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# SHIPPING

AUSTRALIA

WINTER 2022



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Pictured: An LNG tanker. Photo credit: Karel Mistrik via Unsplash.



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# 2021-2022 Change, reform and review

Photo credit: Chris Pagan via Unsplash



By Capt. MELWYN NORONHA,  
CEO Shipping Australia

Another twelve months have passed since the last edition of this magazine. Looking out from the bridge, there are many interesting and fundamentally important matters affecting the world of ocean shipping. In the article that follows, several issues are highlighted. However, the selection here is by no means exhaustive – we could have filled an entire magazine all about COVID, legal conventions, autonomous ships, or decarbonisation, or shipping markets, or diversity, or any number of other matters. No doubt we will touch on many of these issues in our newsletter and on our website.

## Port productivity, regulation, and reform

The World Bank and its private sector partners have published a Port Performance Index. It is very disappointing to note that Australian box ports can largely be found at the bottom of the World Bank tables regardless of the methodology and regardless of the year of performance. Meanwhile, Gina Cass-Gottlieb, the chair of the competition watchdog, has called for the regulation of container ports and for port performance monitoring. Noting that Australia's container ports are regional monopolies that have the ability to extract monopoly rent, she declared

that proper regulation of container ports would boost competition.

## Container shipping markets

Box shipping markets are currently experiencing a decline in freight rates. Global freight rates have declined from about USD\$9,167 at the beginning of 2022 to about USD\$5,703 by the end of August 2022. That's about a 38% decline in freight rates. Pretty much all freight rates publicly tracked by Freightos are showing declines at various times through the year. The Shanghai Containerised Freight Index, China to ANZ, is fluctuating but the overall trend appears to be in decline. The cost of shipping remains high, however. Global charter rates are still in the stratosphere and fuel prices are likewise.

## Political overview

In May 2022, the Australian Labor Party swept to power with 77 MPs and 26 Senators. Shipping Australia congratulates the ALP on its victory and wishes them well. We, of course, wish them every success in governing Australia for the benefit of all Australians. Government policies of relevance to the shipping and maritime industries include industrial relations reform, continuation of the existing cabotage regime and the creation of a national shipping fleet.

## Industrial relations

After a heated period on the waterfront with strikes and disruption, the environment has largely calmed down as the maritime unions and the main container stevedores have concluded their Enterprise Bargaining Agreement(s). Alas, upset and disruption continues as a major union-major port services provider dispute has yet to conclude.

## New CEOs and directors

Australia's maritime industry is always an industry in change. We welcomed many people to the industry and many

people to senior roles over the last 12 months. Saul Cannon was appointed to role of CEO of the Port of Melbourne. Gladstone Port Corporation welcomed Craig Haymes as CEO. Port of Brisbane welcomed Neil Stephens as CEO. Dr Hermione Parsons took over as the CEO of the Australian Logistics Council in July 2022. Sam Askin of 1-Stop was appointed CEO in December 2021.

Clint Evans, managing director for Hapag-Lloyd in Oceania, was appointed as a director of Shipping Australia in August 2021. My Therese Blank, Maersk Group's Head of Oceania Market, was also appointed as a new director of Shipping Australia.

## Pilotage

Poseidon Sea Pilots began operations at the Brisbane Pilotage area on the first day of this year, after it won a ten-year contract in the early part of 2021. Poseidon is a fully owned subsidiary of the AMS Group.

## COVID

It's hard to believe that, about this time last year, the government anti-COVID response was in full swing around Australia. There were extensive lockdowns around the country, and many issues such as getting physical documents on board ships, getting sick and injured seafarers off ships, exchanging exhausted crews for relief crews, getting visas from the authorities, flying seafarers around the world and keeping them out of quarantine... there were just so many issues.

From an ocean-shipping perspective, many of these have now resolved and we are approaching something akin to a more normal situation.

## New members

One pleasing trend is that Shipping Australia continues to attract new members. Since the last edition of this publication, we have announced that



Wormald Technology, Subsea, AAL and AMPI have joined the association. At the time of writing, another company is about to make its announcement (on 09 September 2022) that it has joined too. We also have ongoing inquiry from companies about Shipping Australia membership.

## **Ports & Maritime Administration Act Review**

Transport for New South Wales is in the process of carrying out a review of the Ports and Maritime Administration Act 1995 and the Port Botany Landside Improvement Strategy. The purpose of the review is to ensure that the regulatory approach remains fit for purpose and considers the future environment. Shipping Australia provided a detailed and lengthy submission focusing on competition in pilotage, port performance monitoring consistent with the World Bank Report, effective price monitoring, effective port governance / oversight, separation of commercial and regulatory activities, and a revised system of maritime governance for the modern environment. However, the review focused on land-side operational matters, such as traffic control at wharves. Shipping Australia considers the review so far to be rather disappointing and a missed opportunity to create a fit-for-purpose regime tailored to the modern industry.

## **Simplified Trade System**

The Federal Taskforce on the Simplified Trade System has been carrying out work for some time. The basic concept is to make international trade easier and cheaper for business by simplifying processes and increasing government efficiency. Efficient cross-border trade is vital for Australia as 1-in-5 jobs are directly or indirectly supported by trade. The Taskforce is looking for more simple rules, more modern information and communications technology, better biosecurity, better security and the like. Shipping Australia understands that the new government is supportive of the work of the Taskforce. The shipping industry is keen that simplification takes place for border trade and that all the various systems that are currently being developed genuinely interface so that trade has a “single window” in which data is provided to the government once and that there is alignment of Australian rules with global standards. Shipping Australia has been

working, and hopes to continue to work, constructively with the Taskforce.

