The Castrol Global Trade Barometer provides a detailed and pragmatic view of what is mined, made and moved internationally to support decision-making based on what is really happening on the ground.
China: Tides of change

The Marine Trade Barometer gives us a unique insight into the performance and outlook of shipbuilding and can be considered a strong indicator of general manufacturing and the wider health of the world economy.

The barometer examines the relative performance of different nations in the shipbuilding industry by tracking the manufacture of goods and components used in shipbuilding.

The Marine Trade Barometer and the Castrol Global Port Report are part of the Castrol Global Trade Barometer (CGTB). By taking into account trade trends, relevant macroeconomic and market influences, and the effect of the business environment on trade, we are able to give a pragmatic view providing market intelligence to support decision-making based on what is really happening on the ground.

To find out more, please download the full document at www.castrol.com/minedmademoved

Trend one: Drifting priorities for China

The Marine Trade Barometer reflects the continued importance of the Asia-Pacific region in shipbuilding. Hong Kong has climbed the table of ship parts trading nations by 2014 value (figure 1), moving from fourth to second and pushing South Korea and China to third and fourth respectively. This movement is likely a reflection of Hong Kong's maritime service expansion and reputation as a highly efficient port.

In many ways, there has been very little change in the rankings of top ten exporters of ship parts (figure 2) since the last forecast. The biggest shift has been China's move to replace South Korea at the top of the table. However, this is unsurprising given that eight of the world's ten largest ports are in China.

This hints at a conflict within China, as it struggles to balance its extrovert status and its introvert goals. China's pivot away from export-led growth towards domestic consumption may have resulted in a dip in this year's forecast to 8.08% from 10.05% in the last report. This 'rebalancing' emerged as a key government policy in the mid-2000s and has led to a wide set of reforms aimed at creating sustainable growth for China as well as social and political stability for its people.

Yet, the entire Asia-Pacific region continues to dominate the table of top ten export products by country (figure 4) with seven of the top ten coming from the region. This is indicative of Asia-Pacific's booming shipping industry and growing expertise in high-end manufacturing. In order to maintain these growth levels, the region will need to focus on building and strengthening relationships and partnerships.
**Figure 1**

The shipbuilding power list:
Top ten ship parts trading nations
by 2014 value

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Value (bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Singapore</td>
<td>$33.73bn</td>
</tr>
<tr>
<td>2</td>
<td>Hong Kong</td>
<td>$18.63bn</td>
</tr>
<tr>
<td>3</td>
<td>South Korea</td>
<td>$18.29bn</td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>$16.36bn</td>
</tr>
<tr>
<td>5</td>
<td>US</td>
<td>$11.29bn</td>
</tr>
<tr>
<td>6</td>
<td>Germany</td>
<td>$10.50bn</td>
</tr>
<tr>
<td>7</td>
<td>Norway</td>
<td>$8.86bn</td>
</tr>
<tr>
<td>8</td>
<td>UK</td>
<td>$6.47bn</td>
</tr>
<tr>
<td>9</td>
<td>Italy</td>
<td>$4.93bn</td>
</tr>
<tr>
<td>10</td>
<td>Netherlands</td>
<td>$4.72bn</td>
</tr>
</tbody>
</table>
Figure 2
Exporting success:
Top ten exporters of ship parts
by 2014 value

1 | China $15.64bn
2 | South Korea $14.77bn
3 | Singapore $7.13bn
4 | US $3.52bn
5 | Japan $2.88bn
6 | Germany $2.56bn
7 | Norway $1.79bn
8 | Italy $1.67bn
9 | Netherlands $1.66bn
10 | UK $1.57bn

Figure 3
Bringing in the goods:
Top ten importers of ship parts
by 2014 value

1 | Singapore $26.60bn
2 | Hong Kong $18.49bn
3 | Germany $7.94bn
4 | US $7.78bn
5 | Norway $7.07bn
6 | UK $4.91bn
7 | South Korea $3.52bn
8 | Brazil $3.40bn
9 | Italy $3.26bn
10 | Netherlands $3.07bn
Figure 4

Bringing in growth:
Top ten export products by country by 2014 value

1 | China   $12.73bn
   Passenger and goods transport ships, boats

2 | South Korea   $12.41bn
   Passenger and goods transport ships, boats

3 | Singapore   $4.27bn
   Special purpose ships, vessels

4 | South Korea   $1.97bn
   Special purpose ships, vessels

5 | US   $1.84bn
   Yachts, pleasure, sports vessels, rowing boats, canoes

6 | Germany   $1.76bn
   Passenger and goods transport ships, boats

7 | Japan   $1.46bn
   Passenger and goods transport ships, boats

8 | Singapore   $1.26bn
   Passenger and goods transport ships, boats

9 | China   $1.13bn
   Tugs and pusher craft

10 | US   $1.13bn
    Special purpose ships, vessels
Trend two: Buoyed by innovation

Perhaps most interestingly, Algeria has risen from outside of the top ten fastest growing ship parts trading nations (figure 5) to top the table. This is likely to be the result of heavy investment in the country’s port capacity as well as wider infrastructure and skills development. Its close proximity to the EU, soaring energy trade and diplomatic ties with China are also likely to have played a part in its success.

