

Global Maritime Weekly Digest

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The **Global Maritime Weekly Digest**, based at **Southampton SOLENT University**, provides a regular flow of maritime news and analysis, of significance in a global context.

Topics covered include shipping fleets and management, seaborne trade, ports, shipbuilding, ship recycling, maritime policy and regulations, and seafarers' labour.

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Editorial comments

- Potential for *strong world trade growth* in 2018, continuing into next year is evident based on an updated analysis by the World Trade Organization (item 1). But WTO economists emphasise that policy choices by governments will have a large impact on whether that outcome occurs and, in particular, restrictive trade policies could hamper progress.
- After much intense debate, an *agreement limiting greenhouse gas emissions* from the global shipping industry was reached at the International Maritime Organization's meeting last week (item 2). This agreement will require a switch to new energy sources for ship propulsion.
- An analysis of *port investment in Africa* by a leading consultancy firm suggests that more and well-targeted investment spending could greatly enhance port performance in many sub-Saharan African countries. Successful investments could strengthen trade links and assist in improving economic growth rates (item 4).
- Uncertainty continues about how much impact *China's Belt and Road Initiative* will have on global seaborne trade. Projects which could result in substantial additional cargo movements are foreseeable but, so far, it is not entirely clear when the effects will begin to become noticeable or on what scale these will occur (item 7).
- Modern *multipurpose ships* provide a valuable service for trade in cargoes not suitable for carriage by the main vessel types. This 'general cargo' transportation sector carrying breakbulk and project cargoes seems to be recovering amid rising demand and signs that fleet capacity is likely to diminish further (item 5).

Richard Scott MA MCIT FICS editor (email: bulkshipan@aol.com) (1) World Trade Organization, 12 April 2018

Strong trade growth in 2018 rests on policy choices

World merchandise trade growth is expected to remain strong in 2018 and 2019 after posting its largest increase in six years in 2017, but continued expansion depends on robust global economic growth and governments pursuing appropriate monetary, fiscal and especially trade policies, WTO economists said. The WTO anticipates merchandise trade volume growth of 4.4% in 2018, as measured by the average of exports and imports, roughly matching the 4.7% increase recorded for 2017. Growth is expected to moderate to 4.0% in 2019, below the average rate of 4.8% since 1990 but still firmly above the post-crisis average of 3.0%. However, there are signs that escalating trade tensions may already be affecting business confidence and investment decisions, which could compromise the current outlook.

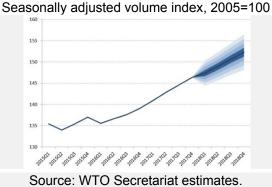
"The strong trade growth that we are seeing today will be vital for continued economic growth and recovery and to support job creation. However this important progress could be quickly undermined if governments resort to restrictive trade policies, especially in a tit-for-tat process that could lead to an unmanageable escalation. A cycle of retaliation is the last thing the world economy needs. The pressing trade problems confronting WTO Members is best tackled through collective action. I urge governments to show restraint and settle their differences through dialogue and serious engagement," said WTO Director-General Roberto Azevêdo.

Trade volume growth in 2017, the strongest since 2011, was driven mainly by cyclical factors, particularly increased investment and consumption expenditure. Looking at the situation in value terms, growth rates in current US dollars in 2017 (10.7% for merchandise exports, 7.4% for commercial services exports) were even stronger, reflecting both increasing quantities and rising prices. Merchandise trade volume growth in 2017 may also have been inflated somewhat by the weakness of trade over the previous two years, which provided a lower base for the current expansion.

Until recently, risks to the forecast appeared to be more balanced than at any time since the financial crisis. However, in light of recent trade policy developments they must now be considered to be tilted to the downside. Increased use of restrictive trade policy measures and the uncertainty they bring to businesses and consumers could produce cycles of retaliation that would weigh heavily on global trade and output. Faster monetary tightening by central banks could trigger fluctuations in exchange rates and capital flows that could be equally disruptive to trade flows. Finally, worsening geopolitical tensions could be counted on to reduce trade flows, although the magnitude of their impact is unpredictable. Technological change means that conflicts could increasingly take the form of cyber-attacks, which could

impact services trade as much or more than goods trade.

On the other hand, there is some upside potential if structural reforms and more expansionary fiscal policy cause economic growth and trade to accelerate in the short run. The fact that all regions are experiencing upswings in trade and output at the same time could also make recovery more self-sustaining and increase the likelihood of positive outcomes.





In recognition of the high degree of uncertainty associated with any forecast under the circumstances, Chart 1 uses shaded bands to illustrate a range of possible trade outcomes in the forecast period. Trade growth in 2018 is most likely to fall within a range from 3.1% to 5.5%. However, it should be noted that the above estimates depend on current forecasts of GDP. Further escalation in trade restrictive policies or other shocks that negatively affect global economic activity could result in trade growth outside of this range.(1)

The WTO's trade forecasts are predicated on consensus estimates of global GDP, which have been revised upwards strongly in recent months. World real GDP at market exchange rates is projected to grow 3.2% in 2018 (up from 2.8% last September) and 3.1% in 2019. Brighter prospects reflect not only investment and employment gains but also improved business and consumer confidence as measured by OECD business cycle indicators, although these could be undermined by uncertainty going forward. The final figure of 3.0% for world GDP growth in 2017 was also stronger than the previous estimate (2.8% as of last September), which partly explains the fact that actual merchandise trade growth of 4.7% for the year exceeded even optimistic assessments (e.g. 3.6% in September, with a high end estimate of 3.9%). Despite the improved outlook, some structural factors that weighed on trade in recent years are still present. This includes the rebalancing of the Chinese economy away from investment (which has very high import content) and toward consumption (which has lower import content compared to investment), as well as the reduced pace of global trade liberalization in recent decades. China's rebalancing might dampen imports slightly in the short-run but it should produce stronger, sustainable growth over the long term, which would support more trade. On the other hand, the lack of further substantive liberalization would be expected to produce subdued trade growth in both the short and long-run.

