The autumn brought an increased volume of carrying business and improved rates as compared with the rest of the year, but the whole of the enormous trade done has brought little or no real profit, and a very bare margin over working expenses, far from enough to cover depreciation. The philanthropy of this great body of traders, the shipowners, is evidently inexhaustible, for after five years’ unprofitable work, their energy is as unflagging as ever, and the amount of new tonnage under construction and in order guarantees a long continuance of present low freights, and an effectual check against increase cost of oversea carriage.

J.C. Gould, Angier Brothers’ Steam Shipping Report, 1894 Cornell University Library
Effectively 6 loss-making years in the last 10
Global Supply Chains Rely Upon High Risk Enterprises

Altman Z-score: <1.81 equals "Distress zone"; >2.99 equals "Safety from bankruptcy"

Source: Drewry Maritime Financial Research, derived from company reports
Despite Poor ROI, Carriers Continue to Order New Ships

Source: Alphaliner

HMM’s orderbook of 396,000 teu represents 95.6% of its current operated fleet of 414,000 teu. Together with a further 100,000 teu of chartered out tonnage that will be redelivered in 2020, HMM’s operated fleet will more than double by 2020.

Table 3.3 ADJUSTED GLOBAL CONTAINERSHIP ORDERBOOK, 2018-22 (’000 TEU)

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</thead>
<tbody>
<tr>
<td>Total global fleet (year start)</td>
<td>18,358</td>
<td>19,819</td>
<td>20,666</td>
<td>20,832</td>
<td>22,622</td>
<td>22,750</td>
<td>23,999</td>
<td>25,069</td>
</tr>
<tr>
<td>% of scheduled orderbook delivered</td>
<td>87.8%</td>
<td>88.7%</td>
<td>75.9%</td>
<td>86.0%</td>
<td>90.0%</td>
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</table>

Notes: All data subject to change. *includes slippage from previous year and projected future orders.

Source: Drewry Maritime Research
Top 12 Carriers by Operated Capacity (in Mil. TEU)

Source: Alphaliner, incl. pending mergers
Carrier Mergers, Acquisitions and Alliances

Mergers and Acquisitions

China Shipping  Cosco  OOCL  Evergreen  APL  CMA CGM  Hapag Lloyd  United Arab Shipping  Hyundai Merchant Marine  Hamburg Süd  Maersk Line  MSC  K Line  MOL  NYK  Yang Ming  Hanjin Shipping

Alliances

Former Alliances

2M  MAERSK LINE  MSC

Ocean 3  CMA CGM  CHINA SHIPPING  UNITED ARAB SHIPPING COMPANY

G6  HAPAG-LLOYD  MOL  NYK  APL

Hyundai Merchant Marine  OOCL

CKYHE  COSCO  EVERGREEN  HANJIN SHIPPING  K-LINE  YANG MING

Present Alliances

2M  MAERSK LINE  MSC

Ocean Alliance  CHINA COSCO SHIPPING  EVERGREEN  OOCL  CMA CGM

Hapag-Lloyd/UASC  ONE  YANG MING

Source: Carriers
Scope For Further Consolidation

Herfindahl-Hirschmann Index (HHI) of Market Concentration

Notes: Based on effective capacity, treating subsidiaries as part of the parent i.e. APL is included within CMA CGM; No accounting for slot charter agreements; Treats all recent M&A as complete so Hamburg-Sud included with Maersk, OOCL in Cosco and the three Japanese carriers K Line, MOL and NYK in ONE

Source: Drewry Maritime Research
### Freight Pricing Scenarios

<table>
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<tr>
<th>Balanced supply/demand (efficient market)</th>
<th>Over-supply</th>
<th>Under-supply</th>
<th>Container shipping is an inefficient market</th>
</tr>
</thead>
</table>
| • stable pricing, improved service levels & more carrier choice | • spot rates < long-term fixed rates  
• smaller transactional customers enjoy lower costs than larger customers  
• contract customers are tempted to step outside their contract agreements to take advantage of lower costs  
• erratic service levels, ad hoc omissions of sailings & port calls | • spot rates > long-term fixed rates  
• carriers tempted to limit space & equipment supply for long-term fixed rate customers  
• larger customers forced to pay market rates to secure sufficient space & equipment  
• erratic service levels, cargo rolled & delayed, bookings declined | • business cycle skewed towards imbalanced market for prolonged periods of time  
• lousy service levels & short-term tactical rather than long-term strategic actions |
Gloomier world economic outlook & rising trade tension have forced Drewry to downgrade its forecast for container demand over the next 5 years

Previously Drewry had forecasted their supply-demand index would go up through 2022, by which year they estimated that the industry would be close to equilibrium.

