Containership Market Outlook

(an analysis of the fleet profile, trade prospects, and rates)

September 2018
Index

1. Fleet Development page 3
2. Shipbuilding Trends page 22
3. Detailed Age Profiles page 31
4. The Demand Side page 40
5. The Charter and S&P Markets page 48
6. Final Words page 51
Fleet Development

(deliveries, demolition, fleet growth)
Over the next few slides we will illustrate the current situation of the fleet of cellular containerships, in terms of number of trading units, total TEU capacity, the orderbook and projected fleet growth.

The present fleet of fully-cellular units larger than 500 TEU amounts to 4,917 units, with a total capacity of 21.8 million TEU, as of September 2018. Whilst trading units of 8,000+ TEU currently number 971 units (20 percent of the total) and total 11.1 million TEU (55 percent of the total), they amount to 37 percent of the orderbook in terms of number of units, and 83 percent of the orderbook in TEU capacity terms.

In 2016, 122 vessels were delivered equivalent to 0.91 million TEU while in 2017, 149 new vessels equivalent to 1.18 million TEU were delivered, 29 percent more in terms of TEU capacity than the previous year.

During the first 8 months of 2018, 127 units were delivered for a total 1.0 million TEU (+34 percent year-on-year in term of capacity) and 20 units were demolished totalling 0.048 million TEU (-87 percent y-o-y).

Moving forward, for the full year 2018 we expect a total of around 1.4 million TEU capacity to be delivered. Our most recent projection assumes a reduction of delivery slippage to 15 percent. In this issue we also changed our assumption for the demolition activity moving forward; since the second half of 2017, market improvements have resulted in a sudden drop in demolition activity. Our new assumption for the period 2018/2020 is shown on page 15.

The effect of slightly faster deliveries and, in particular, slower demolition is clear: we now expect the containership fleet to grow at a slightly faster pace, compared to our previous outlook.

Most of the fleet growth will come from the largest vessel sizes with units above 12,000 TEU accounting for over 63 percent of the expected growth in 2018 and the size between 8,000/11,999 TEU accounting for another 19 percent. The fleet of units between 3,500 and 4,999 TEU is expected to slightly shrink given that these units are now too small for long haul voyages and too big for regional or feeder services. The fleet of feeder units below 3,500 TEU is expected to grow slightly over the next couple of years. Total containership fleet growth is expected to record a 8 percent increase in 2018, after assuming 15 percent slippage, with a lower growth of 3 percent in 2019 and 2020.
Our size breakdown for containerships:

- **ULCS** 12,000+ TEU
- **VLCS** 8,000-11,999 TEU
- **Post-Panamax** 5,000-7,999 TEU
- **Panamax** 3,500-4,999 TEU
- **Intermediate** 2,000-3,499 TEU
- **Handy** 1,000-1,999 TEU
- **Feeder** 500-999 TEU