Historically, world merchandise trade volumes have grown around 1.5 times faster than world real GDP at market exchange rates. The ratio of trade growth to GDP growth (referred to as the "elasticity of trade with respect to income") rose above 2.0 in the 1990s, but fell back to 1.0 in the five years following the financial crisis (2011-2016). This elasticity measure rebounded from 0.8 in 2016 to 1.5 in 2017, which is close to the historical average. Stronger trade growth relative to GDP growth is expected to continue at least into 2018, barring major economic shocks (Chart 2).

Preliminary data suggest that trade is off to a strong start in 2018. The WTO's most recent World Trade Outlook Indicator (February 2018) pointed to above-trend trade growth in the first quarter, while other indicators such as export orders and container shipping are also suggestive of an ongoing recovery. Tighter labour markets and modest increases in inflation in major economies will leave less room for error on the part of policy makers, but absent any missteps trade growth should remain strong over the next two years.

Details on trade developments in 2017

The acceleration of world merchandise trade volume growth to 4.7% in 2017 from 1.8% in 2016 was broad based, driven by rising import demand across regions but most notably in Asia. The largest gains were recorded on the import side in developing economies, where trade growth surged to 7.2% in 2017 from 1.9% in 2016. Import demand also picked up in developed countries, albeit less dramatically, as merchandise trade growth in volume terms increased to 3.1% in 2017 from 2.0% in 2016. Meanwhile, merchandise exports grew 3.5% in developed countries and 5.7% in developing countries last year, up from 1.1% and 2.3% respectively in the previous year (Table 1).

Although merchandise trade volume growth was stronger in developing countries for the whole of 2017, exports and especially imports of developed countries strengthened over the course of the year while trade growth in developing economies was more stable. This is illustrated by Chart 3, which shows seasonally-adjusted quarterly merchandise export and import volumes by level of development. Year-on-year growth of imports was considerably stronger in developed countries in the second half of 2017 (4.3%) than in the first half (2.3%), while growth eased slightly in developing economies (6.0% in the second half, down from 7.2% the first half). Export volume growth in developed countries also increased from 3.4% to 4.3% between the first half and second half, while growth in developing countries picked up slightly from 5.2% to 6.4%.

The recovery of merchandise trade volumes in 2017 was widely shared across regions but this was especially true on the export side, where North America, South and Central America and the Caribbean, Europe and Asia all recorded stronger growth. Asia and North America saw steady year-on-year growth in imports throughout 2017, whereas import growth accelerated over the course of the year in Europe (1.4% in the first half, 4.1% in the second half) and South and Central America and the Caribbean (1.5% in the first half, 6.6% in the second half, see Chart 4).

Asia had the fastest trade volume growth of any region in 2017 on both the export side (6.7%) and the import side (9.6%) following two years of tepid expansion (Table 1). North American exports and imports rebounded strongly in 2017 with growth of 4.2% and 4.0%, respectively, after stagnating in 2016. South and Central America and the Caribbean's import growth turned positive again in 2017 with an increase of 4.0%, following three years of steep declines. Meanwhile, European trade flows continued to expand at a moderate pace, with growth of 3.5% for exports and 2.5% for imports in 2017.

"Other regions," encompassing Africa, the Middle East and the Commonwealth of Independent States, saw steady export growth of 2.3% in volume terms due to the fact that demand for oil and other natural resources tends to be quite stable in quantity terms. Meanwhile, imports of the combined regions increased slightly by 0.9%, partly as a result of higher primary commodity prices, which raise export revenue in resource exporting countries and allow more imports to be purchased. Energy prices more than doubled since January 2016, but even at nearly US\$70 per barrel oil prices still remain below the US\$100 level that prevailed before the middle of 2014.

Asia was responsible for much of the recovery of world merchandise trade in 2017 on both the export and import sides. This is illustrated by Chart 5, which shows regional contributions to world trade volume growth. On the export side, Asia contributed 2.3 percentage points to global growth of 4.5% in the latest year, or 51% of the total increase. Asia also added 2.9 percentage points to world import growth of 4.8, or 60% of the overall increase. North America made substantial positive contributions to exports and imports as well, after adding very little to trade growth in 2016 as internal and external demand faltered. Europe added less to merchandise import growth in 2017 than it did in 2016, but South and Central America and the Caribbean made a positive contribution for the first time since 2013 as Brazil exited its recession.



Chart 5: Contributions to world trade volume growth by region, 2011-2017

a Other regions comprise Africa, Middle East and the Commonwealth of Independent States, including associate and former member States. b Refers to South and Central America and the Caribbean Source: WTO Secretariat.

No single factor can explain the revival of world trade in 2017 but several contributed to it, including increased investment spending, which is highly correlated with trade, and higher commodity prices, which raise incomes in resource-based economies and encourage investment in the energy sector, e.g. shale oil in the United States. Appendix Chart 1, which shows GDP growth by expenditure component in selected economies, illustrates recent trends. Investment made a negative contribution to GDP growth in the United States in 2016 and negligible contributions to growth in Japan and the United Kingdom for the year, but all three saw investment rebound to varying degrees in 2017. Investment is important for trade because it is thought to be the most import intensive component of GDP, followed by exports, private consumption and government spending.(2)

The fluctuations in the United Kingdom may have been partly due to the uncertainty introduced by the Brexit referendum, and the fact that this uncertainty was partly alleviated in 2017. However, the long-run impact of Brexit on trade and investment remains to be seen.

