Purgatory = Dry Bulk and Container Shipping

February 2017

Ben Nolan, CFA, (312) 564-8703 - nolanb@stifel.com

Stifel does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

All relevant disclosures and certifications appear on pages 9-11 of this report
Signs of the Bottom

• DNB $903 million loan losses in 2016

• Nordea €502 million loan losses in 2016

• New commercial vessel ordering near 50-year low

• Hanjin Bankruptcy

• STX Shipbuilding
Dry Bulk – Reasons for Hope

Dry Bulk Ordering History

Source: Clarkson Research Services

Commodity Prices

Source: Bloomberg

Dry Bulk Fleet Growth

Source: Clarkson Research Services

Dry Bulk Equities

Source: Bloomberg

*Includes DSX, EGLE, GNK, GOGL, SALT, SB, SBLK
Reasons for Doubt: China

Chinese and Global Steel Production

Source: World Steel Association

China Iron Ore Imports vs. Production

Source: Bloomberg

Chinese Steel Exports

Source: Bloomberg

Chinese & Indian Thermal Coal Imports

Source: Clarkson Research Services

Chinese and Global Steel Production

Source: World Steel Association

China Iron Ore Imports vs. Production

Source: Bloomberg

Chinese Steel Exports

Source: Bloomberg

Chinese & Indian Thermal Coal Imports

Source: Clarkson Research Services
Iron Ore: In the Balance

China Iron Ore Inventory Levels

Iron Ore Majors Production Estimates

Source: Bloomberg

Source: Company filings
Containers – Still In Purgatory

**Container Box Rates**

$ per 40 ft box

$2,500
$2,000
$1,500
$1,000
$500
$0

May-16  Jul-16  Sep-16  Nov-16  Jan-17

- Shanghai to Rotterdam
- Shanghai to LA

Source: Bloomberg

**Idle Capacity vs Panamax Charter Rates**

$/day

$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0

Jan-11  Sep-11  May-12  Jan-13  Sep-13  May-14  Jan-15  Sep-15  May-16  Jan-17

- 6-12 Month 4400 TEU Rates
- Idle Capacity

Source: Clarkson Research Services

**Containership Fleet Growth**

mm teu

2.5
2.0
1.5
1.0
0.5
0.0


- Deliveries
- Removals
- Fleet Growth

Source: Clarkson Research Services and Stifel estimates
## Liner Consolidation

### January-15

<table>
<thead>
<tr>
<th>Market Share</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.3%</td>
<td>APM-Maersk</td>
</tr>
<tr>
<td>12.5%</td>
<td>Mediterranean Shg Co</td>
</tr>
<tr>
<td>8.1%</td>
<td>CMA CGM Group</td>
</tr>
<tr>
<td>4.8%</td>
<td>Hapag-Lloyd</td>
</tr>
<tr>
<td>4.7%</td>
<td>Evergreen Line</td>
</tr>
<tr>
<td>4.1%</td>
<td>COSCO Container Lines</td>
</tr>
<tr>
<td>3.3%</td>
<td>China Shipping</td>
</tr>
<tr>
<td>3.0%</td>
<td>Hanjin Shipping</td>
</tr>
<tr>
<td>3.0%</td>
<td>MOL</td>
</tr>
<tr>
<td>2.8%</td>
<td>NOL/APL</td>
</tr>
<tr>
<td>2.6%</td>
<td>Hamburg Süd Group</td>
</tr>
<tr>
<td>2.6%</td>
<td>OOCL</td>
</tr>
<tr>
<td>2.5%</td>
<td>NYK Line</td>
</tr>
<tr>
<td>2.0%</td>
<td>Yang Ming</td>
</tr>
<tr>
<td>1.9%</td>
<td>PIL</td>
</tr>
<tr>
<td>1.9%</td>
<td>Hyundai M.M.</td>
</tr>
<tr>
<td>1.8%</td>
<td>K Line</td>
</tr>
<tr>
<td>1.8%</td>
<td>UASC</td>
</tr>
<tr>
<td>1.6%</td>
<td>Zim</td>
</tr>
<tr>
<td>1.0%</td>
<td>Wan Hai Lines</td>
</tr>
<tr>
<td>---</td>
<td><strong>80.3%</strong></td>
</tr>
</tbody>
</table>

### 2017 (assuming announced consolidations)

<table>
<thead>
<tr>
<th>Market Share</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.8%</td>
<td>APM-Maersk</td>
</tr>
<tr>
<td>13.8%</td>
<td>Mediterranean Shg Co</td>
</tr>
<tr>
<td>10.5%</td>
<td>CMA CGM Group</td>
</tr>
<tr>
<td>8.0%</td>
<td>COSCO Container Lines</td>
</tr>
<tr>
<td>7.3%</td>
<td>Hapag-Lloyd/UASC</td>
</tr>
<tr>
<td>6.9%</td>
<td>MOL/NYK/K Line</td>
</tr>
<tr>
<td>4.8%</td>
<td>Evergreen Line</td>
</tr>
<tr>
<td>2.8%</td>
<td>Yang Ming</td>
</tr>
<tr>
<td>2.7%</td>
<td>OOCL</td>
</tr>
<tr>
<td>2.2%</td>
<td>Hyundai M.M.</td>
</tr>
<tr>
<td>1.7%</td>
<td>PIL</td>
</tr>
<tr>
<td>1.4%</td>
<td>Zim</td>
</tr>
<tr>
<td>1.1%</td>
<td>Wan Hai Lines</td>
</tr>
<tr>
<td>---</td>
<td><strong>82.0%</strong></td>
</tr>
</tbody>
</table>

Source: Alphaliner
And the Fleet...

