Tanker Market Insight
October 2016
September review: Mid-sized tanker rates felt the warm glow of returning Nigerian and Libyan volumes to the market, with Atlantic basin rates recovering from a weak August showing. VLCC rates felt downward pressure as shorter-haul trade from MEG – India took away from volumes moving East due to Chinese refinery maintenance. LR2 demand remained depressed as the West – East arbitrage remained closed as high onshore stocks in Asia limited import demand.

October outlook: The conclusion of Chinese refinery maintenance alongside increased production in Libya and Nigeria have started to provide upside support for rates across most segments. However, a lack of Venezuelan cargoes will continue to put some downside pressure to Aframax rates in the Caribs market. TCEs across all segments will see some negative pressure as oil price increases are also bringing up the price of bunkers.

Wild cards: While Libyan and Nigerian volumes have returned to the market and are providing some healthy upside to mid-sized rates in the Atlantic Basin, the whole thing could come to a halt should geopolitical stability deteriorate. Given what we know of these regions, it would not be surprising if that were to occur. Weather-related delays could crop up through the month should hurricane / typhoon season continue to be as active as it has been in recent weeks. Rising oil prices are also driving up bunker costs, and could take the shine off TCEs should prices increase further.

Increases in Atlantic Basin supply continue to support mid-sized tanker rates
<table>
<thead>
<tr>
<th>Segment</th>
<th>Aug’16</th>
<th>Sept’16</th>
<th>September Review</th>
<th>October Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>VLCC</td>
<td>17,085</td>
<td>15,000</td>
<td><strong>↓</strong> Increased Indian imports of MEG crude put a damper on tonne-mile demand in September. Declining demand from Chinese teapot refineries, refinery maintenance, and slowing SPR builds brought down Chinese seaborne import demand, which was also chipped away at VLCC demand.</td>
<td><strong>↑</strong> The conclusion of Chinese refinery maintenance alongside the return of WAF volumes to the market could provide some positive momentum for rates as tonnage becomes stretched between the AG and the Atlantic basin.</td>
</tr>
<tr>
<td>Suezmax</td>
<td>5,545</td>
<td>19,500</td>
<td><strong>↑</strong> WAF production increased by ~ 300 kb/d in September, which prompted a dramatic rise in Suezmax rates mid-month. Increased Russian and Iraqi exports also provided further support for the increase in rates.</td>
<td></td>
</tr>
<tr>
<td>Aframax (Pacific)</td>
<td>10,930</td>
<td>7,500</td>
<td><strong>↓</strong> Long tonnage lists and limited cargos put a damper on rates, while the hopes of weather-related delays did not materialize.</td>
<td><strong>↔</strong> Russian crude exports from Kozino are expected to fall 18 kb/d m-o-m to a two-month low of 640 kb/d in October, which is negative for Aframax demand in the region.</td>
</tr>
<tr>
<td>Aframax (Atlantic)</td>
<td>7,625</td>
<td>14,050</td>
<td><strong>↑</strong> Increased demand cross-MED as Libyan volumes began returning to the market provided some upside to rates. However, gains were capped as the Caribs market remained depressed from a lack of Venezuelan cargos while maintenance on the Buzzard field commenced in the North Sea, resulting in fewer cargos.</td>
<td><strong>↑</strong> Libyan production has risen to ~450 kb/d so far in October, compared to ~190 kb/d in August, which is positive for the MED market. An uptick in Baltic exports, reaching a two year high of ~1.8 mb/d (an increase of ~184 kb/d m-o-m) will also provide support for rates.</td>
</tr>
<tr>
<td>LR2</td>
<td>18,415</td>
<td>12,250</td>
<td><strong>↓</strong> The West-East arbitrage remained closed alongside ongoing high onshore inventories, leaving long position lists open in the AG, which put downward pressure on rates.</td>
<td><strong>↔</strong> Shell Chemicals has shut one of its petrochemical production plants in Singapore, which is negative for naphtha demand. In addition, rates could come under pressure as Middle Eastern exports dip due to refinery maintenance.</td>
</tr>
</tbody>
</table>

**Spot Market Review and Outlook**

The return of WAF and Libyan exports provided upside to mid-sized tankers.
Time charter rates continued to slip as sentiment in the market remains soft.

### Broker Assessed Time Charter Rates

<table>
<thead>
<tr>
<th></th>
<th>1 year time charter rates ($/day)</th>
<th>3 year time charter rates ($/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aug16</td>
<td>Sept’16</td>
</tr>
<tr>
<td>VLCC</td>
<td>30,000</td>
<td>↓ 28,750</td>
</tr>
<tr>
<td>Suezmax</td>
<td>21,000</td>
<td>↓ 21,250</td>
</tr>
<tr>
<td>Aframax</td>
<td>17,750</td>
<td>↓ 16,750</td>
</tr>
<tr>
<td>LR2</td>
<td>17,750</td>
<td>↓ 15,750</td>
</tr>
<tr>
<td>MR</td>
<td>14,000</td>
<td>↓ 13,250</td>
</tr>
</tbody>
</table>

Source: Average of Clarksons, Braemar ACM, and Poten
S&P Activity

- Liquidity was low in September compared to previous months. However, there were two sales concluded in the month that set new, lower benchmarks.
- The Aframax Lion City River (105k DWT/2007/Namura) sold for $20.5M to independent owner Avin, Greece. This price was lower than the last done, the ISIS (116k/2007/Universal), which was renegotiated down in early September to $24M. The price achieved on the Lion City River is 12% lower than broker assessed values.
- The MR Nord Observer (47k DWT/2007/Onomichi) sold for $14.3M which is a step down in price. As a comparison, the older MR Challenge Prospect (48k DWT/2005/Iwagi Zosen) sold for $14M in July-2016.
- Asset prices continue to be negatively impacted by a lack of available financing (debt and equity markets) and concern about the high number of newbuildings scheduled to deliver over the next 4-6 quarters. As we progress into Q4-2016, owners will start incorporating an extra year of depreciation in their price ideas.