Appendix Chart 1 also shows that China's economic rebalancing away from investment and toward consumption is continuing, with investment accounting for roughly 32% of GDP growth in 2017, down from 55% in 2013. This development may add some drag to world trade growth as China imports fewer

capital goods, but the process has so far been gradual and not very disruptive to global trade. Less investment could also help reduce overcapacity in sensitive sectors such as steel and aluminium, thereby alleviating trade tensions

Dollar values of international trade flows are strongly influenced by exchange rates and commodity prices. Despite daily ups and downs, the nominal effective exchange rate of the US dollar against a broad basket of currencies was basically unchanged in 2017, while prices for energy, food, raw materials and metals rose between 7% and 24%. This partly explains why merchandise trade growth was stronger in value terms than in volume terms for the year. The dollar value of world merchandise exports was up 11% in 2017 to US\$17.20 trillion. World commercial services exports increased by 7% to US\$5.25 trillion in the same period.

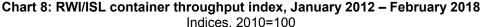
Appendix Chart 2 shows year-on-year growth in monthly merchandise exports and imports of selected major traders through February 2018. Trade values have been growing at stable rates in most countries since 2017. China and the European Union (28) show an uptick in growth in the early months of 2018 while India and Korea appear to be losing momentum. However, these figures should be used with caution as they may be strongly influenced by fluctuations in prices and exchange rates.

Appendix Tables 1, 3 and 4 provide detailed breakdowns of annual merchandise trade in current US dollar terms by region and selected economies. Resource exporting regions such as Africa and the Middle East recorded stronger export growth than import growth, while industrialized regions such as North America, Europe and Asia had import growth that was as strong as or stronger than export growth. There were few major changes in rankings of merchandise exporters and importers with some exceptions. Counting individual EU members separately, the Republic of Korea jumped from the 8th position to 6th on the export side while the United Arab Emirates rose from 19th to 15th place, the latter reflecting higher petroleum prices. Meanwhile, Japan overtook the United Kingdom as the world's 4th largest merchandise importer while Canada fell from 9th to 12th place in import rankings. China remained the largest exporter and the United States remained the largest importer regardless of whether the European Union was treated as 28 separate countries or as a single trader, excluding intra-EU trade.

Outlook for trade in 2018 and 2019

Some leading and coincident indicators of merchandise trade continued to point in a generally positive direction in the first quarter of 2018 while others have taken a negative turn. An index of container port throughput was close to its highest level ever recorded in February (Chart 8), suggesting strong trade growth. However, a measure of global export orders derived from purchasing managers' indices dipped in March, falling to 51.8, its lowest level since December 2017. A value above 50 still indicates expansion, but the recent weakening could be attributed to rising anti-trade rhetoric (Chart 9).





Source: Leibniz Institute for Economic Research and the Institute of Shipping Economics and Logistics.

Balanced against these broadly positive signs is a rising tide of anti-trade sentiment and the increased willingness of governments to employ restrictive trade measures. Recent measures have been applied to widely traded goods supplied by a large number of countries, with counter actions promised if these go

into effect. An escalating cycle of retaliation may yet be avoided if negotiations manage to diffuse tensions, but this is not guaranteed. As always, the WTO stands ready to help members reach mutually beneficial outcomes.

Another major risk is an unanticipated hike in inflation in one or more countries, which could cause monetary authorities to raise interest rates precipitously and cause economic growth to slow, with negative consequences for trade. The United States Federal Reserve is already in the process of raising interest rates closer to historical norms while the European Central Bank is moving closer to phasing out its own stimulus measures. Economic forecasters generally expect monetary authorities to manage these challenges successfully, but with less room to manoeuvre some financial volatility could come to the fore if conditions change.

The increased level of policy uncertainty is illustrated by Chart 10, which shows an index based on the frequency of phrases linked to economic uncertainty in press accounts.

Assuming current forecasts for GDP growth come to pass, the WTO expects world merchandise trade volumes to increase by 4.4% in 2018, with stronger growth in developing economies in both exports (5.4%) and imports (4.8%). Developed countries should also see fairly strong growth on both the export side (3.8%) and the import side (4.1%). In 2019 global trade growth is projected to moderate to 4.0%, with developing economies still outpacing developed countries in both exports (5.1% compared to 3.1%) and imports (4.4% compared to 3.3%) (Table 1). However, economic activity would also be expected to take a hit from escalating trade restrictions, which could result in more negative scenarios being realized.