## **Biofouling management**

Mandatory biofouling management requirements for international vessels arriving in Australia began on 15 June 2022. The Department of Agriculture Fisheries and Forestry has advised that ships will receive less intervention for biofouling if vessels have either implemented an effective biofouling plan; or cleaned all biofouling within 30 days prior to arriving in Australian territory; or have implemented an alternative biofouling management pre-approved by the Department. Vessels that do not have one of these three methods can still enter Australia but will be subject to further inquiries by the Department. Shipping Australia has been communicating the requirements and we continue to work co-operatively with the Department.

## **Seafarer welfare**

Discussions and proposals are currently being developed to formulate the provision, and sustainable funding, of seafarer welfare services. Shipping Australia supports the concept of providing welfare for seafarers. However, we have concerns about the current proposals in terms of the amounts to be raised, the source of funding, and the nature of service provision. The exact nature of what services need to be provided where in Australia has not been determined while the funding for the provision of seafarer welfare services could be quite substantial. Shipping Australia is in favour of a thorough review of what seafarers need; a thorough and professional costing of the same; an open and free-market tender for the provision of services; welfare services should be offered by competing institutions that do not agree to substantially lessen competition; and funding should be provided either from general taxation of contributions from across the supply chain which could take the form of e.g., a levy. There are other issues of concern.

## **Data standards**

Shipping Australia notes that it has been about three years since the founding of the Digital Container Shipping

Association in April 2019. Four container shipping companies set up the neutral, not-for-profit, association with the aim of driving standardisation, digitalisation, and inter-operability.

Since the last edition of this publication, the DCSA has joined forces with a host of international bodies such as BIMCO, FIATA, the International Chamber of Commerce and others to develop common and inter-operable standards. The US Federal Maritime Commission has stated that the US FMC intends to us DCSA standards as has the European Shippers' Council. Meanwhile, the DCSA has now issued a statement that Electronic Data Interchange is too costly, too complicated, has too many standards, and has too many different versions. It ought to be replaced with application programming interfaces, which are more tailor-made for the transmission of data in real-time.

Shipping Australia notes the widespread declarations by various international bodies to conform to DCSA standards and we urge all Australian governments and regulatory bodies to do likewise, and to replace EDIs with APIs, for the benefit of Australia as a whole.

## **Gender equity in shipping**

The International Maritime Day for Women in Maritime 2022 took place in May. The International Maritime Organization notes that there is ample evidence that “investing in women is the most effective way to lift communities, companies, and even countries... IMO has been making a concerted effort to help the industry move forward and support women to achieve a representation that is in keeping with twenty-first century expectations”. Shipping Australia supports gender equity in shipping, and we are also taking steps to help boost gender equity within shipping. These include encouraging the set-up of a Diversity Committee within Shipping Australia; diversity training for Shipping Australia staff (all of our Board Members have undergone this training in their organizations) and improving the gender balance in our committees. We are in the process of ensuring that there is a male co-chair and a female co-chair on all of our State Committees. We have also committed to seeking out and publishing more shipping-related gender-inclusive material in our newsletter and website. ▲

# Update from Queensland

By GEOFF DALGLIESH

The previous Port of Brisbane CEO Roy Cummins left the Port in 2021, The position was left open until March 2022 when Neil Stephens after a trial period at the helm was appointed by the PBPL Board as Roy's replacement. Qld SAL welcome Neil as the new CEO and wish him the best in his new role.

The Board of PBPL believes Neil is the right person to lead the organisation through and into the Ports long term vision to be Australia's premier port and logistics hub.

## Brisbane Port Pilotage

The incumbent Pilotage Company BMP lost their contract and a new contract has been awarded to Poseidon Sea Pilots (PSP) with a contract period of 10 years from 1st January 2022. PSP's parent Company is AMS Group who are involved in many Maritime areas such as VTS Traffic Services, security for Government, Satellite installations, Emergency towage and Aids to

navigation to name a few.

PSP after some initial issues over the first three months have consolidated and now have 29 Pilots on their books with approximately 45% trained to Level 1 status and the remainder at Level 2. Approximately 50% of vessels coming into Port of Brisbane require Pilots to be Level 1 status.

## Port of Townsville Channel widening

Channel widening has commenced and will take approximately 2 years to complete. It will widen Townsville's 14.9 kilometres shipping channel from 92 metres to 180 metres at the inshore end, tapering to 120 metres at the seaward end. Upon completion ships up to 300 metres long will be able to safely enter the port.

## Coastal Shipping

The Qld State Government appointed

task force which closed submissions for interested parties at the end of February 2022. They indicated that they would be conducting interviews over the coming months with those submissions. To date there has been no further update on those submissions.

The State Government at the last election pledged \$21 million towards progressing possible development of an intrastate Coastal Shipping Service.

## Qube Logistics Brisbane

Qube is trialling what they call "Project London" which has the ultimate objective of achieving the movement of more empty containers per vehicle within the port precinct. At this point they are in stage three of the five-stage project and in close discussions with the POBL to ensure legal issues and clarifying questions such as height and width restrictions etc met with an implementation time frame of April 2023. ▲

# Update from Victoria

By CHARLES MASTERS

Following a review of all ports in Victoria, the State Government elected to consolidate the sector and bring all ports under the auspices of one, newly created, entity called Ports Victoria. It will be located in Geelong and is headed up by CEO Brendan Webb.

