The maritime world in 2017

IHS Markit chief Maritime and Trade correspondent Richard Clayton assesses the state of the global shipping industry, and identifies five critical issues now influencing the investor landscape.

Talking trade

Shipping is a servant of world trade. World trade depends upon the efficient interaction between economies, which is driven by governments' attitude to imports and exports. A determination to protect domestic industries from foreign competition will hinder trade, and therefore depress demand for shipping. The past year has seen significant change to governments' attitude to trade, in response to a popular mood to stop foreign goods and services undercutting jobs. Whether justified or not, shipping is regarded as an engine of globalisation and as such enables foreign competition to undermine domestic economic success.

IHS Markit has marked the rise of China's economy since it gained access to the World Trade Organization in 2001. GDP growth hit an unprecedented 15% in 2007, recovering after the global financial crisis of 2008-09 to reach 12% in 2010, but has steadied to a range between 7% and 8% in subsequent years. Throughout 2016 China's highly-centralised economy flatlined at 6.7% growth, and expansion in 2017 is now forecast at about 6.6%. This is the sign of a maturing economy. More significantly, China's economy is being redirected from export-oriented to a greater focus on domestic consumption, worryingly encouraged by easing access to credit. Even so, forecasts from PwC, the professional services company, suggests China will surpass the United States as largest economy by 2028.

But it was not China's slowing economy that dominated the headlines in the first quarter of 2017: rather it was the United States, more specifically President Donald Trump and his protectionist stance. An "America First" trade policy quickly led to a withdrawal from a potential Trans-Pacific Partnership, and promises for a renegotiation of the North America Free Trade Agreement. This will have severe implications for automobile manufacturers in Mexico, much of the output from which goes north to the US. Trade between the US and Mexico is expected to be the first high-volume flow to suffer from protectionist trade policies, however this is likely to go far beyond Mexico. Ironically, it was China's President Xi who warned against trade wars during the World Economic Forum in Davos, Switzerland this January.

Changing popular sentiment is also expected to drive economic policies, and therefore trade, across key European Union states. Elections will be held in the Netherlands (March), France (April), and Germany (September), while the United Kingdom begins two years of negotiations on pulling out of the EU in March. Trade policies will feature high on the agenda for each of these elections.

Five of the top six economies, ranked in terms of nominal GDP – United States, China, Germany, United kingdom, and France – will question their trading policies during 2017. In the case of the UK, which plays a leading role in global shipping services, decisions about a shift in trade from a focus on the European bloc to a series of bilateral agreements will have implications for shipping, port infrastructure, and inland logistics, as well as marine insurance, ship finance, and maritime education.

The year 2016 saw vessel overcapacity and weakening demand dominate industry thinking. The year 2017 is shaping up to be a period when trade policies reach the top of the agenda. Nevertheless, there have been significant developments for the supply of shipping and for the shipyards that deliver newbuilding ships; for the supply of seafarers, levels of competence, and the interaction of technology with human resource; and for ship management. Meanwhile, the enduring elephant in the room – an epidemic of maritime bribery and corruption – is now in open discussion.

World trade policies have entered a period of turbulence

Skilled shipyard workers will find employment elsewhere

Vessel supply

If 2016 saw a collapse in the number of newbuilding ship orders, 2017 will see the consequence of this dearth of orders: a collapse in the number of shipyards building ships.

In simple numbers from IHS Maritime & Trade data, ship owners placed orders for just 149 ships of more than 10,000gt in 2016, covering bulk carriers, crude oil and refined products tankers, and container ships. The total was well short of the 1,094 orders recorded in 2015, and just 9% of the 1,568 ships ordered in 2013. Chinese yards won almost half the orders last year, with South Korean and Japanese builders sharing the rest. However, the most revealing statistic is that only 21 Chinese yards secured new business in 2016 (less than half the number of successful shipyards in 2015); only six Korean yards won new business and only 11 Japanese yards.