Table 1: Merchandise trade volume and real GDP, 2014-2019 a

Annual % change

| | 2014 | 2015 | 2016 | 2017 | 2018P | 2019P |
|---|------|------|------|------|-------|-------|
| Volume of world merchandise trade b | 2.7 | 2.5 | 1.8 | 4.7 | 4.4 | 4.0 |
| Exports | | | | | | |
| Developed economies | 2.1 | 2.3 | 1.1 | 3.5 | 3.8 | 3.1 |
| Developing economies c | 2.7 | 2.4 | 2.3 | 5.7 | 5.4 | 5.1 |
| North America | 4.6 | 0.8 | 0.6 | 4.2 | 4.5 | 4.5 |
| South and Central America and the Caribbean | -2.1 | 1.8 | 1.9 | 2.9 | 2.8 | 2.6 |
| Europe | 1.6 | 2.9 | 1.1 | 3.5 | 3.6 | 2.9 |
| Asia | 4.5 | 1.5 | 2.3 | 6.7 | 5.7 | 5.0 |
| Other regions d | -1.0 | 5.5 | 2.6 | 2.3 | 4.7 | 4.4 |
| Imports | | | | | | |
| Developed economies | 3.4 | 4.3 | 2.0 | 3.1 | 4.1 | 3.3 |
| Developing economies c | 2.4 | 0.6 | 1.9 | 7.2 | 4.8 | 4.4 |
| North America | 4.3 | 5.4 | 0.1 | 4.0 | 5.7 | 5.0 |
| South and Central America and the Caribbean | -2.7 | -6.4 | -6.8 | 4.0 | 3.9 | 5.7 |
| Europe | 3.0 | 3.7 | 3.1 | 2.5 | 3.5 | 2.8 |
| Asia | 3.7 | 4.0 | 3.5 | 9.6 | 5.9 | 4.7 |
| Other regions d | 0.5 | -5.6 | 0.2 | 0.9 | 0.4 | 1.8 |
| Real GDP at market exchange rates | 2.7 | 2.7 | 2.3 | 3.0 | 3.2 | 3.1 |
| Developed economies | 2.0 | 2.3 | 1.6 | 2.3 | 2.4 | 2.2 |
| Developing economies c | 4.3 | 3.7 | 3.6 | 4.3 | 4.6 | 4.6 |
| North America | 2.6 | 2.7 | 1.5 | 2.4 | 2.8 | 2.3 |
| South and Central America and the Caribbean | 0.9 | -0.9 | -2.1 | 1.0 | 2.3 | 2.8 |
| Europe | 2.0 | 2.3 | 1.9 | 2.6 | 2.4 | 2.1 |
| Asia | 4.1 | 4.2 | 4.1 | 4.5 | 4.5 | 4.4 |
| Other regions d | 2.5 | 1.1 | 2.2 | 2.0 | 2.8 | 2.9 |

a Figures for 2018 and 2019 are projections.

b Average of exports and imports.

c Includes the Commonwealth of Independent States (CIS), including associate and former member States.

d Other regions comprise Africa, Middle East and Commonwealth of Independent States (CIS). Sources: WTO Secretariat for trade, consensus estimates for GDP.

(1) It should be noted that quarterly estimates do not match annual volumes and forecasts exactly but they tend to be of similar magnitude.

(2) Auboin M. and Borino F. (2017), "The falling elasticity of global trade to economic activity: Testing the demand channel, improving global trade forecasts", Voxeu.org, 12 June. Source: WTO

(2) Hellenic Shipping News, 16 April 2018/ Platts

IMO greenhouse gas cuts present unprecedented challenge for shipping

The International Maritime Organization is set to throw up another challenge for the shipping industry with Friday's greenhouse gas cuts deal, requiring the industry to come up with GHG-free vessel designs over the next decade at the same time as it struggles with other regulations.

The IMO's Marine Environment Protection Committee adopted a strategy requiring the shipping industry to reduce its total GHG emissions by 50% from 2008 levels by 2050, as well as cutting carbon dioxide emissions "per transport work" by at least 40% by 2030.

The cuts "per transport work" may be achieved by measures like slow steaming to maximize fuel efficiency in the global fleet. But outright cuts to the industry's total emissions will be much harder, given that the global fleet is expected to continue growing over the coming decades as global trade increases. These cuts imply new vessels capable of running on GHG emission-free power sources will need to start coming into service in the 2030s. The challenge to shipping is unprecedented as it remains largely unclear what these power sources will be.

When the IMO decided in 2016 to cut marine fuel sulfur limits to 0.5% in 2020, the range of options for how shipping could implement the cuts were reasonably familiar to the industry. This time around, a set of largely untested technologies are on offer.

A report from the OECD's International Transport Forum in March arguing 100% carbon dioxide cuts were achievable for shipping by 2035 carried much weight in this week's discussions, as proponents of more radical cuts used it to support their arguments. The report advocates efficiency measures such as slow steaming and more hydrodynamic hull designs in the short term, while moving toward power sources including methanol, hydrogen, ammonia and wind power in the longer run.

In the next few days the focus will shift to whether proponents of more radical cuts are satisfied with the deal. IMO delegates and officials are hoping to avoid the possibility of harsher measures being imposed at a regional level by authorities unimpressed by the results achieved at the global level.

Starting point

Before this week's meeting, several delegations argued only 100% GHG cuts by 2050 would be consistent with the 2015 Paris Agreement's goal of limiting global warming to 1.5 degrees Celsius over pre-industrial levels. The words "at least" in the strategy for the 50% cuts may have been key to securing the support of these more ambitious countries, suggesting that the cuts may be intensified at a later date. In comments Friday before the MEPC adopted the strategy, IMO Secretary General Kitack Lim characterised the deal as a "compromise position" that "may not be satisfactory to all".

"Please remember, this initial strategy is not a final statement but a key starting point," he said. The EU has previously threatened to include shipping in its emissions trading system if the IMO does not have a satisfactory GHG emissions strategy in place by 2023. IMO delegates and officials are hoping the EU will seek to toughen the cuts at future MEPC meetings rather than imposing its own measures at the regional level.

"The agreement reached today at the IMO is a significant step forward in the global efforts to tackle climate change," said EU Commissioner for transport Violeta Bulc and EU Commissioner for energy and climate action, Miguel Arias Canete, in a joint statement Friday.

"The shipping sector must contribute its fair share to the goals of the Paris Agreement," they said. While the EU had sought a higher level of ambition, Friday's deal was "a good starting point that will allow for further review and improvements over time," the Commissioners said.

"For this initial strategy to succeed, it is now crucial that effective reduction measures are swiftly adopted and put in place before 2023. Preparations on longer term actions should also begin," the Commissioners said.

The IMO's agreement makes it less likely that the EU will bring shipping emissions into its legally binding EU Emissions Trading System. The EU has said it would bring shipping emissions into the EU ETS in 2023 if the IMO failed to take meaningful action to reduce GHG emissions by 2021.

Decarbonization road

Major global shipping industry association BIMCO on Friday also welcomed the IMO agreement.