Additionally, Port of Melbourne underwent changes with CEO Brendan Bourke retiring late last year. That role is now filled by former Toll executive Saul Cannon. Two well-respected shipping executives with a combined 100 years' experience departed the Port, namely Don Forsdyke and Chris Ryan. Shipping Australia wishes both well in retirement. The rail transformation project designed to remove inner city container traffic from arterial roads has commenced

with completion due in 2023. Funded through a levy, we expect this levy to be removed once the project is complete and that the levy should not be re-assigned, or transformed into another charge, as experienced when the channel deepening levy later became a fixed infrastructure charge.

The annual Phil Kelly Golf Challenge had to be postponed because of staffing issues at Waterford Valley Golf Club. A change of venue to LaTrobe Golf Club in May saw 18 teams line up to compete for the prestigious trophy. Another stevedoring team won the event, namely MIRRAT, in a hotly contested game which follows from previous year's winners DPWA and Patrick Terminals. The attention to detail provided by

Latrobe Golf Club staff was nothing short of excellent and as a result we have booked the venue for Thursday 9th March 2023. Grateful thanks to the event's key sponsors namely Port Phillip Sea Pilots, Port of Geelong, MIRRA T and NPDL.

The return of staff to offices in Melbourne following Covid related lockdowns has been slow with reports highlighting the city had the lowest level of office attendance of all Australian Cities. We anticipate the situation to change as more Companies realise the interactions of staff to be more beneficial to both the organisation and indeed the wellbeing of individuals rather than work in isolation. ▲



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Over  
**30m** tonnes of trade  
throughput



Over  
**\$600m** forecast in infrastructure  
investment over the next  
five years



## HRH Princess Anne visits the Cape Don working museum and training ship



*Pictured: Her Royal Highness, the Princess Royal, Princess Anne, takes a moment to chat with Shipping Australia CEO, Capt Melwyn Noronha.*

The Princess Royal, Her Royal Highness Princess Anne, visited the Cape Don museum and training ship in April 2022. Her Highness also met Shipping Australia CEO Melwyn Noronha during her visit to the Cape Don. The Princess Royal was on a tour of Australia and Papua New Guinea. On her visit to the Cape Don, she was representing the Prince of Wales, Prince Charles.

The Cape Don, is a 1963 Newcastle State Dockyards-built lighthouse supply and navigation aids maintenance ship. It is the last surviving Cape Class ship that was purpose-built to service lighthouses around the coast of Australia. It is currently moored at Waverton, on the north shore of the Paramatta River in Sydney.

The ship is now a working museum and training vessel. The Sea Heritage Foundation, a charitable organisation, has developed a range of programmes to provide training to the community. The Sea Heritage foundation is focused on providing education on training to members of the Indigenous communities.

One programme is a Certificate I course, delivered by TAFE, that will enable anyone who successfully completes the course to register with AMSA as a general deck hand. This will enable course graduates to work as a general deck hand on a variety of near-shore vessels such as tugs, charter boats and ferries. Completion of the course also enables graduates to continue to train with TAFE and it represents the start of an ongoing professional development pathway.

“It acts as a window of opportunity into the maritime industry,” CJ Manjarres-Wahlberg, a director of the Sea Heritage Foundation told Shipping Australia.

The Prince of Wales, Prince Charles,

established the Prince’s Trust Australia, a charity, in 2013 to support a variety of causes. The Prince’s Trust Australia is providing funding for two-day taster courses so that anyone who may want to undertake the training can experience the course without having to commit.

Time has taken its toll on the Cape Don and it needs restoration. The vessel needs to be dry-docked. Thales Australia operates the Captain Cook Graving Dock at Garden Island on behalf of the Royal Australian Navy and Thales Australia has confirmed that the vessel has a docking date of 16 January 2023. The work is being paid for by the Sea Heritage foundation using funds raised from corporate donors.

Mr Manjarres-Wahlberg noted that the Cape Don needs a full scrape and clean, a new coat of paint on the hull and superstructure, and rust rectifications throughout the vessel. The aft mast to the vessel was lost some years ago and a replacement is to be made and installed on the vessel during dry-dock.

Also present during the visit were representatives of State and Federal Governments, the former master of the Cape Don – Captain Richard Island, the CEO of the Prince’s Trust Australia – Michelle Endacott, Commodore Charles Huxtable of the Royal Australian Navy, and the CEO of Shipping Australia, Captain Melwyn Noronha.

Mr Manjarres-Wahlberg commented to Shipping Australia that: “it was a significant day for ship and its future. We look forward to planning for the dry docking in 2023. It will become a living, working museum with an integrated training platform, providing maritime operations training, hospitality and integrated primary school education programmes for the community”. ▲

## Shipping Australia meets with the Governor General of Australia

Shipping Australia CEO Melwyn Noronha met with a high-level delegation, including His Excellency General the Honourable David Hurley AC DSC (\*Retd) the Governor General of Australia, in May 2022. The group heard more about the Cape Don restoration, a project that Shipping Australia supports in an advisory role, and also about the how the Prince’s Trust Australia helps former service personnel.

CJ Manjarres-Wahlberg, a director of the Sea Heritage Foundation, held a Q&A session about the Cape Don project and Sean Farrell, CEO of the Australian Defence Alliance also held a Q&A session.