Despite slipping to second place in the list of fastest growing trading nations (figure 5), Israel is also showing stronger rates of growth than the last forecast this is likely the result of greater efficiency and competition as a consequence of privatization and lower levels of government participation. The fastest growing ship parts trading nations are nations with strongly developing ports. However, Brazil’s rate of growth has slowed slightly since the last forecast as a result of a stalling economy. As a consequence, it has fallen to third in our rankings.

Interestingly, the US has risen from seventh to fifth place in the top 10 ship parts trading nations (figure 1). This is based on the country’s success in honing specialist skills as evidenced by the US’s move into the top 10 export products by country (figure 3) for its production of ‘special purpose ships’. Yet, continuing labour disputes in west coast ports could be a potential threat to these rates of growth.

Singapore ranks first and fourth in the list of top ten import products by country (figure 5), specifically for its imports of ‘passenger, goods and special purpose ships’. This is indicative of its efforts to ramp up port capacities to fuel exports.

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Figure 5

Shipbuilding fast lane:
Top ten fastest growing ship parts trading nations by CAGR* 2014-2019

1 | Algeria 17.45%
2 | Israel 15.86%
3 | Brazil 13.63%
4 | Mexico 12.51%
5 | Iran 11.89%
6 | Hong Kong 11.78%
7 | Venezuela 11.09%
8 | Indonesia 11.00%
9 | Iraq 10.74%
10 | Thailand 10.60%

* CAGR = annualised growth over five years 2014-2019
Trend three: Choppy waters ahead for Europe

Singapore looks set to retain its place at the head of the top ten import products by country (figure 6). However, European nations have suffered in the forecast. This downward movement is a reflection of the broader economic climate within Europe and weaker demand for ships due to Europe’s current surplus of shipping goods.

Although Germany still ranks third, its forecast growth has dropped dramatically to 4.24% from 3.95% last time. If this trend continues, Germany will fall to sixth in the rankings by 2019. Italy is also falling behind, possibly based on the lack of sophistication of its ports and a perception that it is uncompetitive and inefficient. If the current trend continues it would fall out of the top ten exporters by value in the near future.

Similarly, European nations have slipped in the rankings of top ten import products by country (figure 6). Germany’s annualised growth rate is reduced at -4.73%, Norway is down to fifth from fourth place, and the UK has slipped from fifth to seventh position.

Figure 6
Bringing in growth: Top ten import products by country by 2014 value
Overall picture:
Marine trade growth

The outlook for growth in the Marine Trade Barometer has deteriorated marginally in the period since the previous CGTB, with annualised growth forecast to fall from 7% to 6.6% over the next five years. This, coupled with a drop in expected year-on-year growth, demonstrates the effects of dampened global trade on the marine sector. In practical terms, this means a slowdown in production for shipbuilders. However, the shipbuilding industry is often one step behind the world economy due to long lead times which create an ‘order to delivery lag’.

Despite this decline, growth is still expected at a reasonable rate of 3 to 5% annually, before picking up substantially after 2017. Although growing from a low base, fast growing Latin American countries such as Brazil, Mexico and Venezuela are set to play an increasing role in shipbuilding over the next five years.

Castrol eye view:
Over supply

Almost 90% of export goods are transported via ships, rather than by land or air. Despite this, the industry is still struggling as it experiences the effects of over supply and excess capacity created in a rush to build ships pre-recession. For example, over ordering seems to be an issue for Germany, Italy and the UK.
The Castrol Global Trade Barometer provides a detailed and pragmatic view of what is mined, made and moved internationally to support decision-making based on what is really happening on the ground.
The place race

The Castrol Global Port Report is a regular series looking at the performance of ports around the world; identifying the winners and losers, and revealing the crucial story ports have to tell about the changing pattern of global trade.

The report examines the largest 50 ports in the world by value, focusing on size of trade and trade flows through these ports today and forecast over the next 5 years.

The Castrol Global Port Report is part of The Castrol Global Trade Barometer. In contrast to trade forecasts based on the drivers of GDP, the CGTB is based on the key drivers of global trade itself, giving us deep, accurate and actionable insight into the nuances of global trade in the near term. By taking into account trade trends, relevant macroeconomic and market influences, and the effect of the business environment on trade, we are able to give a pragmatic view providing market intelligence to support decision-making based on what is really happening on the ground.