"The IMO has done something no one has done before: set an absolute target for emissions reductions for an entire industry," the group said in a statement Friday.

"It is a landmark achievement in the effort to reduce emissions, and something that every other industry should look to for inspiration," said BIMCO deputy secretary general Lars Robert Pedersen.

"The strategy shows that there is only one road ahead, and that is the road towards decarbonization," he said.

"In BIMCO we believe the industry can deliver on this target — even if we don't know exactly how, yet," Pedersen said.

Global shipping emissions peaked in 2008 and are already being decoupled from economic growth, but new technology and procedures will be required to bring emissions to zero in the second half of the century, he said.

Another question on the shipping industry's mind will be how the GHG strategy will affect plans to implement the IMO's 0.5% sulfur cap on marine fuels in 2020. This week's deal is likely to add to uncertainty over that regulation as it encourages the "wait-and-see" attitude already prevalent among many shipowners and bunker sellers.

Refinery owners considering expensive upgrades to increase their middle distillate production to meet new demand from the shipping industry may no longer consider the investment worthwhile if large numbers of shipowners are set to turn away from oil within the next two decades.

Equally, shipowners mulling over the benefits of LNG bunkering may now pause for further analysis. While burning natural gas will deliver some GHG emission reductions compared with oil, the reductions will not be enough to meet the cuts envisaged by the IMO's new strategy. Source: Platts

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(3) Hellenic Shipping News, 14 April 2018/ Wood Mackenzie

IMO aims to halve global shipping emissions – but what will it cost?

Global bunker fuel costs could rise by up to US\$60 billion annually from 2020, in a full compliance scenario, when the International Maritime Organization's (IMO) 0.5 wt% sulphur cap for bunker fuels kicks in.

Fuel oil, which is high in sulphur content, has traditionally been used by the shipping industry as bunker fuel. In 2017, global demand for high-sulphur fuel oil stood at over 70% of overall bunker fuels. With the implementation of the IMO regulation in 2020, shippers will have to consider a switch to alternative fuels, such as Ultra Low Sulphur Fuel Oil (ULSFO) or marine gas oil (MGO), or install scrubbers, a system that removes sulphur from exhaust gas emitted by bunkers.

Installing scrubbers may be an economically attractive option. Although there is an initial investment, shippers can expect a rate of return of between 20% and 50% depending on investment cost, MGO-fuel oil spread and ships' fuel consumption. However, the penetration rate for scrubbers could be limited by a number of factors, including access to finance, scrubber manufacturing capacity and dry-dock space. Demand from the bunker fuels market will total about 5.3 million b/d in 2020, according to Wood Mackenzie forecasts.

Based on pure ULSFO refinery streams, available ULSFO volumes in 2020 will total about 1.2 million b/d. This could be boosted by further blending ULSFO with vacuum gas oil (VGO) streams, but VGO is a valuable feedstock for the production of other lighter refinery products, and may not be readily available. It is likely that MGO will help meet additional demand from the shipping sector. Wood Mackenzie estimates that this will see MGO demand rise by over 1 million b/d in 2020 in our base case outlook. Meeting this demand will require higher crude runs with residue upgrading units, particularly in the US and China, supporting an uplift in refining margins.

It also provides refiners, particularly in the US and China, the opportunity to capture the value of their ULSFO component streams and increase their share of the global bunker market.

Some refiners should see better profit margins as incremental demand for MGO rises, pushing up its price. Higher refining runs, required to meet additional MGO demand, could potentially push global

gasoline market into surplus weakening gasoline prices. This could mean that the gasoline pain for some refiners could be more acute than the impact of weaker HSFO prices. Overall, we expect a material impact on refining economics post IMO and refiners must ensure they have a robust IMO strategy in place.

We also expect a shift in bunkering locations based on compliant fuels availability. Singapore, for example, could potentially lose some of its market share for bunker fuels to China as shippers look for alternative locations with a surplus of compliant fuels. China, with ample MGO supply, is well positioned to attract shippers.

New greenfield upgrading investments from refiners are unlikely to be purely driven by IMO regulation, and there is a need to look at longer-term rationale and strategic fit of these projects. Structural shifts in the fuel oil and gasoil markets may result in better economics, but that needs to be re-evaluated. For refiners choosing not to invest, the focus should be on infrastructure to capture the opportunity from their existing configuration and internal streams.

Source: Wood Mackenzie

(4) Hellenic Shipping News, 13 April 2018/ Pricewaterhouse Coopers

More strategic investment in Africa's ports can accelerate growth and development by strengthening trade

Africa needs to take advantage of the economic potential of its ports and shipping sector if it is to realise its growth ambitions. Globally, ports are gateways for 80% of merchandise trade by volume and 70% by value. Investment in ports and their related transport infrastructure to advance trade and promote overall economic development and growth is therefore vital – particularly in emerging economies that are currently under-served by modern transportation facilities.

However, port investment must be channelled appropriately to ensure financial sustainability and economic growth. Investment is not always about building new ports or terminals – investment spent on infrastructure without cognisance of the efficiency and effectiveness of the performance of the port may not produce the desired results. Port performance must be seen in the context of not only port infrastructure shortfalls, but also the fact that port performance has a direct impact on the efficiency and reliability of the entire transport network in which the port is just a node for the transfer of goods. These are among the key findings of an analysis of port development in sub-Saharan Africa (SSA) issued by PwC (www.PwC.com) today. The report, 'Strengthening Africa's gateways to trade', was developed in response to the challenges facing SAA's ports in attracting external investment and highlighting the regional economic and growth benefits thereof.