The meeting took place within the setting of the Indo Pacific 2022 International Maritime Exposition and associated conferences. ▲

## Shipping Australia meets PNG Ports Corporation

A high-level delegation of executives from Papua New Guinea Ports Corporation visited the Shipping Australia office in March 2022 discuss international shipping, global ports matters, the shipping industry in Australia and regulatory policy.

Shipping Australia Chair, Scott Henderson, and Shipping Australia CEO, Captain Melwyn Noronha, hosted the high-level delegation.

Both Shipping Australia and the PNG Port Corporation agreed in the future to develop a working relationship to discuss shipping and ports matters of regional and global concern. ▲



# Chris Wang wins the Shipping Australia Prize!

Australian Maritime College MBA student Chun Hei (Chris) Wang won the 2021 Shipping Australia Prize for Excellence. Shipping Australia congratulates Chris on his achievement!

He was nominated for the \$750 prize by the Australian Maritime College because of his demonstrated excellence in his commercial shipping related studies.

Dr Vera Zhang, Senior Lecturer at the National Centre for Ports And Shipping at the Australian Maritime College, commented: "Sincere congratulations on Mr Wang's hard-earned success ... Mr Wang was awarded the Shipping Australia Prize in 2021 due to his high achievement in commercial shipping subjects in his studies of MBA (Maritime and Logistics Management)".

Shipping Australia caught up with Chris to find out more.

## **How did you feel when you found out that you had won the prize?**

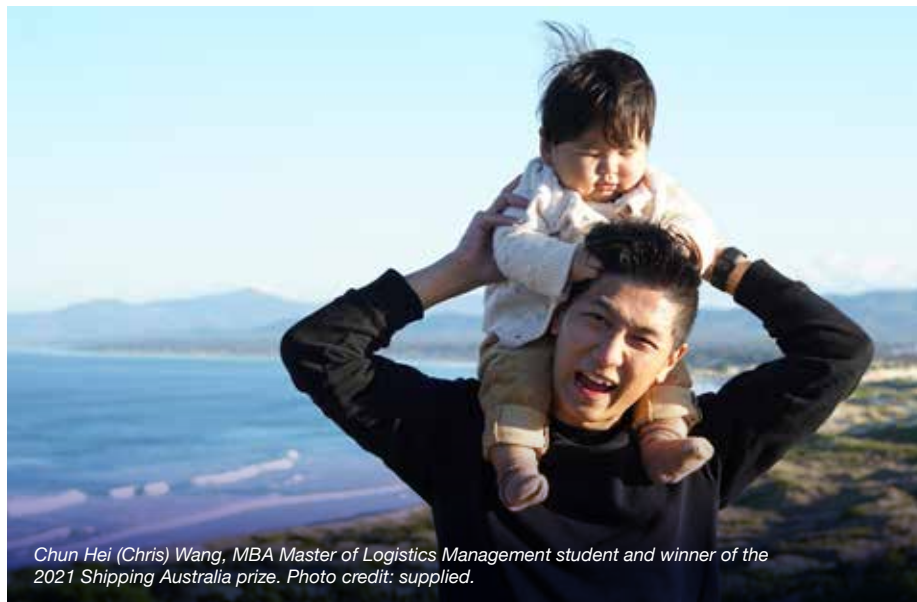
I was having lunch with my young family in town when I found out I had won the Shipping Australia prize. I am so surprised and feel so honoured upon receiving this news.

## **What will you do with the prize money?**

I would probably spend the prize money on gifts for my wife and my one year old son as they showed a lot of support to me when I was doing the course. I am pretty sure I would not get the prize if they are not around.

## **What course are you studying? Why did you pick that course?**

I was studying a Master's degree in Maritime and Logistics Management. I picked this course because of my seafaring background, which is the forefront of the shipping industry. I am interested in having a more in-depth knowledge in this industry after spending a year working onboard container vessels. I chose to study maritime subject just because of my father. I have grown up in a maritime family as my dad is a harbour pilot in Hong Kong, which got me exposed into ships and maritime knowledge at my early age. Throughout



*Chun Hei (Chris) Wang, MBA Master of Logistics Management student and winner of the 2021 Shipping Australia prize. Photo credit: supplied.*

the course I am actually more interested in this subject because it is one of the oldest industry in modern civilisation and I can always find our ancestors' intelligence in the maritime industry.

## **What are your future career plans after you finish your course?**

My career plan is to get into either the port industry or the shipping logistic industry in Tasmania. I am also open to getting back onboard if the opportunity comes.

## **What's the most interesting aspect of the maritime industry for you?**

Given my academic background of holding a bachelor degree in Economics, I always find it interesting that how the maritime industry forms the backbone of our world's economy. While globalisation and trades keep our world connected, it would be impossible for them to take place without the maritime industry.

## **There are many maritime educational institutions in many countries in the world that you could have chosen to study at. Why did you pick the Australian Maritime College? Why did you choose to study in Australia?**

I pick AMC when I was studying my pre-sea program back in 2017, I just decided to pursue a higher degree of study in AMC when COVID hit us two years ago. I chose it because it is the most well-known

institution that provides professional training to seafarers. It is also one of the few institutions around the world that has the course structure to let student gain working experience onboard after completing each block of study. Of course, the beautiful and astonishing environment of Tasmania is also one of the reason I chose to study in AMC.

## **What one message, or piece of advice, would you give to a person who is considering a career in the maritime industry or in studying maritime subjects at university?**

While studying in maritime subjects can be broad, it actually leads to endless possibilities in our future career such as the field of seafaring, logistics management and port management. We might not know how the knowledge we acquire today is going to be used in the future, but I am sure all of us would be grateful to have these knowledge or experience when the times come.

