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World Shipbuilding Supply & Demand

OECD Workshop, 19 Dec. 2006

The Korea Shipbuilders’ Association

Contents

- World Economy: “Forecasting & Results”
- World Economy Factors: Positive & Negative
- New Building Delivery: Trends & Prospects
- World Ship Production & Capacity
- Summary
Higher Growth of World Economy:
To be Continued or Peak?
“Forecasting & Results”

World Economy is expected to continue its high growth trends at an annual growth rate of 4.7% ~ 5.1% through 2011 according to IMF WEO.

<table>
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Source: IMF, World Economic Outlook(2006.9)
At the 7th ISFM, all Associations forecasted that World Economy would grow at an annual average rate of 3.6% to 4.1% through 2010.

IMF is forecasting strong economic growth at a rate of 10% this year for Chinese Economy, which would continue to show its strong economic pace in the next few years. This high growth level is higher than that of a forecasting presented by Associations.
Considering Chart 1, Chart 2 & Chart 3, **World Economy** have shown an upward trend recently higher than expected, which has increased trade volume in all sectors such as Tanker, Bulk, Container shipping market as well as LNG demand. Accordingly, New building production in recent years exceeded the forecasting levels released by all Associations. These results remind us the need to amend the previous forecasting and finally let us agree to do new one by the Spring 2008.

**Factors affecting the World Economy in the Future:**

“Positive factors and Negative factors”
Positive Factors vs. Negative Factors

Positive:
- Continuing High Growth in BRICs
- Sustained Growth of U.S Economy
- Recovering Japanese Economy from the prolonged depression as well as EU zone

Negative:
- Geopolitical Uncertainty in Some Areas
- Expanding Trade Deficit in U.S
- Concern on High Oil Price

Negative factors may finally trigger oversupply in the market in some future while construction of huge new yards and expansion of facilities are proceeding.
New Building Delivery:
Has it Increased and to be continued?

Fig. 4, World New Building Delivery

Delivery has steadily increased since 2004. It is expected to be over 38.2 m CGT in 2007/2008, which would be the highest level in shipbuilding market history.

Source: Clarkson (2006.10)
As of the end of Oct. this year, projected deliveries for 2009 are already exceeding level of 30.0 m CGT.

Therefore,

It may be expected to continue its high delivery trends until the early of 2010s.

World Ship Production & Capacity:

It has sharply increased over the last ten years.

It will continuously increase in the next few years.
Fig. 5, World Ship Production Trends

Source: Lloyd’s Register

Fig. 6, World Capacity Evaluation by Organizations

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         2. KSA Evaluation(2001)/SAJ 2006(06.5)/CESA2006(06.9)/Clarkson2006(06.10)
Note: M.CGT
Fig. 7, World Shipbuilding Capacity in 2007/2010

Note: SAJ Capacity Evaluation (2004 & 2010)

Fig. 8, Delivery & Capacity in 2010

Note: SAJ (Blue), CESA (Red Point), Clarkson (Yellow)
Based on Figure 6, production volume as of the end of 2005 has already exceeded new building capacity level estimated by every association and institute.

Increase of World Capacity will continue in a few years to come.

Projected World Capacity

Factors to Increase World Capacity

- **Unexpected High Level of New Order in recent years**
- **Facility Investment**: Such as New and/or Added Facilities, Installation of Large Cranes
- **Diversification on the Facility Use**: Such as Facility Deregulation & Conversion of Repairing Facility for New building
- **Efficient Management, Productivity Enhancement**: Introduction of New building Technology, Increase of Outsourcing for Ship Production
Challenges to Be Considered

- New Environmental/Safety Regulation: Single Hull Tanker, PSPC, GBS, CSR
- Possible Steel Supply Shortage & Price hike
- Possible Over-capacity in the future

Summary

- Current market situations are favorable for all shipbuilders. And also,
- Steady world economy and increasing delivery until the early of 2010s would be enjoyable for shipbuilders. Therefore,
- Key parameter for world shipbuilding market in the future is world shipbuilding capacity depending on market situations.
Considering recently unexpected economic growth & favorable market situation, in order to avoid over-estimation or under estimation of market against real situation,

It is time to make effort to help increase common understanding on future shipbuilding market.