In this report, ports are ranked by volume. Ranking by 2014 value, as in other areas of the CGTB, would be a less useful measure as some ports may trade low value produce in large volumes while others will trade a smaller amount of high value products.

To find out more, please download the full document at www.castrol.com/minedmademoved
Trend one: Safe harbours

Ports reflect the overall story of global trade. However, not all port nations are created equal and those that are geographically well placed, and make the most of this natural advantage, are more likely to perform strongly.

The Port Report rankings highlight the importance of emerging markets in the performance of ports. In fact, all of the top 10 ports are based in Asia.

A combination of geography and a commitment to innovation and development has seen Dubai enter the table of top twenty ports by volume at number nine (figure 1). The UAE’s emergence as a trade hub is based on the Government’s commitment to capitalise on its location near the Middle East and North Africa by enabling business and promoting trade, most significantly by developing its infrastructure. As a result, in 2012, it appeared fifth in the World Bank Doing Business Report for ease of Trading Across Borders.

Trend two: Emerging markets have wind in their sails

The Port Report, like many other areas of the CGTB, highlights the importance of the Asia-Pacific region and China as a dominant trading power.

China features heavily in the table of top twenty ports by volume (figure 1) which includes nine of the country’s ports, an increase from seven in the last forecast. Importantly, China is regionalising meaning that the benefits are spreading to other nearby regions.

South Korea, for example, is also growing at a rapid rate, although from a low base. It is an Asian trade hub, geographically well placed to China and at the centre of key trade routes including the North American route, the Southeast Asian route, and the European route. The Korean Government is keen to promote the country as the key logistics hub for the region. However, in order to remain competitive, its ports will need to evolve a flexible infrastructure.

In comparison, European countries are growing at a slower rate, likely because they transport many of their exports via road and rail and possibly as a result of congestion. Traditional European port nations do not perform strongly in the list of top twenty ports by volume (figure 1). For example, Rotterdam has dropped out of the top 10, moving from fourth to eleventh.

North European ports like Rotterdam are currently experiencing heavy traffic, largely due to poor carrier schedule reliability. Work to improve infrastructure is also affecting terminal capacity as is the strain of accommodating larger volumes of container ships.
Figure 1
The port superpowers: Top 20 ports by volume

1. Shanghai (China) $889.37bn
2. Singapore (Singapore) $841.40bn
3. Shenzhen (China) $615.84bn
4. Hong Kong (China) $591.34bn
5. Busan (South Korea) $465.05bn
6. Ningbo (China) $459.04bn
7. Qingdao (China) $410.60bn
8. Guangzhou (China) $405.01bn
9. Dubai (UAE) $350.62bn
10. Tianjin (China) $344.19bn
11. Rotterdam (Netherlands) $304.60bn
12. Dalian (China) $287.31bn
13. Port Klang (Malaysia) $273.07bn
14. Kaohsiung (Taiwan) N/A*
15. Hamburg (Germany) $239.47bn
16. Antwerp (Belgium) $223.22bn
17. Xiamen (China) $211.91bn
18. Los Angeles (US) $202.38bn
19. Tanjung Pelepas (Malaysia) $201.24bn
20. Long Beach (US) $173.11bn

* Missing values are because the UN does not collect data for these countries. Kaohsiung ranks in its respective place because it is included on other trade indices.
Trend three: New moorings

There are dramatic changes in the table of fastest growing ports (figure 2). In stark contrast from the last forecast, Brazilian, Indian and Australian ports no longer dominate.

Instead, Canadian ports, Vancouver and Montreal, appear for the first time, reflecting faster growing trade in the North American Free Trade Area generally. Trade in commodities is particularly strong with new trade routes opening up with Norway and the Baltics.

Durban in South Africa is also a new entrant, topping the table of fastest growing ports (figure 2), largely due to its exports of automotive parts and commodities. The area is currently recovering after recent industrial action in its mining industry and its rise in status suggests that this may be coming to a close.

The dominance of Middle Eastern and Turkish ports, none of which appeared in the last forecast, highlights the emergence of fast growing trade routes, particularly focused on the logistics and infrastructure industries. Turkey’s location makes it an ideal hub for trade between Europe, the Middle East and central Asia. It is also benefitting from government investment in infrastructure and its growing middle class.
**Figure 2**  
**Full steam ahead:**  
Top 20 fastest growing ports by CAGR* 2014 - 2019