## **What do you do in your spare time?**

I spent most of the spare time with my wife and my one year old son because family is probably the most important aspect of my life at this stage. Working out at the gym, learning guitar, and riding motorcycle are the other three things that I recently enjoy doing to challenge myself in my spare time. ▲



*Pictured: My Therese Blank, who has joined the Shipping Australia board. Photo credit: supplied by A P Moller Maersk.*



*Pictured: Clint Evans joined the Shipping Australia board. Photo credit: supplied by Hapag-Lloyd.*

## Shipping Australia welcomes two new directors!

Shipping Australia has appointed two new directors since the last edition of this magazine.

My Therese Blank has been appointed as a new director of Shipping Australia. She is currently Maersk Group's Head of Oceania Market and she has responsibility for ocean business in Australia, New Zealand, and the Pacific Islands.

My has more than 15 years of experience in the shipping and logistics industries across Europe, Asia, and Oceania. She has held several senior leadership positions within Maersk, including Australia Sales and Country Director and Oceania Area Customer Service Director. In 2013, she established Maersk in Myanmar as Country Director. Her first role in regional capacity management was as part of the Maersk Management Trainee Programme. She holds a master's degree in business and economics from Uppsala University, Sweden.

Commenting on her appointment, My said: "productivity and automation are key to our industry. When the supply chain operates without issues, it's an invisible industry that both enables our economy and the ability of Australian families to access a wide variety of consumer products. We have a great opportunity to improve processes across the supply chain and modernise the legal framework which underpins the industry.

"Shipping Australia is an important vehicle to accelerate the transformation of our industry as it is the voice of ship operators and owners to Australian governments. In my role as a director,

I'm also committed to driving innovation in, and digitisation of, the shipping industry. Accelerating digital platforms and data sharing within the industry is key. Meanwhile, the next five years will be ground-breaking for our industry as the world fleet moves to carbon neutral fuels for a more sustainable future. This will require collaboration across industry to enable, and make accessible, carbon neutral fuels across the region. "

My also notes that, in the 110 years of the combined history of Shipping Australia and its predecessor organisations, she is the organisation's first-ever female director.

"I'm honoured to be the first female director at Shipping Australia, and I will continue the focus on diversity. I hope to be a role model for the many women in our industry," she says.

Shipping Australia Chairman, Scott Henderson, commented: "on behalf of Shipping Australia, I welcome My to the board. She is a very highly qualified leader with years of experience in a variety of senior roles at a major ocean shipping company. I am confident that she will be a great addition to the team".

Clint Evans has also been appointed as a director of Shipping Australia.

Clint began his shipping career in 1995 when he joined shipping agency John T. Rennie & Sons as a trainee on an internship program. Over the last 26 years he has gained experience in multiple aspects of shipping, including agency, freight forwarding, supply chain and liner shipping around the world including South Africa, the Middle East, India and, more recently, Australia.

In his current role, as the Oceania managing director for Hapag-Lloyd, he has been actively involved in the implementation of Hapag-Lloyd's strategy and the consequent expansion of service offerings, throughout the region.

Clint is a highly experienced director, having served as the chairman of the Association of Ship Brokers and Agents of South Africa (Richards Bay) and as a director of several companies such as Inchcape Shipping Services (Bahrain), Inchcape Shipping Services (Qatar), United Arab Shipping Agency Company (India) and Hapag-Lloyd (Australia).

Commenting on his new appointment, Clint said: "it is an honor and privilege to be appointed to the board of Shipping Australia. SAL is an extremely well respected shipping industry body that continues to effectively address industry challenges while also promoting the interests of ship owners, shipping lines and shipping agents in Australia. In my role I would like to actively support the SAL chairman and directors in developing industry improvements and policy enhancements. I would also like to support and drive initiatives aimed at further enhancing overall shipping related capabilities to meet Australia's future trade and logistics challenges".

Shipping Australia chairman, Scott Henderson, commented: "On behalf of Shipping Australia, I welcome Clint to the board. Clint has years of experience in many different sectors of the maritime industry. He will be able to further the interests of the industry and he is a great addition to the board". ▲



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AUSTRALASIAN INSTITUTE  
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# Shipping Australia cautions against government support for protectionist maritime policies

By SHIPPING AUSTRALIA



*Pictured: A small container ship being loaded at a wharf. Photo credit: Michael via Unsplash*

Prior to the recent Federal election, it was a declared policy of the Australian Labor Party that it would develop a national fleet. Details at the time were pretty scant and, as at the point of writing, there have been no detailed updates. So it's pretty hard right now to analyse a national fleet policy. Still, we can look at similar nationalist policies tried overseas and here, in Australia, in the past. Policy proponents and

politicians tend to claim that protectionist national maritime policies will bring a variety of benefits. But they generally don't. Worse, as you will see, no matter what the form of the nationalist policy, it has always failed to meet its policy goals (so it's a failed policy) and they've often been extremely detrimental in a variety of ways. Here, we detail numerous failed and harmful nationalist maritime policies.

## **US Jones Act: the many failures**

The U.S. Jones Act requires ships carrying goods between two US ports to be US-built, owned, crewed, and flagged. OK, so the various protectionist maritime policies being proposed in Australia fall some way short of the US Jones Act. But the US Jones Act is in the same family of protectionist, nationally-focused, maritime policies aimed at propping up a domestic industry through



the creation of some kind of government-contrived market. Many of the arguments used to justify the US Jones Act are the same arguments that we'll hear in a misguided attempt to justify government support for protectionist Australian policies too, or, worse, an Australian national fleet. So, we can look at the US Jones Act as being a relevant policy for the purposes of comparison.