China and South Korea led the rapid expansion of shipbuilding capacity in the decade to 2010. China had just 25 yards in 2000, rising to about 200 in 2007 at the height of demand; South Korea invested heavily to expand existing capacity. The increase in orders was followed by a fall in 2009, with another increase in demand coming after the anticipated market upturn in 2013. Jobs were secure as these newbuildings worked their way through the system in 2015 and 2016, but 11 shipyards in China, South Korea, and Vietnam have already been declared bankrupt or entered restructuring. Moreover, speaking at the Marine Money conference in London in January, Adam Kent of Maritime Strategies International offered his opinion that "one-third of China's orderbook is fictitious."

Unless new business is secured in the first half of 2017, it's likely there will be closures at Japanese shipyards. Sumitomo Heavy Industries is scheduled to deliver its last order, a 106,000 dwt Aframax tanker, in October 2018. Thereafter, Minaminippon Shipbuilding delivers its last ship, a 51,000 dwt MR tanker, in January 2019; Namura Shipbuilding delivers its last 34,000 dwt bulk carrier in March 2019; Kawasaki Heavy Industries delivers its final very large gas carrier in June 2019; and Mitsui Engineering & Shipbuilding completes its ultimate vessel, a very large crude carrier, in December 2019.

This is a worst-case scenario. Japanese ship owners such as Asahi Tanker – an affiliate of MOL – has remained loyal to domestic builders even in tough times. However, shipyards such as Tsuneishi have already gone on record as saying it will concentrate construction at yards in China and the Philippines, and end building in Japan. South Korea is taking a different view, using resources of the Export-Import Bank of Korea to assist in the rehabilitation of troubled Daewoo Shipbuilding & Marine Engineering and Sungdong Shipbuilding. The bank's chairman, Lee Duk-hoon, insisted such a move would be in the best interests of the state, which is borne out by the significant size of shipbuilding in relation to the national economy.

The outlook for a surge in newbuilding orders in 2017 looks weak. Although most shipyards have enough work to last until the later months of 2018 – very close to the critical 1.5 years before extreme measures are necessary – little help will come from replacement business because the existing fleet is relatively young. Second-hand vessel pricing is expected to keep newbuilding orders in the background throughout the coming year, however the case for newbuilding orders in the dry bulk sector will become increasingly compelling in 2018. But the tanker sector will struggle to accommodate a surge of newbuilding deliveries during 2017, which will depress rates and discourage new orders, and the offshore sector is likely to continue in its two-year-long moribund state. What of the container sector?

Mærsk Group chief executive officer Søren Skou believes container shipping is undergoing a fundamental change that will see it transform from an industry segment in its own right to an integral part of the broader supply chain. Speaking at Mærsk's Capital Markets Day last December, Skou explained that the ships brought in as part of the Hamburg Süd acquisition would sweep away the need for any newbuildings that have not already been ordered. "The industry doesn't need any more ships, and we won't need to build in coming years," he said. Consolidation in container shipping – as completed in 2016, as underway in 2017, and as rumoured for 2018, together with the new alliance structures to go live this year – will mean there will be very few newbuilding orders for container ships certainly before the end of 2018.

This position is underlined by banks' much more cautious attitude to lending. "In the past," Citi global head of shipping Michael Parker told Marine Money, "shipping has been financed by banks over-lending at too-cheap rates." Smaller carriers will struggle to get access to capital, adding to the drive towards greater consolidation, and encouraging the thinking of container shipping as an element in the end-to-end supply chain.

So Asian shipbuilders should not expect a surge in orders from the tanker, offshore, or container sectors before the end of 2018, or from the dry bulk sector before the end of 2017 at the earliest.

Beyond competence

In 2015, the BIMCO/International Chamber of Shipping Manpower Report estimated the global supply of seafarers to be 1,647,500, of which 774,000 were officers and 874,000 ratings. Global demand for seafarers was estimated at 1,545,000, however the industry required 790,500 officers and 754,500 ratings. So two years ago there was a shortfall of 16,500 officers. By 2020, the officer shortfall is expected to be 92,000, and by 2025 a staggering 147,500 officers. China, Philippines, and India are the key suppliers of officers, with the Russian Federation and Ukraine coming next.