Why ports matter

As an emerging market region endowed with vast resources and a growing population, SSA must accelerate its market access and trade across the region and with the rest of the world. PwC analysis shows that a 25% improvement in port performance could increase GDP by 2%, demonstrating the close relationship between port effectiveness and trade competitiveness. With growing congestion in many African ports, Africa runs the risk of sacrificing further growth through lack of investment in port terminal infrastructure. Access to effective ports, interconnecting infrastructure and efficient operations to cope with current demand and future growth, will lead to reduced costs and improved overall freight logistics efficiency and reliability – all of which are fundamental to the region's future success.

Despite the high volumes of goods that require transport, the development and integration of ports in Africa's wider logistic chains remains uneven. Some ports are important generators of benefit and serve large hinterland areas, often extending beyond national borders. Others lag in terms of available facilities, reliability and efficiency in the handling of freight, which increase supply-chain costs. The disparities in performance between different ports impacts on Africa transport logistic chains, and makes African countries less competitive than they could be.

Dr. Andrew Shaw, PwC Africa Transport and Logistics Leader, says: "Ports are a vital part of the supply chain in Africa, with many ports having a far-reaching hinterland often spanning a number of countries, which makes them a natural focus for regional development."

"In this report we show that the global transportation and logistics industry can no longer afford to ignore developments in Africa. Logistics service providers and ports in particular will continue to play a key facilitator role in trade competitiveness and thus facilitate trade and sustained economic growth across the region. Trade competitiveness requires governments and key stakeholders to see ports as facilitators of trade and integrators in the logistics supply chain. Efficient ports can make countries and regions more competitive and thus improve their growth prospects. The reliability and efficiency of each port terminal, including minimising delay to shippers, is critical to enhancing future trade facilitation."

Kuria Muchiru, Partner, Government & Public Sector PwC Kenya, adds: "Efficient port operations in Mombasa and Dar es Salaam are critical to increased throughput and evacuation of cargo. Investments in rail are seen as a major step towards contributing to improved performance. Developments in multimodal operations and master planning of the ports to keep up to date with increasing throughput, which in turn fuels economic growth are critical to efficiency. In the long run East Africa is expected to a be a major transhipment hub on the East Coast of Africa, which will reduce freight costs in addition to contributing to the Belt and Road. "

Ian Arufor, Partner PwC Nigeria, comments: "International trade is a primary vehicle for the international movement of capital to developing nations, which ultimately drives economic development." "As the larger West African economies embark upon, or seek to accelerate, the implementation of their economic development drives, new and / or expanded port access and capabilities are increasingly recognised as key tenets of these programs. This is exemplified by the number of active port development and expansion projects in Nigeria and Ghana."

The case for shifting focus

Historically, many governments have focused on the revenues that can be extracted from ports as opposed to recognising them as facilitators of trade and growth. Africa needs to shift its understanding of the role ports can play and step up investment in them to achieve its economic development goals. In particular, there should be more awareness of the greater economic benefits that effective and efficient ports can play.

In SSA, the business case for port expansion is often only defined once capacity is already constrained and thus many ports operate under severe pressure while investment decisions are being made. This continual lag, which often lasts years, reduces competiveness and takes no account of the resulting reduced trade impact on African economies. In contrast, China's approach to port investment is instructive. China considers port investments on the benefits it receives from trade and thus regards ports as highly strategic investments in the national interest.

High port logistics costs, poor reliability and low economies of scale in trade volumes have a negative impact on trade growth in Africa. According to PwC estimates, US\$2.2 billion per annum could be saved in logistics costs if the average throughput at the major ports in SSA doubled. In other parts of the world, such a focus on volume and efficiency has led to a stronger emphasis on hub and feeder ports for containers and enhancing scale for commodity bulk terminals.

Although individual countries in Africa have tended to push for developing their own hub ports (ports with the greatest volume potential), it is likely that we will see some ports eventually emerge as major hubs. PwC's analysis shows that, based on the degree of shipping liner connectivity, amount of trade passing through a port, and the size of the hinterland, Durban (South Africa), Abidjan (Côte d'Ivoire) and Mombasa (Kenya) are most likely to emerge as the major hubs in Southern Africa, West Africa and East Africa, respectively.

It is notable that SSA merchandise trade has increased by about 300% over the past 30 years, yet the region contributed less than 1% to the value of world trade growth during this period. The value of SSA exports has declined since the end of the resources boom, while imports have continued to grow. As demand for commodities begins to increase once more, we expect to see prices and volumes will rise again.

The fact that most African countries have an imbalance in trade focused on commodity exports and manufactured imports poses major cost challenges. SSA imports are predominated by containerised cargo, while exports are mostly handled as bulk freight. This trade imbalance between imports and exports means that many containers return empty, thereby absorbing valuable port capacity and resulting in higher logistics costs for inbound traffic to offset the cost of an empty return leg. Improving Africa's trade potential to export manufactured, semi-processed or agricultural goods would significantly improve the imbalance in containerised trade. This rebalancing of containerised trade offers a unique opportunity for African countries to beneficiate and expand trade in higher-value exports.

Most SSA ports are public sector owned and managed, which makes the raising of capital in a constrained economic environment difficult. Governments' role in the port sector also affects investment returns because of the manner in which they regulate and operate ports.

Greater clarity and transparency about government involvement and regulation of port activity is important. Almost all investors we spoke to during our research highlighted governance as the main risk consideration in their investment decision to support increased port investment. This is in an environment in which 67% of port terminal operators interviewed in southern Africa felt that they needed to expand their port facilities.