Following a downgrade to the demand expectations, along with a slightly upgraded supply forecast, the expectation is that the industry will be confronted with the current oversupply for several more year.

No-one knows at the moment how much demand in Q3 ’18 was artificially stimulated by fears coming from the latest round of tariffs issued by the US & CN and therefore how hard the come down will be in the last quarter this year.

With new ship deliveries higher than expected and fewer demolitions in Q2 ’18 Drewry has marginally raised the fleet growth rate to 5.7% instead of 5.4% this year.
The majority of containership owners still appears undecided on how to achieve compliance with the new IMO 2020 regulation.

Interest in LNG propulsion remains limited so far due to high upfront investments and uncertainties regarding the yet unproven gas bunkering infrastructure.

Interest in exhaust gas cleaning systems, known as scrubbers, has picked up significantly in recent months. Despite investment costs of 5-10m USD per ship, the relatively short payback period for scrubbers has proven sufficiently attractive for some ship-owners. But questions now being raised over ‘open’ systems being used to cheat the new regulations.

Still, the total number of scrubber-fitted vessels will remain at a fraction of the global container fleet of more than 5,300 ships. Therefore, the vast majority of these will need to switch to low-sulphur fuel, with operators facing higher fuel bills as a result.

Slow-steaming likely to become more pronounced, impacting schedule reliability, capacity management & pricing.

Source: Alphaliner
Will IMO 2020 Global Sulphur Limit Regulation Change Pricing Behaviour?

- 0.1% Ultra Low Sulphur Fuel Oil (ULSFO) currently required for use in Sulphur Emission Control Areas (SECA) in North Europe and North America currently costs about $200/ton more than IFO 380.
- The ULSFO premium has ranged between $100 and $240 per ton, with an average premium of $169/ton based on data available since 2015.
- The switch to 0.5% Low Sulphur Fuel Oil (LSFO) on 1 January 2020 is expected to raise the total fuel costs for carriers, although there remains significant uncertainty over the level of the LSFO price premium.
- The 0.5% LSFO is expected to be a blend of low sulphur refinery residue and suitable cutter stock to achieve the desired RMG 380 with max 0.5% sulphur and this is expected to cost less to produce than the 0.1% ULSFO and the premium is expected to be lower.

Source: Alphaliner
Will Trade Tariffs Alter Trade Patterns?

Apart from escalation magnitude, new trade barriers lead to workarounds among customers that have alternative choices.

What comes next?
- CN’s announcement to take retaliatory tariff action against $60 billion of US goods, sharply escalating trade war as Trump administration considers imposing duties on virtually all CN imports (worth add. ~USD267)
- Apart from putting up barriers, CN is aiming to simplify clearance processes in general according to last week’s State Council meeting
- As CN cannot match US tariffs like-for-like, “qualitative measures” against US firms operating in China might to start kicking in

How customers react
- Forward extra cost to customers or accept lower profit at least for the short term
- Re-source import supplies from alternative country and re-route exports (e.g. Chinese honey industry exporting into US via 3rd country)
- Re-locate production to other countries
- Stop business due to cost & margin pressure

Tariffs on steel & aluminum products
0.6M (0.4% of global sea trade) TEU container trade

Tariffs on US imports
- Tariffs on China imports
0.6M (0.4% of global sea trade) TEU container trade
0.5M (0.3%) TEU container trade
- New US/EU Agreement
Cooperation towards zero tariffs
- Current NAFTA discussions
Agreement between US & MX reached, discussions with CA continue. Decision likely end Sep
- Tariffs on US imports
Further tariffs for goods worth $60bn as counter measure to latest US tariffs

Effective as of: March 6
Source: DPDHL Corporate Development, press articles, Seabury Consulting
THANK YOU