(note: for all sizes, includes only fully cellular units)
The containership fleet of 500+ TEU currently numbers 4,917 ships as of September 2018. The containership fleet of 8,000+ TEU currently numbers only 971 units (20 percent of the total), while 55 percent of the containership fleet is smaller than 3,500 TEU.
The containership fleet of 500+ TEU currently amounts to 21.8 million TEU. The containership fleet of 8,000+ TEU currently amounts to 11.1 million TEU, 51 percent of the total fleet.
The container market has been increasingly consolidating into alliances between the main liner companies. The three major alliances account for 84% of the global fleet.
Almost three-quarters of the containership fleet of 500+ TEU was built in the Far East, with South Korea accounting for around 35 percent of the global fleet, followed by China and Japan accounting respectively for a further 26 percent and 12 percent. European-built units are mainly older and smaller units assembled in Germany, Denmark and Poland.
Because of higher costs and smaller yards, just 2 vessels of 2,000 TEU each are on order in Europe, with China controlling over half of the global orderbook followed by South Korea and Japan.
Most of the trading containership fleet of 500+ TEU was built in South Korean and Chinese shipyards. South Korean production tends to be concentrated in a few shipyards, while Chinese production was spread across a larger number of shipyards.
While shipbuilding in past years have been spread across a large number of active shipyards, in recent times China has been concentrating its production in fewer, larger and more modern yards. Looking at the shipyards with the largest orderbook at present, 5 of them are located in China.
The increase in average ship size continues. Ships over 12,000 TEU accounted for 62 percent of total TEU delivered in 2017, and account for 69 percent of the capacity expected between 2018 and 2020.
In 2017, 149 new vessels equivalent to 1.2 million TEU were delivered, 29 percent more than in 2016. During the first 8 months of 2018, 127 units (over 1.0 million TEU) were delivered: 57 units above 8,000 TEU, 8 units between 3,500 and 4,999 TEU, 32 units between 2,000/3,499 TEU, 21 units between 1,000/1,999 TEU and 9 units between 500/999 TEU.
Demolition activity fell dramatically from record strong 652,000 TEU in 2016 to 433,000 TEU in 2017. Given the low demolition activity during the second part of 2017 and during the first 8 months of 2018 we revised our forecast for 2018 to just 1100,000 TEU and 2019 to 300,000 TEU; this slightly affects our supply growth estimates.
During the first 8 months of 2018 only 20 units were demolished: 1 unit between 5,000/7,999 TEU, 7 units between 3,500/4,999 TEU, 2 units between 2,000/3,499, 4 units between 1,000/1,999 TEU and 6 units between 500/999 TEU.
In 2018 so far we recorded deliveries for 1,040,000 TEUs whilst demolition accounts only to 47,600 TEUs, for a net fleet growth of 992,400 TEUs. Clearly most of the growth comes from the largest segments where no demolitions have been recorded and most deliveries took place.
Our growth forecast for 2018-2020 is based on the current orderbook after assuming 15 percent delivery slippage and a strong slowdown of demolitions in 2018 and 2019 in line with what we are witnessing over the last 12 months.
Our growth forecast for 2018-2020 is based on the current orderbook after assuming 15 percent delivery slippage and a strong slowdown of demolitions in 2018 and 2019 in line with what we are witnessing over the last 12 months.
Our growth forecast for 2018-2020 is based on the current orderbook after assuming 15 percent delivery slippage and a strong slowdown of demolitions in 2018 and 2019 in line with what we are witnessing over the last 12 months.
Our growth forecast for 2018-2020 is based on the current orderbook after assuming 15 percent delivery slippage and a strong slowdown of demolitions in 2018 and 2019 in line with what we are witnessing over the last 12 months.
Shipbuilding Trends

(newbuilding orders, major builders)
During the first 8 months of 2018 we recorded new orders for 99 vessels: 18 ULCS, 25 VLCS, 27 ships between 2,000/3,499 TEU, 28 Handy containerships and just one Feeder; no units between 3,500/7,999 TEU were ordered so far. The above figures show a very strong increase of newbuilding activity compared to the first 8 months of 2017 when only 5 x 2,000/3,499 TEU, 10 Handies and 9 Feeders were ordered.

South Korean yards remain the favourite choice with Samsung and Hyundai securing 38 orders so far. The Japanese shipbuilding industry has also been making quite a strong come back in the container sector, with Imabari awarded 18 units. Chinese yards secured 31 units, all in the smaller sizes.

From the analysis of the orderbook it is clear that orders have been extremely polarized in 3 main segments for the last few years: the new ULCS, above 20,000 TEU ordered by major liner companies to compete on the Far East-Europe and Far East-West Coast North America, the NeoPanamax vessels, and the Feeder and Feedermax vessels.

These 3 segments represent the 3 main drivers in the industry:

- the effort to achieve higher economies of scale and be competitive on the main long haul routes, in particular on the Far East-Europe trades.

- the possibility to take advantage of the New Panama Canal and its larger locks to service in one voyage both the West and East Coasts of Americas. As of 1 June the Panamax Canal Authority announced that will allow ships of up to 51.25 m to transit the Canal, effectively allowing 20-row wide containerships – the limit was before set at 49 m. Moreover the LOA limit, set at 366 m, has been lifted on a vessel by vessel basis. This should allow vessels of up to around 15,000 TEU to transit the Canal.

