The shipping market cycle

All shipping sectors are highly cyclical... **but different sectors have different cycles**...
• “Deleveraging” process in Chinese shipbuilding industry
• Korea’s “Big Three” are better off
• Japanese yards are protected by conservative yard capacity management

Source: Clarksons, DVB Shipping and Offshore Research
Shipping – average time to delivery at contracting

*Excluding vessels < 10,000 DWT

Source: Clarksons, DVB Shipping and Offshore Research
Seaborne trade

Seaborne trade 2002-2016

Trade growth lower in 2010-16 than in 2002-08
Trade growth higher in 2010-16 than in 2002-08

Sectors not equally exposed to future over-capacity

[Sources: IHS Global, MSI and DVB Shipping & Offshore Research]

Source: IHS Global and DVB Shipping & Offshore Research
Freight rates are low in most shipping sectors

ClarkSea Index
[USD/Day]

Average 1990-1999
USD 12,016/Day (volatility 6%)

Average 2000-2008
USD 23,444/Day (volatility 11%)

Average 2009-2017
USD 11,768/Day (volatility 13%)

Sources: Clarksons SIN and DVB Shipping & Offshore Research
Dry Bulk – Freight rates

Baltic Dry Index

Sources: Clarksons SIN and DVB Shipping & Offshore Research
Dry Bulk – Supply

Orderbook delivery schedule

Supply growth expected to slowdown

Sources: IHS Global and DVB Shipping & Offshore Research

Capesize • Panamax • Supramax • Handysize

Total Fleet • Fleet growth (RHS)
Chinese import demand for major bulk commodities, 2016

Sources: MSI and DVB Shipping & Offshore Research

Breakdown of Chinese GDP

Sources: IMF and DVB Shipping & Offshore Research
Dry Bulk – Outlook

Seaborne trade

The demand-supply gap is expected to narrow over the next years

Sources: MSI and DVB Shipping & Offshore Research

Sources: IHS Global, MSI and DVB Shipping & Offshore Research
Container – Freight rates

Quarterly supply and demand growth

Freight rates and time charter rates

Supply growth  Demand growth

Sources: IHS Global, Maersk, Alphaliner and DVB Shipping & Offshore Research

CCFI (LHS)  Clarkson Timecharter Rate Index (RHS)

Sources: Clarksons SIN and DVB Shipping & Offshore Research
The relationship between GDP growth and container trade growth is changing.

Sources: IHS Global, IMF and DVB Shipping & Offshore Research
**Container – Supply**

**Orderbook delivery schedule**

- [Mn teu]

<table>
<thead>
<tr>
<th>Year</th>
<th>New Post-Panamax</th>
<th>7,000-9,999 teu</th>
<th>New Panamax</th>
<th>3,000-6,999 teu</th>
<th>Old Panamax</th>
<th>Feeder (0-3000 teu)</th>
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<tbody>
<tr>
<td>2017</td>
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<td>2020+</td>
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</tbody>
</table>

**Supply growth**

- [Mn teu]

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Fleet</th>
<th>Fleet growth (RHS)</th>
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<tbody>
<tr>
<td>2008</td>
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<tr>
<td>2018</td>
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</tbody>
</table>

Sources: IHS Global and DVB Shipping & Offshore Research
In aggregate, no major improvement in the supply-demand balance is expected in 2017 and 2018.
5,100 – 9,999 TEU – employment breakdown

Liner

Tonnage Provider

Charter contracts expiring 2017

Charter contracts expiring 2018

Intransparent contracts*

Long-term charters and charter contracts expiring 2019 and later

 SOURCES: Alphaliner and DVB Shipping & Offshore Research

* Charter contracts reported valid but not disclosing durations, or disclosing expiration dates lying in the past
Market Environment

Structural Trends of Global Energy Market

North America
- Shale Gas & Oil Development Leads to Excess Supply of Crude Oil, Oil Products, Chemical Products, LPG and LNG

Western Europe
- Petrochemical Capacity Rationalization is Delaying

Middle East
- Lifting sanction of Iran add more oil into the market
- Increased long-haul trade of products from new Middle East refineries

North East Asia
- China’s Slow Down and China’s Plan to Increase Self-Sufficiency of Chemical Products
- China remains to be the largest buyer for Crude oil

South East Asia & Australia
- New Liquefaction Plants Come on Stream and Start to Supply LNG

FSU
- Decline of oil production
- OECD Europe remains the main market

West Africa
- Oil exports to be squeezed by Middle East exports towards Far East

Petrochemical Industry to Expand to Downstream Sectors

Latin America
- Petrochemical projects may get reassessed, delayed or curtailed

Source: DVB Shipping and Offshore Research,
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