Where are we in the market cycles?
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Marine Money | Greek Shipfinance Forum | Athens
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Market Fundamentals

Cycles & Prices & Trends
Ship Earnings in today’s money over three decades

The main markets past cycle trough, but earnings still weak.
Good news on demand side – world industrial growth peaking; and trade growing fast.
Key issues are the development of the world economic business cycle, China’s steel, shipbuilding production, scrapping, environmental regulations and the dynamics of releasing the surplus capacity. Not easy to weight up.

***Average earnings of bulkers, oil tankers, containers and gas carriers
Sectors: Cycle Position October 2018

% deviation from earnings average 2008-2018

- Bulk carrier & Container rates improve after the extremely weak 2016
- Tanker Markets still weak
- The Gas market is well below trend, however since 2017 rates are on an upward trend – positive demand growth through to 2021

Bulk carriers much better than 12 months ago, but the Tanker market deteriorated

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>% Change in Average Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLCC</td>
<td>-106%</td>
</tr>
<tr>
<td>Suezmax</td>
<td>-70%</td>
</tr>
<tr>
<td>Aframax</td>
<td>-65%</td>
</tr>
<tr>
<td>LPG (VLGC)</td>
<td>-38%</td>
</tr>
<tr>
<td>LNG 160K CBM</td>
<td>-32%</td>
</tr>
<tr>
<td>LNG 145K CBM</td>
<td>-32%</td>
</tr>
<tr>
<td>Neo-Panamax 9000 teu</td>
<td>-15%</td>
</tr>
<tr>
<td>Intermediate Containership 6800 teu</td>
<td>-1%</td>
</tr>
<tr>
<td>Narrow Beam Containership 4400 teu gls</td>
<td>-1%</td>
</tr>
<tr>
<td>Feeder Containership 1700 teu grd</td>
<td>35%</td>
</tr>
<tr>
<td>Clean Products(MR)</td>
<td>-37%</td>
</tr>
<tr>
<td>Handysize</td>
<td>-38%</td>
</tr>
<tr>
<td>Supramax</td>
<td>-1%</td>
</tr>
<tr>
<td>Bulker Panamax</td>
<td>1%</td>
</tr>
<tr>
<td>Capesize</td>
<td>12%</td>
</tr>
</tbody>
</table>

% change in average earnings from the 2008-2018 average

Source Data: Optima Shipping Services, The Baltic Exchange
Newbuilding Prices out of the bottom - Bulkers

81K DWT Panamax Bulkcarrier NB Prices

61-64K DWT Supramax NB Prices
Newbuilding Prices - Containers

Containers 1700 TEU Newbuilding Prices

Containers 8800 TEU Newbuilding Prices
Secondhand Prices: Bulkers

Panamax 76K Bulkcarrier 5 Year Old Secondhand Prices

Handymax 56K 5 Year Old Secondhand Prices

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Secondhand Prices - Containers

Containers 1700 TEU 5 years old secondhand Prices

Containers 8800 TEU 5 years old secondhand prices
Yards revenue and deliveries in the 3 major sectors

Bulkers, Oil Tankers & Containers: Deliveries vs Yard revenue
A shift towards Chinese Ship Yards

For the 3 major sectors there are currently 188 active yards – of which 35% is expected to deliver their final order this year, whilst 78% of them will deliver their final order until the end of 2019.

In 2007 285 yards received more than 1 order, while in 2017 91 yards received more than 1 order – a decrease of 68%.

Inability to secure orders at a profit.

Issue: Yard Consolidation

China: “Plans on structural reform 2016-2020 in shipbuilding industry” → China’s top 10 state-owned shipbuilders will be responsible for 70% of the country’s new tonnage by 2020.

Japan follows the trend (capacity cuts & mergers), but S. Korea remains skeptical.

Cost increase: steel prices, labor cost, exchange rates.

The extra cost can be balanced if builders charge higher.
Sectors: Fleet Age Profile

Bulk Carriers: Existing Fleet Age Profile

Tankers: Existing Fleet Age Profile

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### Sectors: Fleet Age Profile