The US Jones Act artificially raises the cost of freight and hurts the economy. It thereby increases the cost of living and hurts the poor. As US Congress Representative, Alexandria Ocasio-Cortez has stated, "We must lift the Jones Act, which has exploited Puerto Rican consumers and strangled the economy".

The Jones Act is supposed to boost maritime training and the mariner workforce, but it doesn't. The US Jones Act is supposed to boost US naval security, but, at best, it is irrelevant. During the first Gulf War in the 1990s, the US Navy mostly chartered vessels from the international civilian commercial market to meet their needs for cargo shipping.

The Jones Act has been proven to hinder disaster relief and the flow of aid to the most desperately afflicted during times of national emergency and tragedy – whenever there is a major disaster, such as a hurricane, it is necessary to have a Jones Act waiver issued so that international shipping can deliver aid and relief supplies. What is particularly awful is that there have been examples of Jones Act vested interests who have actually lobbied against the granting of waivers during times of emergency and disaster. Such lobbying would, if successful, prevent hinder the flow of aid to people who are in desperate need during times of national emergency and tragedy.

Australian policy proponents and politicians are looking to have some form of Jones Act-style policy enacted here. This is bad policy with bad outcomes. It ought not to be supported.

### **Sibling policies: national fleets and national cabotage**

Before anyone writes to us complaining that "national fleet" policies and "coastal shipping" policies are two different sets of policies, we like to point out that (a)

we know, and (b) despite that, national fleets and national cabotage policies are similar policies in justification and effect. They're sibling policies.

Both the national fleet policy, and the national cabotage policy, are typically justified in that they will deliver some benefits in the areas of national security; protection of national trade; providing opportunities for maritime training / skilling / workforce development; job creation; creating national maritime clusters, attracting capital investment; boosting the national flag (i.e. the number of ships registered under that nation's ship registry); boosting general economic development, and so on.

A national fleet can, in theory, be brought into existence in a variety of ways. A government can buy a fleet, or greatly subsidise private operators, or alter policy settings. A national cabotage policy can come into existence pretty much the same way.

Although the details may differ, a national fleet policy and a national cabotage policy will have very similar justifications and goals.

### **Australia's own Jones Act: the many and expensive failures of the Coastal Trading (Revitalising Australian Shipping) Act 2012**

We already have our own version of the Jones Act. It's the Commonwealth's Coastal Shipping (Revitalising Australian Shipping) Act 2012.

The Coastal Shipping Act was set up to "revitalise" Australian shipping. But, really, the Coastal Shipping Act damaged local shipping.

The Act created a contrived and protected market that was meant to provide protectionist advantages to a domestic shipping fleet, to increase the volumes of coastal cargo, to increase the numbers of ships flying the Australian flag and to increase the numbers of Australian seafarers.

So what's happened in the ten years since the introduction of the Coastal Shipping Act 2012?

The existing coastal regime was promoted as being sure to spark a shipping Renaissance. But it didn't.

It was said that the coastal regime (and associated tax benefits) would provide

Australian companies with an exciting opportunity to invest in new tonnage and to expand existing operations. But it never.

It was said on the "great day" of the legislative passage of the coastal shipping and tax regime that shipowners were ready to invest, that they were committed to their investment decisions, and that they were looking forward into expanding into new trades. But they weren't. And they didn't.

Shippers (the owners of cargo) did find that freight rates massively increased. Tasmanians were put at a severe disadvantage with freight rates rising by up to 63% in some cases. Ships fled the domestic Australian flag (the domestic registry for shipping companies with a locally-trading presence). Hundreds of Australian seafarers lost their jobs when these ships left the domestic registry.

The Australian international flag (the Australian registry for internationally trading ships (i.e. ships that trade internationally and which choose to fly the Australian flag)) was primarily set up to lure international ship operators. But it has never attracted a single ship from an international ship owner in its ten years of existence.

It gets worse. The Coastal Shipping Act 2012 forced at least one manufacturer to shut down with about 100 job losses. It forced widespread "import substitution" – that's when goods are imported from overseas instead of being manufactured in Australia and shipping around Australia. Bricks, for instance, are imported into Sydney from Spain rather than being made in Perth and shipped around the coast. The average volume of coastally carried cargo has fallen by a few million tonnes since the introduction of the Coastal Shipping Act.

So that's a lot of business that the Australian economy is losing. Some observers commented in 2013 that the introduction of the Coastal Shipping Act caused an ongoing loss in excess of AUD\$100 million each year.

It's not just us saying that the Coastal Shipping Act 2012 has not been beneficial to Australia. Prior to its introduction, there was widespread maritime-industry and trade-community opposition to the Act. Since then, the Coastal Shipping Act has been reviewed independently and separately by about

eight independent expert reviewers (including the Productivity Commission, which has reviewed it several times) and, each time, it has been recommended that the Coastal Shipping Act ought to be scrapped or fundamentally re-written.

It's good advice. If only someone in political office would listen to this advice and act upon it.

### **Still not convinced? Current Australian tax incentives haven't worked**

At the same time that the Coastal Shipping Act was passed, there was a series of tax incentives established to primarily lure ship owners into registering ships in the Australian registry. Those tax incentives are still available now to any operator that wants to operate under the Australian flag.