Performance of ports in SSA

A range of physical, organisational, technological and institutional elements play a role in determining port capacity and efficiency. PwC has developed a Port Performance Analysis (PPA) that tests the performance of SSA ports against international norms and practices. Using the PPA assessment tool, notwithstanding the fact that each region and port has its own specific challenges, it is possible to draw the following conclusions about SSA ports:

- There is a lag in investment in port infrastructure, which tends to perpetuate bottlenecks at key African ports. The investment lag is largely driven by reluctance to invest ahead of demand and when investment decisions are made, it frequently takes a number of years before new equipment is supplied or infrastructure constructed.
- African ports tend to operate at higher densities than their global counterparts due to land constraints.
- Terminal capacity utilisation is often constrained by vessel sizes, vessel utilisation and call frequency.
- Road network around ports are often not sufficient to sustain port volumes.
- Many of the handling inefficiencies and long container dwell times are not the result of port infrastructure shortfalls at all. Rather, they are a consequence of poor port management, customs and associated container clearing processes, as well as inadequate landside connections which prevent containers leaving ports without delay.

Future drivers of investment

The report assesses current investment in SSA's ports and reveals a number of trends:

- Ownership and service models are gravitating towards greater private-sector involvement;
- Increasing competition between ports is driving investment decisions;
- Shipping lines and port operators are increasingly driving port investment;
- Externally-funded commodities and consumer goods are driving investment;
- Appetite for large greenfield investment is waning;
- · Focus on intermodal facilities and dry ports is increasing; and
- Greater awareness of infrastructure interdependencies.

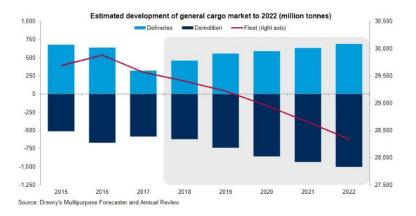
Shaw comments: "SSA ports are under increasing pressure to respond to the needs of shipping lines, logistic providers and multinational traders, as they seek to drive efficiencies throughout the value chain. There remains a strong case for SSA to focus on investment in ports. Developing port infrastructure ahead of demand, focusing on the ports with the greatest potential (the 'hub' ports of the future) and improving the overall functioning of these ports so that through productivity gains they are increasingly attractive as destinations for global trade are key imperatives."

(5) Drewry, 4 April 2018

Multipurpose shipping eyes recovery

Multipurpose shipping has started 2018 on a confident footing and is forecast to recover further on rising demand, contracting vessel supply and lessening threats from competing sectors, according to the latest edition of the Multipurpose Forecaster and Annual Review report published by global shipping consultancy Drewry.

The multipurpose shipping market, which comprises both breakbulk and project cargo sectors, has struggled over the last few years but conditions are now ripe for recovery. Dry cargo demand is growing, with a number of drivers reporting improving conditions, whilst the multipurpose fleet is contracting as older, smaller, less heavy lift capable tonnage is weeded out.



"This year has started with renewed optimism and it is Drewry's belief that the market has finally turned that corner," said Drewry's lead analyst for the multipurpose sector Susan Oatway. "Rate rises are never stratospheric in this sector, but we believe a steady growth of around 2-3% per year is possible over the forecast period."

However, due to the diversity of drivers that supports this sector there are still some concerns that could impact the outlook over the medium term. The first of these is the imposition of tariffs on US steel imports but Drewry has concluded that the impact will be limited. The 45 million tonnes of steel imported into the US on a yearly basis represents just 8% of the global trade. And many countries have now been exempted from tariffs, including the two largest US suppliers, Canada and Mexico. Furthermore, under certain scenarios, alternative trading patterns could lead to an increase in tonne-mile demand. Then there is the IMO deadline to implement a 0.5% sulphur cap on marine fuel from 2020. There is to be no push back on this deadline, so owners are looking at three costly measures for compliance. They can either install scrubbers, use (expensive) low-sulphur fuel or switch to LNG fuelled vessels. Drewry's believes that for the older, simpler vessel this could be the impetus needed to send overage vessels for demolition since almost 10% of the fleet is over 30 years old.

The simple multipurpose fleet, that is those vessels with lift below 100 tons, has already started to contract at a rate that is affecting the whole fleet. However, Drewry believes that the future is with the project carrier sector, i.e. those vessels with lift greater than 100 tonnes.

"Some 80% of all newbuildings over the last five years have heavylift capability, and at least 70% of the orderbook has this capability. The project carrier fleet is growing, but it will be some time before it reverses the decline in the overall multipurpose fleet," added Oatway.

Source: Drewry

(6) Notes by Richard Scott, *Solent GMWD* editor, 23 March 2018 for delegates at Seafarers Welfare in Chinese Ports conference, organised by Solent University/CCM

China's seaborne trade, shipping and ports

These notes, accompanying my presentation for the SWIC conference today, highlight some key aspects of how China's seaborne imports and exports and the China-owned merchant ship fleet relate to activity in Chinese ports.

China's seaborne trade

Growth in China's seaborne trade is the world shipping industry story of the century. Imports and exports have increased enormously since the millennium.

- The upwards trend in imports has been especially notable. During the past decade (2007-2017) annual seaborne imports of all cargoes into China rose by 163% to reach 2,400.million tonnes.
- There has been strong growth in all the main import categories over the past ten years. Dry bulk commodities is by far the largest category, growing by 191%. Oil is the second largest, up by 129%, while container cargo grew by 143% and other cargoes by 149%
- Another remarkable outcome was China's *expanding proportion of global seaborne imports*. From 11% of the world total in 2007 (and, earlier, 5% in 2000), this proportion almost doubled to 21% in 2017. The much faster growth of imports into China than seen in other countries, and the huge scale of cargo movements, has attracted global attention.
- Many forecasters expect the upwards trend in imports to continue in the next few years, although there is considerable uncertainty about the future pace.
- Also, there has been an *expansion of exports*. These comprise container cargo, dry bulk commodities and other cargoes. The total is large but, for comparison, less than one quarter of the imports volume. Over the past decade the annual volume of exports rose by 19%. These comprise 5% of the global total.

