Maritime Cluster in Japan
- Shipbuilding and WP6 -

Shin Otsubo
Deputy Director-General

Maritime Bureau
Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
• Maritime Cluster in Japan
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Maritime Clusters in the World

Stavanger (Norway)
Concentration of shipbuilding and universities specializing in offshore energy development

Rotterdam (Netherlands)
Biggest European port; accounts for 60% of inland water transport;

Piraeus (Greece)
Biggest European port for cruise; concentration of shipowners

London (U.K.)
Birthplace of marine insurance and classification society; concentration of information-related industries

Singapore
Concentration of trade and financial business in Asia, bunkering

These clusters have their own specialized strengths.
Japanese maritime cluster has a wide range of marine-related activities and competitive core activities.

- Core activities: shipping, shipbuilding, marine equipment, port, etc.

- Marine-related activities: education, financing, broker, legal services, etc.
Overview of Maritime Cluster in Japan


Core maritime industry: 109 billion USD

- **Shipping**: 47 billion USD
- **Shipbuilding**: 27 billion USD
- **Ship management**: 3 billion USD
- **Ship machinery and equipment**: 11 billion USD
- **Port transport**: 18 billion USD
- **Marine equipment**: 1 billion USD

Non-core Maritime industry: 20 billion USD

- **Parts supply for ships**
- **Storehouse logistics**
- **Public services**
- **Finance**
- **Legal services**
- **Trading House**
- **Staffing services**

Industries close to maritime: 1 billion USD

- **Coast guard**
- **Marine development**
- **Offshore**
- **Fishery**
- **Marine leisure**
- **Research**

Relevant industries: 11 billion USD

- **Retails**
- **Steel**
- **Paper making**
- **Car**
- **Grain**
- **Oil**
- **Electronics**
- **Utilities**
- **Non-ferrous metal**
- **Others**

Source: Japan Maritime Center
Core Activities of Japan’s Maritime Cluster

*Shipper*

Maritime Transport

**Shipping**
Ocean-going: 47 billion USD

- 75% Japanese Shipping
- 88% (fleet) Japanese Shipbuilder

**Shipbuilding**
25 billion USD

- 71% Japanese Shipbuilder
- 95% Japanese Ship Machinery Industry

**Ship Machinery Industry**
9 billion USD

- Companies: 670
- Employment: 41,000

**Ocean-going**
- Companies: 210
- Employment: 6,000

**Ship management company**

**Classification Society**

**Marine insurance**

**Finance**

**Trading company**

Source: final report “New Comprehensive Policy on Shipbuilding Industry”
The shipbuilding industry is concentrated in Western Japan. In many local cities, a large portion of economies depend on shipbuilding.

Share of shipbuilding in local economy

- Imari: 30%
- Mihara: 17%
- Nakatado: 22%
- Marugame: 33%
- Sasebo: 18%
- Saikai: 81%
- Nagasaki: 23%
- Saeki: 35%
- Tamana: 36%
- Usuki: 24%

Source: Clarksons Research, Japan Ship Machinery & Equipment Association
Imabari Maritime Cluster

Largest as shipbuilding

Ship construction 522

Share of shipbuilding companies which have office is in Imabari 34%

Share of shipbuilding companies which have office is in Imabari 19%

Biggest maritime city in Japan

Ship building

Shipping

Maritime Cluster

Ship machinery

Seamen’s training

Financial institutions

Local banks focusing on ship finance

Related industries
Marine equipment maker: 160

BARI-SHIP maritime exhibition comparable to Posidonia/ Nor-shipping?

Largest as shipowner

Ocean-going vessels 2,566

Imabari 940

Largest as shipowner

Education base for seafarers

- National Maritime College
- National Institute of Technology

Source: Commission of maritime city interaction in Imabari city (2014)
Shipbuilding is one of the economies which have large economic ripple effect; ranked as 6th in 49 industries.

Economic ripple effect of shipbuilding
• Ratio of economic impact of shipbuilding to total economy is about 3.

\[
\frac{\text{Induced total production value}}{\text{Ship production value}}
\]

Shipbuilding is a core part of Japanese Maritime cluster.
• Maritime Cluster in Japan

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Characteristics of Shipbuilding

• Large economic impact
  – High spillover effect
  – Employment in local cities

  Many emerging countries are trying to develop the shipbuilding industry.

• Cyclical industry: booms and slumps, depending on the shipping market.
  – Time-lag between order and delivery of ships; coupled with volatility of shipping market, speculative orders may prevail.
  – High exit barrier: facilities difficult to use for other purposes, loss of employment feared
Shipbuilding is cyclical: short booms followed by longer slumps.
Negative Effects of Overcapacity

- New orders drop sharply and stay low for a long time
- Low level of ship price remains for a long time

Fleet surplus keeps freight rate low, keeping ship prices low, too. Excess capacity, once emerged, does not go away easily.
What happens during shipbuilding depression?

◆ Due to large economic impact and long slump of shipbuilding, governments tend to protect shipbuilding in their countries.
  ✓ Subsidies, loan, debt forgiveness, etc. inconsistent with international rules

◆ However, since global shipbuilding industry is a single market, governmental support inconsistent with international trade rules in one country will distort the entire global market.

❖ Policy coordination among shipbuilding countries is essential to establish normal competitive conditions: OECD WP6
Efforts by WP6

◆ Core mandate of WP6:
  ✓ Establish normal competitive conditions in the global shipbuilding industry

◆ 1960s - 1980s: Non-mandatory instruments
  ✓ General Guidelines for Government Policies in the Shipbuilding Industry
  ✓ General Arrangement for the Progressive Removal of Obstacles to Normal Competitive Conditions in the Shipbuilding Industry

◆ 1994: Mandatory instruments; tailor-made for shipbuilding
  ✓ Agreement Respecting Normal Competitive Conditions in the Commercial Shipbuilding and Repair Industry: not entered into force

◆ 2000s: The 2nd attempt for the mandatory rule, with China
  ✓ Negotiation for new shipbuilding agreement: failed
Role and challenges of WP6

◆ Role

✓ Time has passed, but the significance of the WP6 mission unchanged: Establish normal competitive conditions.

◆ Challenges

✓ Address the excess shipbuilding capacity. 
  Back to the basics: re-confirm the market principle. 
  Let the productive ones survive. 
  Adjusting the capacity may be painful. The main government role is to reduce the social costs.

✓ Learn from the past, while more and more countries wish to develop shipbuilding industries.
  • Brazil, India, Indonesia, Philippines, etc.
Viewpoints for Sustainable Maritime Industry

◆ Key words for sustainable development of the maritime industry
  ✔ Environment, safety, innovation, productivity, human resource, etc.

◆ Japanese “Maritime Cluster” grew together with local economies. Not overinvestment; enough care for education and training, stable employment. Model of “sustainable” maritime industry!

◆ “Fair competition” continues to be an indispensable element for sustainable development of the maritime industry due to its nature of “single market“.
  ✔ More for WP6 to accomplish