- The Feeder and Feedermax fleet are ageing quickly and new units are needed to replace overaged tonnage.

It is also clear from the orderbook that vessels between 3,500 and 10,000 TEU, very popular around the turn of the century, might face an “almost extinction” in a not too distant future, since they are too small to compete on long haul routes and too big for distribution services: only 3 vessels are currently on order in the 3,500/10,000 TEU sizes.
Orders started to pick up in the second half of 2017. During the first 8 months of 2018, a total of 99 new orders were placed compared to just 24 orders during the same period in 2017. 2018 orders include: 18 x 12,000+ TEU and 55 x 1,000/3,500 TEU. Orders focus on large ships and feeder vessels, ordered to substitute old tonnage going to demolition.
After a record low in 2016, orders started to pick up again during the second half of 2017. During the first 8 months of 2018, concluded orders showed clearly a focus on sizes between 1,000/3,500 TEUs and over 11,000 TEUs. Vessels between these two sizes are too large for feeder service and too small for liner service.
The orderbook for all containerships is now equivalent to 7 percent of the current trading fleet in unit terms. The highest orderbook to fleet ratio is for units above 12,000 TEU at 28 percent.
Containership vessel sizes continue to grow exponentially, and there are a growing number of carriers ordering ULCSs in order to compete with their peers awaiting ULCS deliveries.
There are currently 36 units on order sized between 11-11,999 TEUs, and 97 units on order above 12,000 TEUs, of which 40 units are over 20,000 TEUs. Orders for sizes between 1,000-3,499 TEU also remain consistent with 201 units on order.
In 2018 so far, Japan and S. Korea attracted over 60 percent of new orders whilst China reached around 25 percent; during the last few years Chinese yards were the favourite choice attracting more than half of new orders each year.
Over the last decade we have witnessed a strong expansion of Chinese shipbuilding. While South Korea has been maintaining a strong market share over the past few years, they are being increasingly squeezed out in the current orderbook. Japanese shipbuilding, which has been pressured in recent years, appears to be making a come back in 2018.
Detailed Age Profiles

(for individual sizes)
All Container (500+ TEU) Age Profile (in TEU)

(updated in September 2018)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>37</td>
<td>108</td>
<td>520</td>
<td>709</td>
<td>1,606</td>
<td>1,127</td>
<td>810</td>
</tr>
<tr>
<td>% of fleet</td>
<td>1%</td>
<td>2%</td>
<td>11%</td>
<td>14%</td>
<td>33%</td>
<td>23%</td>
<td>16%</td>
</tr>
</tbody>
</table>
ULCS Container (12,000+ TEU) Age Profile (in units)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>140</td>
<td>202</td>
</tr>
<tr>
<td>% of fleet</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>40%</td>
<td>58%</td>
</tr>
</tbody>
</table>

(updated in September 2018)
VLCS Container (8,000-11,999 TEU) Age Profile (in units)

(updated in September 2018)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>19</td>
<td>189</td>
<td>196</td>
<td>210</td>
</tr>
<tr>
<td>% of fleet</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>3%</td>
<td>30%</td>
<td>32%</td>
<td>34%</td>
</tr>
</tbody>
</table>
PostPanamax Container (5,000-7,999 TEU) Age Profile (in units)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>146</td>
<td>229</td>
<td>133</td>
<td>27</td>
</tr>
<tr>
<td>% of fleet</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
<td>26%</td>
<td>41%</td>
<td>24%</td>
<td>5%</td>
</tr>
</tbody>
</table>

(updated in September 2018)
Panamax Container (3,500-4,999 TEU) Age Profile (in units)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>0</td>
<td>7</td>
<td>24</td>
<td>82</td>
<td>238</td>
<td>265</td>
<td>60</td>
</tr>
<tr>
<td>% of fleet</td>
<td>0%</td>
<td>1%</td>
<td>4%</td>
<td>12%</td>
<td>35%</td>
<td>39%</td>
<td>9%</td>
</tr>
</tbody>
</table>

(updated in September 2018)
### Intermediate Container (2,000-3,499 TEU) Age Profile (in units)