It's really important to realise that, today, there is no serious legal or policy barrier to any international ship owner / operator from establishing a local fleet in Australia.

In fact, the system is actually set up to lure international ship owners and operators to Australia by providing them with tax incentives. The shipping policy playing field is level now and it was in fact levelled in 2012.

#### **So what are the tax policies?**

The Shipping Exempt Income Tax provides that income generated from shipping activities is exempt. In theory, the ship owner would pay lower taxes which would make the Australian flag more attractive.

The Accelerated Depreciation and Roll-Over Relief allows ship owners to claim greater deductions in the earlier part of a vessel's life. In theory, this would make the Australian flag more attractive. It also encourages owners of older ships to invest in newer ships.

The Seafarer Tax Offset makes Australian companies eligible for a refundable tax offset for salary, wages and allowances paid to Australian resident seafarers. The offset is supposed to stimulate

opportunities for Australian seafarers to be employed on overseas voyages.

The Royalty With-holding Tax Exemption makes payments made to non-residents by Australia companies exempt from certain taxes. The aim was to reduce the costs of Australian shipping companies when hiring foreign ships.

Did these tax incentives increase the numbers of ships on either of the Australian registers? No. The numbers of ships on the domestic register fell. The number of ships on the international register is now, and always has been, zero.

Did these tax incentives encourage any international ship owners / operators to set up shop in Australia? No. They did not. There are no ships on the Australian international register. Plus several shipping companies that were present in 2012, and which were offering freight carrying shipping services in Australia, exited the local market.

Did the at-sea opportunities for Australian seafarers increase? No. Because the numbers of ships fell, the opportunities to do sea-time training reduced.

Did the numbers of Australians employed as seafarers increase? No. Because the numbers of Australian flagged ships fell, hundreds of Australian seafarers lost their jobs.

Did the tax incentives meet any of their policy objectives? We think you know the answer to that already. It's "no".

### **Still not convinced? Australia's cruise industry flourished... with an exemption to the Coastal Shipping Act**

Cruise shipping in 2011-2012 resulted in expenditure by the industry of about AUD\$1.77 billion. Passenger spending took the total to AUD\$2.4 billion. There was an increase of hundreds of cruise ship visits in Australian ports to 736 visits, according to industry body the Australian Cruising Association.

We'll jump forward now to 2018-2019 (because cruise ships were banned from 2020 to 2022 because of COVID). The Association was reporting "another" successful year. Economic impact analysis shows that expenditure had risen to a total of AUD\$4.8 billion. Wage



*Pictured: money in a jar. Various kinds of tax benefits and incentives have been offered over the years to boost national maritime policies. Tax benefits and incentives don't work. Photo credit: Melissa Walker Horn via Unsplash.*





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A view of Anzac Parade, Canberra with the Old Parliament House (centre, mid-ground) and Parliament House (centre, mid-ground), framed by Red Hill and the Bullen Range in the background. Nationalist shipping policy from Canberra has been adverse to Australia's economic interests. Photo credit: Social Estate via Unsplash.

growth was huge. Total employment impacts rose to over 17,000 full time equivalent jobs.

What a success for the Coastal Shipping Act, eh? Right? Eh? Right?

No.

Pretty early on in the life of the Coastal Shipping Act, cruise ships over 5,000 gross tonnes that could carry over 100 passengers were given an exemption from the Coastal Shipping Act under section 11. The last Ministerial exemption for the cruise sector was issued on 13 September 2018 and it runs until the end of 2023.

Given that the cruise sector succeeded economically while it was subject to an exemption to the Coastal Shipping Act, and, given that there were many adverse effects for non-cruise shipping sectors, then it seems reasonable to infer that the success of the cruise sector was due in part to the fact that it had an exemption to the Coastal Shipping Act.

### **Still not convinced? Western Australia was aided by international ships... when an exemption was given to the Coastal Shipping Act**

Outback rains and flooding in late January 2022 damaged vital cross-country road and rail links. That disrupted the landside transport of goods, which caused a shortage of supplies in the western parts of Australia.

The Deputy Prime Minister and Minister

for Infrastructure, Transport and Regional Development, Barnaby Joyce, signed a section 11 exemption from the Coastal Trading (Revitalising Australian Shipping) Act 2012, which allowed international ships to carry cargo between Australian ports on voyages between eastern states and territories and Western Australia.

Shipping Australia understands that international shipping companies experienced a surge in bookings for east-to-west coastal cargo after the coastal shipping exemption was granted.

Let us put that another way. When Australian shippers were given the choice of using international shipping companies to carry their cargo on Australian coastal voyages, they leapt at the chance. This post-exemption surge proves that there is demand by Australians to access coastal shipping services that could be offered international ships.

### **Still not convinced? Australia's previous national fleet repeatedly went bankrupt**

Australia once owned its own national shipping line. It went bankrupt and was re-capitalised several times because it just couldn't compete and it was subject to political interference.

Australian Labor Party Federal Transport Minister Laurie Brereton was given the thankless task of selling the company. He found it really hard going and famously remarked that "you couldn't give it away".

### **Still not convinced? StateShips failed with huge financial losses**

Consider the fate of StateShips. This was a Western Australian government owned-shipping line set up to serve the people of Western Australia. It was abolished by the Liberal Richard Court government in the mid-90s. It was racking up huge debts and was costing a fortune to operate – it was losing about AUD\$19m a year in 1995, that's about AUD\$35m a year today.