This forecast is very pessimistic; other surveys take a different view depending on factors such as perceptions about the future development of trade and the benefits of future technology.

Worrying though this might be, a far greater concern is the decline in standards of competency, a decline that will only get worse over the next decade. In January the IHS Markit Maritime Risk forum heard that testing for standards of knowledge to gain the STCW (International Convention on Training, Certification, and Watchkeeping for seafarers) certificate of competency sets no pass mark, but enables employers to take on seafarers who achieve an acceptable 60% or more. Although this pass level is an imperfect measure of seafarer knowledge, attitude, and behaviour, the better employers can pay for perceived quality.

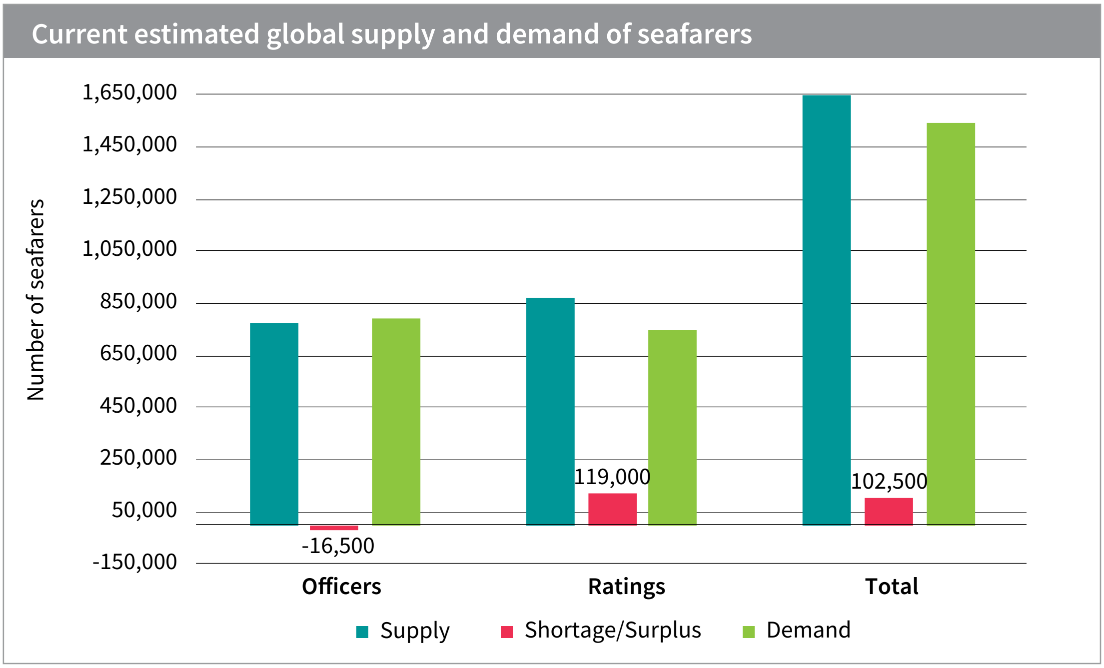
The problem comes when there are not enough seafarers of sufficient standard to crew an employer's ships. Leaving a vessel swinging at anchor is not an option, so the search continues with the standard slightly lowered. Anxious to keep the ships in the market, the temptation to take on board crews that fail to meet the company-specified standard increases, even more so when the shortage of officers makes itself felt year after year.

So the problem crew managers and vessel operators face is not a shortage of seafarers as much as a shortage of seafarers of high quality. One forum speaker claimed one seafarer in 12 achieves less than 40% in STCW tests. In a well-supplied world, seafarers achieving just 30% in the STCW standards would be rejected, but they find employment with companies that are even more needy. They shouldn't be in the industry at all because lack of quality increases risk which, eventually, feeds through to accidents and incidents.