#### (updated in September 2018)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>12</td>
<td>23</td>
<td>79</td>
<td>169</td>
<td>287</td>
<td>103</td>
<td>108</td>
</tr>
<tr>
<td>% of fleet</td>
<td>2%</td>
<td>3%</td>
<td>10%</td>
<td>22%</td>
<td>37%</td>
<td>13%</td>
<td>14%</td>
</tr>
</tbody>
</table>

- **Scrapped or Total Loss**
- **Trading**
- **Orderbook**
### Handy Container (1,000-1,999 TEU) Age Profile (in units)

(Updated in September 2018)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>18</td>
<td>47</td>
<td>228</td>
<td>190</td>
<td>391</td>
<td>229</td>
<td>168</td>
</tr>
<tr>
<td>% of fleet</td>
<td>1%</td>
<td>4%</td>
<td>18%</td>
<td>15%</td>
<td>31%</td>
<td>18%</td>
<td>13%</td>
</tr>
</tbody>
</table>
### Feeder Container (500-999 TEU) Age Profile (in units)

#### (updated in September 2018)

<table>
<thead>
<tr>
<th>Age range</th>
<th>30 yrs +</th>
<th>25-29 yrs</th>
<th>20-24 yrs</th>
<th>15-19 yrs</th>
<th>10-14 yrs</th>
<th>5-9 yrs</th>
<th>up to 4 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of units</td>
<td>7</td>
<td>31</td>
<td>157</td>
<td>103</td>
<td>263</td>
<td>61</td>
<td>35</td>
</tr>
<tr>
<td>% of fleet</td>
<td>1%</td>
<td>5%</td>
<td>24%</td>
<td>16%</td>
<td>40%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>
The Demand Side

(container trade, port throughput)
Global container trade growth slowed to 1.5 percent in 2015, following which, driven by an improving economic environment and global growth, the container trade gained pace and increased 3.9 percent in 2016 and a strong 4.7 percent in 2017. During the first 7 month of 2018, the container trade has increased further by an estimated 4.7 percent.

Asia, primarily China, continues to play a dominant role in the export of containerised goods, with the region accounting for 56 percent of global container exports during the first 7 months of 2018. Exports from Asia have shown the strongest volume increase of 2.2 million TEU during the first 7 months of the year – a 4.1 percent year-on-year increase. Strong rates of growth have also been registered from the Sub Continent and the Middle East (+13.3 percent), as well as South and Central America (+6.7 percent), although their weight on total exports however is quite limited.

Asia also accounts for the largest share of global container imports, making up 39 percent of global imports during the first 7 months of the year. Imports to Asia showed the strongest volume increase of 1.1 million TEU or 3.1 percent year-on-year. Imports to Europe accounted for a further 20 percent, and increased 0.6 million TEU or 3.2 percent year-on-year. Imports to North America accounted for another 17 percent, and increased 0.6 million TEU, up 3.6 percent year-on-year. The strongest growth however comes from the Sub Continent and Middle East region with a jump of 1.0 million TEU or 17.9 percent year-on-year.

Several factors have contributed to lower container throughput growth in previous years, including the conversion from breakbulk to the containerised mode of transportation reaching a peak; lower volume due to the trend of miniaturisation of manufactured goods; slowdown in the rate of manufactured activities being offshored to Asia and especially to China; and slowdown in the Chinese economy. According to Alphaliner, China and Hong Kong together are expected to account for a third of global port throughput in 2018, around 270 million TEU – an increase of 4.1 percent compared with 259 million TEU recorded a year ago.

