contributing to boosting competitiveness.