Future technology will remove some of the more mundane tasks at sea, however it's likely to accentuate the quality problem. Rather than requiring a deskilling of seafarers, technology will drive an upskilling: although there might be fewer seafarers, they will need to be trained to higher levels. But there will be a degree of reluctance on the part of companies to invest in higher-level training for seafarers if there is any chance they will be snapped up by rivals with similar requirements. This is current experience: the industry is investing millions of dollars to get seafarers to the right level, only to find the best officers attracted to employers offering the best terms and conditions. It's not an easy situation. A rapidly-dwindling pool of talent will concentrate around the better companies, leaving the rest to catch as catch can.
One solution to the crew competence dilemma is to regard the STCW standard tests as offering clues to a seafarer's competence but not the entire picture. Experience, attitude, and behaviour should also be factored in; accept that increasing levels of automation will demand new skills and therefore new levels of training; build professional development into a seafarer's employment package to generate loyalty and aid retention; focus less on the actual numbers of seafarers and more on the levels of competence; encourage experienced seafarers to join shore-side operations when they leave the sea to assist in vessel operations.

Capt Pradeep Chawla, managing director of QHSE (Quality, Health, Safety, Environment) and Training at Anglo-Eastern Univan Ship Management has been thinking about the competencies of future super-seafarers. The Master, he says, will need to process large amounts of data without suffering from information overload, identify the critical issues from among the alarms and displays, and work with multicultural teams on board and ashore while maintaining his or her over-riding authority enshrined in the ISM code.

In addition, the senior officer will be required to understand the limitations of available technology and the challenges of adopting new technology and complying with new regulations. He or she must keep abreast of change, cope with increasing levels of stress, maintain clear communications with shore and port, and manage their shipboard teams. At the very highest level, the skills required go far beyond being competent.



BIMCO/ICS Manpower Report 2015 saw the officer shortfall growing

Seafarer numbers might not be as significant as the skills they can offer

Ship manager mergers are more likely to secure quality seafarers

Managing change

In November it was announced that Cyprus-headquartered ship managers Columbia and Marlow Navigation were in advanced negotiations about merging their businesses. The bare bones of such an agreement were set out in a Columbia company newsletter in which founder Heinrich Schoeller commented that closer co-operation with companies that share similar ethics and values would become more important in years to come.

“The multi-purpose co-operation [Schoeller Holdings subsidiary] AAL has launched with Peter Döhle Group can serve as a blueprint,” he said. “Both companies will share their experience, resources, and hardware... but they will remain independent of one another.”

Ship management has seen several examples of corporate realignment over the past two years, with Anglo-Eastern snapping up Univan, while V.Group – now majority owned by equity investor Advent International – has added India’s Selandia to UK-based Bibby. However, the Rickmers brothers decided against merging their management businesses.

Collaboration and takeover are expected to feature again in 2017 simply because the shipping business is taking on an altogether grander scale to counter continuing dire market conditions. In his explanation of V.Group’s strategy, chief executive Clive Richardson said the decision to add non-management shipping services (from naval architecture to procurement services) had the aim of “making us better ship managers.”

But scale is not the only driver of change: there’s also an increasing concern about a shortfall of qualified and experienced officers (see above) and the anticipated evolution of digital technology. Anglo-Eastern Univan CEO Bjørn Hojgaard observed during the merger talks last year: “We see the benefits of scale foremost in increasing our ability to attract more high-quality seafarers and the best shore-side talent. It is the core of maintaining a competitive advantage.”

Nevertheless, the greatest opportunity for ship management in future – as well as its sternest challenge – will be handling the inevitable application of technology at every level of vessel and human performance.

One Asian manager offered Fairplay four areas of application: the concept of digital twinning, the benefit of real-time cargo monitoring, the potential of health monitoring and, further off, sensor technology that will enable insurers and other interested parties to follow the sequence of events leading up to an accident or incident.

The greater use of remote sensing will enable operations teams onshore to maintain a close watch on performance of machines and hull. Digital twinning allows realistic simulations of conditions, possible repairs and maintenance, and optimising of operational costs. At the same time, smartphones have helped to drive down the cost of sensors and placed significant computing-power in the hands of people both at sea and ashore. Digital simulations will cover not only engines and other machinery, they will also cover the hull. It is speculated that over time, as class societies gain comfort with the models, vessels can be constructed with less steel or allow for longer life-spans or intervals between special surveys. Both would equate to lower cost for ship owners.