China-owned fleet

- The China-owned fleet of merchant ships strongly increased its capacity by almost 200% during the period of ten years from end-2007 to end-2017, reaching 153 million gross tonnes (including all vessels of 100 gt and larger). These are ships owned and controlled by Chinese nationals based in China,
- Looking at the *number of ships* in the fleet, this total has not grown as rapidly, up by 63% over ten years to 7,400 ships at end-2017 because of the increased average ship size: bigger container ships, tankers and bulk carriers (especially the gigantic 400,000 dwt valemax ore carrier behemoths).
- Among the *main vessel type categories*, the bulk carrier fleet's capacity more than tripled (up by 236%), tanker fleet capacity increased similarly by 192%, container ships saw an almost quadrupling (up by 297%), while all other ship types together grew by 74%.
- China-owned ships have achieved an expanding proportion of the world fleet. This proportion has grown by five percentage points from 6.6% at end 2007 to 11.8% at end 2017.
- Fleet growth in the past three years averaged 8% annually, and *future rapid growth is implied* by a large volume of new ships on order for Chinese shipowners. Currently these are equivalent to 16% of existing ships, mostly for delivery in the next two years. But several other influences will also affect fleet growth.

Consequences for China's ports

- Import and export trade extensively employs foreign-owned vessels, despite the growth in the China-owned fleet, a large proportion of which is employed in trades to or from China.
- Although up-to-date statistics on port calls are not available for this summary, such data probably is obtainable at a substantial price from maritime information providers.
- We know that increased trade has led to greatly increased vessel movements to or from ports in China. This additional activity has occurred despite the rise in the cargo-carrying capacity of individual ships on some trade routes, which is only a partly offsetting factor related to ship movements.
- In many trades average ship size used probably has not changed greatly over the past decade, implying more individual shiploads and therefore more port visits.

sources: statistics in this summary are partly based on data compiled by *Clarksons Research*, accompanied by numerous calculations by *Bulk Shipping Analysis*.

(7) Hellenic Shipping News, 5 April 2018/ Reuters

Damp squib or next commodity super-cycle? The Belt and Road dilemma

China's Belt and Road Initiative (BRI) is one of those rare things that virtually everybody seems to have heard about, but equally, very few people can actually claim to have a detailed understanding of what it means.

This dichotomy was in evidence at the Belt and Road conference, hosted by Mines and Money, in Hong Kong on Tuesday, with views ranging from the BRI will be the driver of a new super-cycle for commodities to that it's more of a marketing slogan aimed at boosting the image and influence of the government in Beijing.

On the side of thinking of the BRI as a sort of a Marshall plan for Asia, Africa and even Europe are a set of impressive sounding numbers, which dwarf the scale of the U.S. initiative that helped to rebuild Europe after World War II.

The heart of the BRI is effectively building vast numbers of infrastructure and energy projects across at least 70 countries that are home to a total of 65 percent of the world's population and some 40 percent of its economic output.

The centrepiece of Chinese President Xi Jinping's economic programme also involves developing the mines and oil and gas fields necessary to supply the raw materials for this vast undertaking.

For its supporters, the BRI is the vehicle by which less developed countries will supercharge their growth and lift their populations out of poverty.

Asian countries need to spend \$1.7 trillion annually on infrastructure in the coming years, more than double the current investment rate, Rani Jarkas, chairman of the advisory firm Cedrus Group, told the Hong Kong event.

It's these sort of numbers that are getting commodity investors and producers excited, as that level of spending will require huge amounts of iron ore for steel, coal for making cement, and metals such as copper and zinc.

Name your top BRI projects

But just as the big picture sounds very encouraging, scratching below the rhetoric reveals that the BRI may not be quite as big a deal as many expect.

One of the questions I have posed at several conferences and events where the BRI is a focus is to ask the audience to think of their top five BRI projects, what they know about them and how much they will add to commodity demand.

This causes most people to stumble, and bear in mind that the attendees at these events are drawn from the resource sector, either as producers, traders, buyers or financiers.

What becomes apparent is that the BRI is currently more of a high-level political initiative that China is using as a diplomatic tool to expand its influence, especially in central, south and southeast Asia as well as Africa.

There doesn't appear to be a coordinated strategy for building the land transport corridors linking China to Europe through Asia, or for the maritime projects that take in Africa as well.

What emerges is that Chinese companies, both the large state-owned enterprises (SOEs) and smaller companies are using the BRI initiative as a vehicle when seeking investment opportunities.

These opportunities still seem more focused on meeting the needs of the Chinese companies, rather than as part of a policy-driven effort to develop the BRI target countries.

The flagship vehicle of the BRI, the Asian Infrastructure and Investment Bank (AIIB), started operations from its Beijing headquarters at the start of 2016, so it's somewhat unrealistic to expect it to already be a major factor driving BRI investment.

It has approved \$4.26 billion in loans so far, according to data on its website, and although that's somewhat more than small change, it's also a far cry from the trillions of dollars in investment that those backers of the BRI say will be delivered.

It also appears the case that virtually any Chinese foreign investment, with the exception of property, is being classified as related to the BRI.

This helps make it look like the BRI is something significant, rather than a collection of unrelated projects being undertaken by separate companies with little or no coordination.

However, just because the BRI seems somewhat haphazard right now, doesn't mean it will remain that way.

"It may be the great project of this century, it may be nothing. But you have to be involved no matter what," is how one investor put it at the conference.

For commodity producers the takeaway is that the Chinese are increasingly interested in developing resources that they believe will meet domestic needs, and those of the BRI.

These include battery metals such as cobalt, lithium and nickel, but also copper and iron ore.

The answer to whether the BRI is indeed the start of a new super-cycle for commodities will become apparent if Beijing can successfully change the process from a slogan to a coordinated, multilateral initiative that produces actual results.