The top 30 ports are estimated to account for over half of global container throughput, with the first 8 of the world’s top 10 container ports in Asia Pacific. Shanghai remained the world’s busiest container port, processing 20.5 million TEU in the first 6 months of 2018, whilst Singapore processed an estimated 18.0 million TEU.
The world container trade growth has been gaining momentum, increasing from an estimated 1.5 percent growth in 2015 to 4.7 percent in 2017. Data for the first 7 months of 2018 show a 4.7 percent growth year-on-year to an average 13.9 million liftings per month.
Asia, primarily China, continues to play a dominant role in the export of containerised goods. During the first 7 months of this year, Asia accounted for 56 percent of global container exports, while Europe accounted for a further 17 percent.
In the first 7 months of 2018, exports from Asia have shown the strongest volume increase of 2.2 million TEU – a 4.1 percent year-on-year increase. Strong rates of growth have also been registered from the SubCont & Middle East (+13.3 percent), as well as South and Central America (+6.7 percent).
Asia remained the largest importer of containerized good, accounting for 39 percent of global imports. Europe and North America accounted for a further 20 percent and 17 percent of imports respectively.
Imports to Asia recorded the strongest increase during the first 7 months of the year with a growth of 1.1 million TEUs. Shipments to the Sub Continent and Middle East grew around 1 million TEUs (+17.9 percent). Strong growth was also recorded from Oceania, and South and Central Americas.
In the first six months of 2018, Shanghai remained the world’s busiest port. 8 out of the world’s top 10 busiest ports are in Asia, of which, 7 are in China including Hong Kong.
Charter and S&P Markets

(TC rates, newbuilding and secondhand prices)
After a softer trend following the spike recorded during the first half of 2017, rates trended upwards since the end of last year, although they have since moderated in recent months. Since the beginning of the year rates increased by over a quarter on average: 4,250 TEU rates increased 55 percent whilst Handy units between 8 and 15 percent.
The price of a mid-sized containership newbuilding remained fairly steady at around $40 million over the past 5 years, although prices have increased slightly with improving rates and growing interest. Second hand prices fell for most of the past decade, although since the beginning of 2017 secondhand values have started increasing again.
Final Words

(summary and conclusions)
After a very negative period since the second quarter of 2015, charter rates for containerships have recorded strong growth since the start of 2017, as demand growth is estimated to have significantly outpaced supply growth since 2017. 1 year TC rates for 4,250 TEU vessels increased from $4,200/d in 2017 Q1 to over $13,000/d recorded in June 2018, while rates for 1,700 TEU grew from $6,500/d to over $11,200/d but, so far, remained still unsatisfactory for owners.

While timecharter rates showed a positive trend since March 2017 reaching good levels in 2018, the same cannot be said for liner rates. SCFI touched its bottom in March 2016 and, since then, started a recovery. Despite the positive trend rates for carrying a TEU from Shanghai to Europe remained almost always under $1,000/TEU not allowing, also due to an increase of bunker cost, liner companies to record high revenues.

Global container trade growth had slowed to average around 3-4 percent per year over the past 5 years. However, the container trade growth has since improved, increasing around 4.7 percent in 2017 to reach almost 161 mln TEU liftings as the industry capitalizes on a revival in demand in the US, Europe and China. According to Alphaliner, the global container trade is expected to grow by another 4.7 percent in 2018 and 4.4 percent in 2019.

Containership supply shows differing trends for the different sizes. Vessels smaller than 3,500 TEUs reported a balanced scenario with deliveries and demolitions almost on the same level; intermediate units, between 3,500 and 10,000 TEUs continued to adjust from a state of overcapacity, with increased demolition activity and fewer orders reported, while larger vessels recorded strong interest with many deliveries and new orders, in particular for ULCVs.

In the first 8 months of 2018, 122 vessels equivalent to 1.0 million TEU were delivered, up 34 percent year-on-year in capacity terms. In comparison, just 20 units have been demolished, confirming a slowing demolition trend recorded since the last months of 2017. For new orders, a strong recovery has been recorded in the first 8 months of 2018, with 99 units reported ordered, more than four times compared with the 24 orders reported in the same period of 2017.

The price of a mid-sized containership newbuilding remained fairly steady at around $40 million over the past 5 years, although prices have increased slightly with improving rates and growing interest. Second hand prices fell for most of the past decade, although since the beginning of 2017 secondhand values have started increasing again.
In addition to regular market reports, banchero costa research recognize the need for bespoke reports & analysis, tailored to specific client needs.

Reports can be produced on a wide range of shipping markets including dry bulk, tankers, gas & containers. In addition in-depth reports can be produced on specific commodity markets.

To discuss individual requirements please contact:

Phone: +65 6327 6863
Email: research@bancosta.com