Meanwhile, sensors for cargo shifting or humidity will become the norm when loading, carrying, and discharging. This would provide vessel charterers and cargo owners with real-time data on the condition of the cargo. The result would be improved protection of cargo as the vessel will be notified immediately of water-ingress or other cargo-damage.

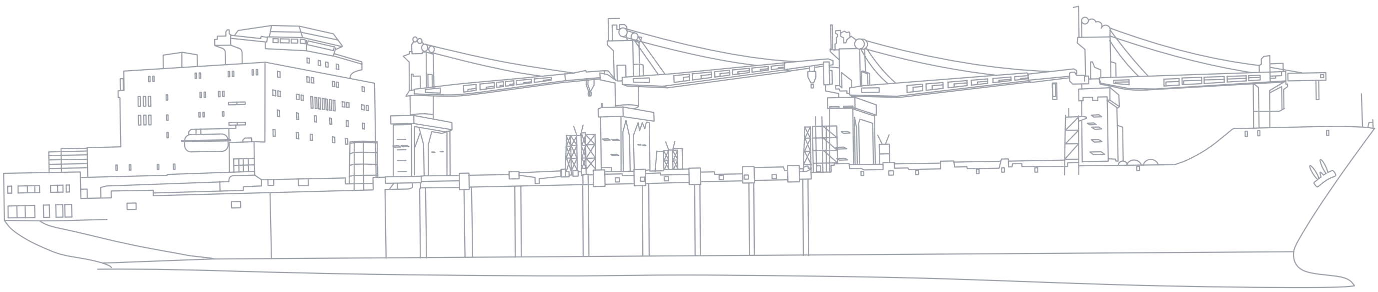
Wearable health-monitoring technology would enable on-board and remote monitoring of crew health issues, leading to a reduction in medical emergencies though the use of predictive algorithms when looking at heart-rate variability, blood pressure and skin conductivity. On board medical facilities will be increasingly automated and remotely controlled. These will also cover fatigue and rest-hour monitoring, and will shed new light on the role of fatigue in incidents and accidents.

Another Asian manager, Hong Kong-headquartered Wallem Group, agrees that technology hasn't yet made any material change to vessel management. However, the business is starting to use technology to increase efficiency and mitigate risk for its clients' assets. The use of leading indicators to alert crew of the need to overhaul machinery, trend monitoring to analyse voyage data, and an in-house automated procurement matrix to get the best prices will enable Wallem to open clients' eyes to more efficient ways to avoid catastrophic machinery failures, optimise voyage performance, and plan budgets for their vessels. An internal mobile app has been developed to allow shore-based superintendents to monitor speed and consumption of vessels in their care.

Ship management as a professional service has begun to use technology to improve vessel and crew performance. Significant change will come within the next decade, perhaps even in the next five years, although investment will not be cheap and will require new skills on shore to match those on board. This will drive greater collaboration within the ship management community. Third-party ship management emerged in the 1970s when banks were forced to relieve ship owners of their vessels in financially troubled times but didn't want to operate them. Today between 10% and 15% of ships are with management companies: continuing troubled times in 2017 could see that proportion increase.

10-15%

Proportion of world shipping currently under third-party management



Tackling corruption

Three significant items of legislation – United States' Foreign and Corrupt Practices Act of 1977, the UK's Bribery Act of 2010, and Singapore's Prevention of Corruption Act of 1993 – all prohibit any facilitating or expediting payment to a foreign official or political party official the purpose of which is to expedite or secure the performance of a routine government action. Facilitation payments are bribes, and as such are a form of corruption. They do not necessarily have to take the form of money, and in shipping are usually cigarettes, whisky or similar. Government officials include port and waterway authorities, and ports state control inspectors. Therefore it is an offence under all three pieces of legislation for a ship's Master to give a couple of bottles of whisky or a couple of boxes of cheap cigarettes to avoid delaying the passage of a USD50 million ship with a USD300 million cargo.