#### Containers: Existing Fleet Age Profile

<table>
<thead>
<tr>
<th>Container Type</th>
<th>0-4 yrs</th>
<th>5-9 yrs</th>
<th>10-14 yrs</th>
<th>15-19 yrs</th>
<th>20 yrs &amp; over</th>
</tr>
</thead>
<tbody>
<tr>
<td>15,000+ TEUs</td>
<td>88</td>
<td>8</td>
<td>7</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>12,000-14,999 TEUs</td>
<td>86</td>
<td>135</td>
<td>196</td>
<td>188</td>
<td>83</td>
</tr>
<tr>
<td>8,000-11,999 TEUs</td>
<td>198</td>
<td>100</td>
<td>67</td>
<td>183</td>
<td>76</td>
</tr>
<tr>
<td>6,000-7,999 TEUs</td>
<td>9</td>
<td>84</td>
<td>100</td>
<td>183</td>
<td>10</td>
</tr>
<tr>
<td>3,000-5,999 TEUs</td>
<td>78</td>
<td>337</td>
<td>414</td>
<td>817</td>
<td></td>
</tr>
<tr>
<td>Feeder</td>
<td>287</td>
<td>390</td>
<td>940</td>
<td>473</td>
<td>817</td>
</tr>
</tbody>
</table>

#### Contracting Pace in major sectors No of Contracts

- **Bulk Carrier**
- **Containers**
- **Crude Oil Tanker**
- **Products Tanker**

No expectation to return to firm levels though...
Forward Delivery Schedule No of vessels

Bulk Carriers OB:
- 14.5% Capes
- 8.6% Pmax
- 5.5% Supras
- 5.4% Hsize

Oil Tankers OB:
- 15% VLCCs
- 8.5% Suezmax
- 13.2% Afras
- 9% Pmax
- 11% LR2
- 7% LR1
- 8% MRs/Handies

Containers OB:
- 20.2% >8K TEU
- 1.14% 3-7.9K TEU
- 9% Feeders
Orderbook Accuracy & Slippage

**Bulk Carriers Orderbook**

2018 slippage at 20% of 2018 orders
For the 2019 51.3% of the orders have not yet started

**Containers Orderbook**

2018 slippage at 12% of 2018 orders
For the 2019 56.4% of the orders have not yet started

Source Data: Optima Shipping Services
2018 slippage at 27.3% of 2018 orders
For the 2019 72.5% of the orders have not yet started

2018 slippage at 3% of 2018 orders
For the 2019 51% of the orders have not yet started

Source Data: Optima Shipping Services
Seaborne Trade Growth – Dry Bulk – Asia’s Role

2018: Tradeflow in Million Tonnes

2008: Tradeflow in Million Tonnes

Source Data: Tradeviews

Export Country

Import Country

Tonne vs Tonne mile

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Seaborne Trade Growth – Oil Tankers & Gas – Asia’s Role

2018: Tradeflow in Million Tonnes

2008: Tradeflow in Million Tonnes

Source Data: Tradeflows

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The Outlook for the world economy and trade is expected to improve.

- Projections for the medium term point to continued expansion, with volumes growing at an estimated compound annual growth rate of 3.2% between 2017-2022.
- Volumes are set to expand across all segments, with containerized trade and major dry bulk commodities trade recording the fastest growth along with LNG.

Organization for Economic Cooperation and Development index of industrial production and world indices:
Gross domestic product, merchandise trade and seaborne shipments, 1975–2016
(1990 = 100) - UNCTAD
Investment Opportunities & Risks
Orderbook Replacement Tonnage in Mll DWT

Orderbook vs Vessels age above 20 years old

Orderbook vs Vessels age above 15 years old

Source Data: Optima Shipping Services
Prospects & Risks

- Trade still growing: Economic upswing supporting trade in short term and still growth potential in shipping demand – especially in Asia & developed economies. Trade impacted by Chinese economy and policy (OBOR).
- Fleet growth slowing: However, still many ships to hit the water and over 50% bigger, so larger market for service sector.
- Market Cycles: Better looking environment for Bulk Carriers/Containers/ LNG than Oil Tankers.
- Shipyard Capacity: Shipyard ordering became weak in 2016 and pressured for further consolidation and capacity reductions.
- Major change in financial landscape: High interest rates and new entries in shipping investment
- Environmental regulation change: Regulation accelerating and creating demand for solutions but timing and technology are pricy.
- Digitalization, e-commerce and the implementation of the Belt and Road Initiative: The unfolding effects of tech advances and China’s ambitious reordering of global trade infrastructure will entail important implications for shipping and maritime trade. Potential for a boost in seaborne trade volumes and enhanced efficiency through digitalization.
- Rising trade barriers: more and more countries adopt protectionist measures and there are many unresolved matters regarding several ongoing trade agreements
- A trend towards de-globalisation coming out from governments, intensifying protectionist policy approaches.
- Many factors nowadays have been impacting the shipping industry making it extremely difficult to calculate risks and plan long term investments.
- However challenging the markets might be there are still opportunities out there.
THANK YOU!

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