Asset Values (USD million)

<table>
<thead>
<tr>
<th></th>
<th>VLCC</th>
<th>Suezmax</th>
<th>Aframax</th>
<th>LR2</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>NB</td>
<td>85.0</td>
<td>55.0</td>
<td>45.0</td>
<td>47.0</td>
<td>33.3</td>
</tr>
<tr>
<td>0</td>
<td>86.0</td>
<td>57.0</td>
<td>47.0</td>
<td>50.0</td>
<td>34.0</td>
</tr>
<tr>
<td>5yr</td>
<td>62.0</td>
<td>44.0</td>
<td>32.5</td>
<td>35.0</td>
<td>23.0</td>
</tr>
<tr>
<td>10yr</td>
<td>41.0</td>
<td>31.5</td>
<td>21.0</td>
<td>21.0</td>
<td>16.5</td>
</tr>
<tr>
<td>15yr</td>
<td>26.0</td>
<td>20.0</td>
<td>15.0</td>
<td>15.0</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Fleet Statistics

- The tanker fleet grew by 24.3 mdwt (5.0%) in the first nine months of 2016 vs. growth of 10.7 mdwt (2.1%) in the same period of 2015.
- 1.6 mdwt of tankers were scrapped in the first nine months of the year, putting 2016 on track for the lowest level of annual scrapping since 1989.
- Fleet growth is expected to remain elevated for the next 12-18 months as a large number of VLCCs and Suezmaxes are set to deliver, with anticipated tanker fleet growth of 5.2% in 2016 and 5.3% in 2017.

Forecasted Fleet Growth by Size Range

<table>
<thead>
<tr>
<th></th>
<th>VLCC</th>
<th>Suezmax</th>
<th>Aframax</th>
<th>LR2</th>
<th>Panamax</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>6.0%</td>
<td>4.8%</td>
<td>2.0%</td>
<td>9.8%</td>
<td>4.4%</td>
<td>4.7%</td>
</tr>
<tr>
<td>2017</td>
<td>5.0%</td>
<td>7.7%</td>
<td>2.1%</td>
<td>7.8%</td>
<td>5.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>2018</td>
<td>3.3%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>1.1%</td>
<td>3.0%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: Clarksons
Note: values in brackets indicates change from last month
Economy Outlook

• The IMF and OECD have recently updated their forecasts, with minimal change from their previous forecasts.

• According to the OECD, global GDP growth is projected to remain flat in 2016 with only a modest improvement in 2017. Weaker conditions in advanced economies, including the effects of Brexit, are offset by a gradual improvement in major emerging market commodity producers. Overall, the OECD comments that the world economy remains in a low-growth trap with persistent growth disappointments.

<table>
<thead>
<tr>
<th>USA</th>
<th>Growth in 2016 has been weaker than expected. The IMF forecasts GDP growth of 1.6% in 2016 and 2.2% in 2017, after growth of 2.6% in 2015.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>GDP growth slowed in the second quarter, driven by weak domestic demand and a slow recovery in the labor market.</td>
</tr>
<tr>
<td>Japan</td>
<td>Growth remains sluggish, with the appreciation of the yen and weak Asian trade weighing on exports.</td>
</tr>
<tr>
<td>China</td>
<td>Forecasts remain unchanged; growth in the first half of 2016 stabilized within the official target range of 6.5 – 7%.</td>
</tr>
</tbody>
</table>

Oil Demand Outlook

• The IEA has reduced their forecast of global oil demand growth in 2016 and 2017.

• According to the IEA, the stimulus from cheaper oil is fading and economic worries in developing countries haven’t been supportive of demand. As a result, global oil demand growth decreased from a robust year-over-year growth of 1.4 mb/d in the second quarter of 2016 to a two-year low of 0.8 mb/d in the third quarter.
OPEC’s recent announcement of forthcoming production cuts has provided oil markets with some buoyancy, and has brought prices above $51 for the first time since Oct’15. Under the agreement, OPEC production is expected to be reduced to 32.5 – 33.0 mb/d from current production levels of around 33.2 – 33.4 mb/d. The proposed drop in production therefore amounts to 0.2 – 0.9 mb/d, depending on what numbers you trust. If implemented, the cuts would bring the oil market into balance much faster than expected.

Details about how OPEC will achieve the cuts, or what quotas will be applied to each individual country, are expected to be announced at their next meeting in November. Of particular interest will be the quotas applied to Libya, Nigeria, and Iran, all of which are pumping below capacity, and all of which could conceivably increase production in the coming months if geopolitical conditions improve. Such exemptions would likely result in positive fundamentals for mid-sized tanker demand. As the chart below illustrates, there is a strong correlation between Nigerian production and Suezmax rates.

Recent increases to Libyan production have re-injected life back into the cross-MED market, and as the chart above illustrates, there is much more upside if we are to believe those currently controlling the Libyan NOC. As we’ve seen in cross-MED and ex-WAF rates in recent weeks with the dramatic increase in rates, more supply in the Atlantic is a positive story for mid-sized tanker demand. And if buyers have to look further afield from the Middle East to procure their volumes, the story can become even more positive. The flip side of that story is that VLCC demand could face a more challenging future given that a reduction in Middle Eastern exports will chip away at the bread and butter of VLCC demand.

In sum, OPEC cuts could be positive for the mid-sized market if exemptions are given to Nigeria and Libya as movements of Atlantic basin crude to Eastern buyers replace the cut in Middle Eastern volumes.