In reality, shipping is a global industry that operates in cultures within which many governments take a very different view of facilitation payments. The arrival on the bridge of a port state control inspector or health officer, flanked by menacing assistants, is a regular occurrence experienced by the Master and his senior team. They search for out-of-date provisions, an item of crew documentation, something that can't be easily explained during a full cabin search. It is recognised as bullying and extortion, and is a critical safety issue because it takes the crew's focus away from the job they are employed to do. IHS Safety at Sea magazine carried a timely analysis of port state corruption in its February issue in which ports in the Black Sea region were picked out, and dry bulk carriers were seen as especially vulnerable because of their tramp trading.

Speakers at the IHS Markit Maritime Risk Forum at the end of January confirmed that bribery and corruption has now reached epidemic levels. Capt Nicholas Cooper told forum delegates how he had learned to fight fire with fire. An unnecessary request from the port state inspector to conduct a fire drill would severely affect cargo handling operations but could be avoided with a bribe. The solution, he said, is simple: "Just call the duty officer on deck with instructions to stop all operations, and bunkers if you are taking them, order all stevedores, lashing gangs and other officials and visitors off the ship, and raise the gangway in compliance with our Emergency – Safety Management System fire in port procedures."

The effect is rapid. Half a dozen frantic phone calls between the PSC inspector and the terminal managers when they find the drill will take at least a couple of hours brings about a cancellation of the fire drill – without the need to pay bribes.

This is the experience of a Master mariner who has been at sea for 40 years, and in command for 25. It's also the experience of a Master who has the full support of his operations team on shore. Younger captains, especially those who do not enjoy the backing of the company, are compromised. They are advised that the Bribery Act forbids making facilitation payments even though failure to do son will lead to vessels being delayed, blacklisted, or languishing for days at the outer anchorage. Any one of these would be followed by the Master being given a seat on the first flight home.

Threats with menaces are a fact of life in certain ports and waterways. It is a major cause of stress for Masters who face the dilemma of understanding the penalties of paying bribes but are faced with the reality of not paying them. The threat of piracy has rightly been countered with action at national security level, and the threat of theft at sea is described as piracy and treated as such. However, the widespread and continuing threat of corruption has not attracted the same reaction by the world's governments and maritime authorities. A recent meeting of the Round Table of international shipping associations (Intercargo, Intertanko, BIMCO, and the International Chamber of Shipping) led to a letter being sent to all Port State Control regional groups suggesting they set up fully independent review panels to assess complaints of corruption or negligence.

The solution, concluded Capt Cooper, is to redefine maritime corruption as a safety issue, and require action among the 172 member countries of the International Maritime Organization. "It is only when whole governments, right up to head of state, are free of corruption will the bribe-free culture filter down to the numerous officials of all grades running their ports," he noted.

Legislation works when it is respected. All Masters understand that it's better to prevent delays than stick rigidly to the rule of law. Ports and canals in specific countries are known to be dangerous, where ill-treatment of seafarers adds up to increased worry and stress, wasted hours for the Master, and a blatant violation of human rights. The Maritime Anti-Corruption Network (www.maritime-acn.org) has identified four objectives to this end: collective action, incident reporting, sharing best practice, and raising awareness. The industry believes it's time to tackle the elephant in the room.

Corruption is far from black and white

The maritime world in 2017

Shipping faces a period of trade policy uncertainty in the Americas, in Europe and Asia, and across Africa. It is unusual for a global transportation business to experience turbulence in all the geographies, even more so when it is considered that this quarter is a period of weakness for all the major shipping markets. As a consequence of the coming together of external and internal disruptions, the traditional shipbuilding, ship owning, ship management, and crew supply businesses are enjoying little incentive to invest. However, lack of investment in Q2 will make itself felt throughout the next five years as environmental regulations kick in.

Meanwhile, there is a growing clamour within the industry for the issue of bribery and corruption to be addressed at a global, meaning governmental, level. This issue goes beyond presidential and legislature elections, and lies of the very heart of how shipping does business. The maritime world in Q2 2017 faces a crisis of confidence that will be played out until at least the end of the year.

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