Consolidation Makes Sense

- Old multiple of 2x GDP growth is now more like 1x GDP growth
- Liner consolidation means more efficient companies which means fewer ships
- More rational liners also probably means more rational ordering and less structural oversupply, eventually
Important Disclosures and Certifications

I, Ben Nolan, certify that the views expressed in this research report accurately reflect my personal views about the subject securities or issuers; and I, Ben Nolan, certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report. Our European Policy for Managing Research Conflicts of Interest is available at www.stifel.com.

The equity research analyst(s) responsible for the preparation of this report receive(s) compensation based on various factors, including Stifel’s overall revenue, which includes investment banking revenue. Our investment rating system is three tiered, defined as follows:

**BUY** - We expect a total return of greater than 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

**HOLD** - We expect a total return between -5% and 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

**SELL** - We expect a total return below -5% over the next 12 months with total return equal to the percentage price change plus dividend yield.

Occasionally, we use the ancillary rating of **SUSPENDED** (SU) to indicate a long-term suspension in rating and/or target price, and/or coverage due to applicable regulations or Stifel policies. **SUSPENDED** indicates the analyst is unable to determine a “reasonable basis” for rating/target price or estimates due to lack of publicly available information or the inability to quantify the publicly available information provided by the company and it is unknown when the outlook will be clarified. **SUSPENDED** may also be used when an analyst has left the firm.

Of the securities we rate, 54% are rated Buy, 40% are rated Hold, 1% are rated Sell and 5% are rated Suspended. Within the last 12 months, Stifel or an affiliate has provided investment banking services for 19%, 7%, 5% and 5% of the companies whose shares are rated Buy, Hold, Sell and Suspended, respectively.
Additional Disclosures

Please visit the Research Page at www.stifel.com for the current research disclosures and respective target price methodology applicable to the companies mentioned in this publication that are within Stifel's coverage universe. For a discussion of risks to target price please see our stand-alone company reports and notes for all Buy-rated and Sell-rated stocks.

The information contained herein has been prepared from sources believed to be reliable but is not guaranteed by us and is not a complete summary or statement of all available data, nor is it considered an offer to buy or sell any securities referred to herein. Opinions expressed are subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of individual investors. Employees of Stifel, or its affiliates may, at times, release written or oral commentary, technical analysis or trading strategies that differ from the opinions expressed within. Past performance should not and cannot be viewed as an indicator of future performance.

As a multi-disciplined financial services firm, Stifel regularly seeks investment banking assignments and compensation from issuers for services including, but not limited to, acting as an underwriter in an offering or financial advisor in a merger or acquisition, or serving as a placement agent in private transactions.

Affiliate Disclosures

“Stifel”, includes Stifel Nicolaus & Company (“SNC”), a US broker-dealer registered with the United States Securities and Exchange Commission and the Financial Industry National Regulatory Authority and Stifel Nicolaus Europe Limited (“SNEL”), which is authorized and regulated by the Financial Conduct Authority (“FCA”), (FRN 190412) and is a member of the London Stock Exchange.

Registration of non-US Analysts: Any non-US research analyst employed by SNEL contributing to this report is not registered/qualified as a research analyst with FINRA and is not an associated person of the US broker-dealer and therefore may not be subject to NASD Rule 2711 or NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.
Country Specific and Jurisdictional Disclosures

**United States:** Research produced and distributed by SNEL is distributed by SNEL to “Major US Institutional Investors” as defined in Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. SNEL is a non-US broker-dealer and accordingly, any transaction by Major US Institutional Investors in the securities discussed in the document would need to be effected by SNC. SNC may also distribute research prepared by SNEL directly to US clients that are professional clients as defined by FCA rules. In these instances, SNC accepts responsibility for the content. Research produced by SNEL is not intended for use by and should not be made available to retail clients, as defined by the FCA rules.

**Canadian Distribution:** Research produced by SNEL is distributed in Canada by SNC in reliance on the international dealer exemption. This material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a “permitted client” as defined under applicable Canadian securities law.

**UK and European Economic Area (EEA):** This report is distributed in the EEA by SNEL, which is authorized and regulated in the United Kingdom by the FCA. In these instances, SNEL accepts responsibility for the content. Research produced by SNEL is not intended for use by and should not be made available to non-professional clients.

In jurisdictions where Stifel is not already licensed or registered to trade securities, transactions will only be affected in accordance with local securities legislation which will vary from jurisdiction to jurisdiction and may require that a transaction carried out in accordance with applicable exemptions from registration and licensing requirements. Non-US customers wishing to effect transactions should contact a representative of the Stifel entity in their regional jurisdiction except where governing law permits otherwise. US customers wishing to effect transactions should contact their US salesperson.

**Additional information is available upon request**

© 2015 Stifel. This report is produced for the use of Stifel customers and may not be reproduced, re-distributed or passed to any other person or published in whole or in part for any purpose without the prior consent of Stifel. Stifel, Nicolaus & Company, Incorporated, One South Street, Baltimore, MD 21202.