<table>
<thead>
<tr>
<th>Rank</th>
<th>Port</th>
<th>CAGR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Durban (South Africa)</td>
<td>2.63</td>
</tr>
<tr>
<td>2</td>
<td>Vancouver (Canada)</td>
<td>2.15</td>
</tr>
<tr>
<td>3</td>
<td>Montreal (Canada)</td>
<td>2.15</td>
</tr>
<tr>
<td>4</td>
<td>Salalah (Oman)</td>
<td>2.03</td>
</tr>
<tr>
<td>5</td>
<td>Ambarli (Turkey)</td>
<td>1.88</td>
</tr>
<tr>
<td>6</td>
<td>Mersin (Turkey)</td>
<td>1.88</td>
</tr>
<tr>
<td>7</td>
<td>Singapore (Singapore)</td>
<td>1.84</td>
</tr>
<tr>
<td>8</td>
<td>Jeddah (Saudi Arabia)</td>
<td>1.79</td>
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<td>9</td>
<td>Dammam (Saudi Arabia)</td>
<td>1.79</td>
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<tr>
<td>10</td>
<td>Tokyo (Japan)</td>
<td>1.68</td>
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<td>11</td>
<td>Yokohama (Japan)</td>
<td>1.68</td>
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<tr>
<td>12</td>
<td>Nagoya (Japan)</td>
<td>1.68</td>
</tr>
<tr>
<td>13</td>
<td>Kobe (Japan)</td>
<td>1.68</td>
</tr>
<tr>
<td>14</td>
<td>Osaka (Japan)</td>
<td>1.68</td>
</tr>
<tr>
<td>15</td>
<td>Sharjah/Khor Fakkan (UAE)</td>
<td>1.68</td>
</tr>
<tr>
<td>16</td>
<td>Dubai (UAE)</td>
<td>1.68</td>
</tr>
<tr>
<td>17</td>
<td>Los Angeles (US)</td>
<td>1.66</td>
</tr>
<tr>
<td>18</td>
<td>Long Beach (US)</td>
<td>1.66</td>
</tr>
<tr>
<td>19</td>
<td>New York/New Jersey (US)</td>
<td>1.66</td>
</tr>
<tr>
<td>20</td>
<td>Savannah (US)</td>
<td>1.66</td>
</tr>
</tbody>
</table>

* CAGR = annualised growth over five years 2014-2019
Operating in remote ports

As global communication and trade increases, shipping companies are increasingly operating in ports that are remote or difficult to access. These locations can be high-risk as they are problematic to navigate, including bottlenecks and challenging underwater obstacles. They may also be sensitive areas including protected natural resources. Generally speaking, they are all characterised by a lack of basic infrastructure found in more established regions.

However, perhaps as a response to consumer demand, global companies with international networks are attempting to navigate these issues while many countries are keen to promote trade from remote ports. Australia’s Northern Territory Government, for example, is keen to establish a buffalo trade with Vietnam. They believe that indigenous people can profit from selling some of the 100,000 feral buffalo native to that part of Australia, which they say overrun the land and damage the environment.
About the Castrol Global Trade Barometer

The Castrol Global Trade Barometer (CGTB) and its sub-barometers are constructed from the sectoral trade flows between the world’s 50 largest trading nations. The CGTB is an aggregate barometer of all trade across all sectors. Each sub-barometer measures the trade flows between countries for a particular sectoral grouping.

The Marine Trade Barometer measures how trade and trade growth in ship parts has changed up to the end of the last quarter. It is also a forecast of how that barometer is expected to change over the next five years on a rolling basis, with the next four quarters forecast on a quarterly basis, and the subsequent four years forecast on an annual basis.

In contrast to trade forecasts based on the drivers of GDP, the CGTB is built upon the key drivers of global trade itself, including trade trends, relevant macroeconomic and market influences (such as GDP, oil prices, inflation and foreign direct investment), and the effect of the business environment on trade (such as regulation, demographics, access to capital and finance). This gives us deep, accurate and actionable insight into the nuances of global trade in the near term. By taking into account the drivers of global trade we are able to give a pragmatic view providing market intelligence to support decision-making based on what is really happening on the ground.

The Marine Trade Barometer covers all goods sectors and sub-sectors related to shipbuilding including: passenger and goods transport ships, boats, fishing vessels, warships and lifeboats.

The forecasts within the CGTB are based on investment grade data covering 200 countries and 10,000 sectors worldwide. The data is interpolated from UN Comtrade, IMF, ITC and country statistical office data. Forecasts for annual and annualised growth are based on twenty parameters that cover short, medium and long-term drivers of trade. Data for these parameters is taken from international sources including Haver Analytics, Bloomberg, UNCTAD, WTO, IMF, ILO and the World Bank. The barometer is independent of political and behavioural factors, except as priced in by markets.
The Castrol Global Trade Barometer is designed to increase the understanding of global trade and its impacts on your industry. If you have any questions about the ideas presented in the report and would like to meet with a Castrol representative, please contact daniel.davies2@uk.bp.com (0203 683 4379).

This report is one of a series, which tracks the performance of global trade and provide a regular five-year forecast of future trade patterns. Further details can be found at www.castrol.com/minedmademoved

More information

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Questions on data

Castrol regrets it is unable to deal with enquiries about the data in the Castrol Global Trade Barometer.

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