### **Still not convinced? Pricey subsidised coastal shipping failure**

After the abolition of StateShips, the WA government tried subsidising a private coastal shipping operator to run a service around the WA coast. That too had to be abandoned. It couldn't win enough business and it repeatedly ran at a loss. The shipping company operating the route needed more money to break even and, when this wasn't supplied by the WA government, it had to give up the service.

### **Still not convinced? Costly failure of the International Shipping (Australian-resident Seafarers) Grants Act 1995**

The International Shipping (Australian-resident Seafarers) Grants Act 1995 was set up to provide payments to Australian shipowners to make employing Australia seafarers more competitive. It was meant to close the gap between the international fleet and the Australian fleet. It was a plan to boost the numbers



of Australian mariners. It was also supposed to calm down industrial relations tensions and produce industrial peace via a compact with the unions that would, ultimately, save \$15 million a year based on \$200,000 per ship per year.

What do you think actually happened? Spoiler: none of these things!

The Act was repealed the following year. The unions did not deliver industrial peace, the savings did not materialise (repeal of the Seafarers Grants Act, in fact, saved AUD\$52m over four years or about AUD\$13m a year) and the sale of the government owned-shipping line was delayed (a further drain on the Australian taxpayer).

“The evidence is there for all to see. The international shipping grants package has not delivered... it has simply provided a windfall gain of \$19 million to existing operators”, Transport Minister John Sharp told Parliament during the passage of the repeal bill through Parliament.

### Still not convinced? Expensive failure of the Ships (Capital Grants) Act 1987

The Ships (Capital Grants) Act 1987 was set up to help Australian ship operators to buy modern, technologically advanced, ships that could be operated with smaller crews. There were

also various subsidies and financial assistance along with early retirement and voluntary redundancy packages for union members. There were also accelerated depreciation tax measures. The total value of these various measures was estimated to be in excess of about AUD\$320 million in 1996. That's about AUD\$574 million today.

So, what do you think happened? In 1996, the average crewing factor (crew per ships) was higher for Australian ships than it was for international ships, which meant Australian ships cost more. There was a pooled employment system which “gives employers no right to select the most suitable, appropriately trained [crew] for their shipping operations,” Minister Sharp told Parliament.

Australian crew wages remained higher than international wages and, as Minister Sharp concluded, “Australian shipping is no nearer to being internationally competitive than it was nine years ago”.

### History repeats itself, first as tragedy, then as farce

There are numerous documented attempts above (most in Australia, one overseas) to produce benefits through implementing protectionist maritime policies:

- Government ownership and operation of ships: expensive failure

- Tax benefits for ships, ship operators, and employment of seafarers: expensive failure
- Grants and subsidies for ships and services: expensive failure
- Creation of a protected and contrived domestic market: expensive failure

The only sensible conclusion is that national fleet and protected coastal shipping policies simply do not work.

Worse, they can hurt Australians. They cause Australians to lose their jobs. They cause Australian businesses to shut down. They cause Australians to lose economic opportunities as goods are imported from overseas instead of being made here and transported around the coast. They drain money from the Australian taxpayer. They cause freight rates to increase unnecessarily.

Ultimately, these policies burden everyday Australian families as they put upwards pressure on cost of living.

We should learn from this sad history. We should learn from the eight or so economic reviews that say such policies don't work – the most recent of which was in 2021 (the Productivity Commission Vulnerable Supply Chains study).

Karl Marx wrote that “history repeats itself, first as tragedy, then as farce”.

Seems apposite. ▲



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# Are we properly calculating lashing loads on large container vessels?

By RIK VAN HEMMEN of marine consultancy Martin Ottaway.  
Re-published with permission.

*Pictured: an image of the "Catène de Containers," sculpture at Le Havre, France.  
Photo credit: Valdas Miskinis via Pixabay.*

We have been involved in quite a number of lost container cases in the last few years, especially on large (12,000 TEU plus) container vessels. Some of these cases show various deficiencies, but in other cases it appears that the lashings simply are not strong enough for normal vessel operations.

That has led us down the lashing requirements rabbit hole, and there are real indications that lashing calculations have been extended along a path to failure. That is not unusual, new failure mechanisms often show up when complex systems are scaled up, and this may be the case with regard to load assumptions on lashings on large container ships.

In that regard I started to ponder wind loads when I came across two videos showing empty container stacks that were blown over during storm Eunice in Rotterdam where windspeeds apparently reached 90 mph.

What struck me is that these containers were so readily peeling away on the lee side of the stack and it made me wonder if this failure mode relates to shipboard container losses.

The first video showed that there is a line that tied to the top downwind container. Before the line snaps the containers in the middle of the stack are already sliding out. It looks like there is substantially elevated pressure in the gap between the container stacks (and suction on the exposed face). The line snaps and the whole stack slides away

while rotating. Then the next stack starts to rotate away. It is unclear what the actual wind direction is.

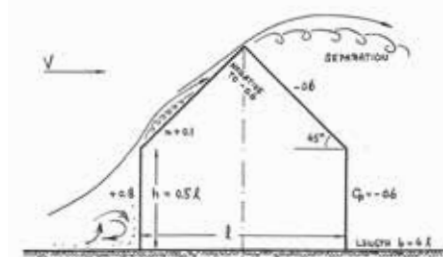
The second video shows the stacks simply being sucked off the leeward side. At a certain stage, top containers simply evenly slide off the top, which pretty clearly indicates the tumbling stacks are squarely on the leeside of the pile of containers. I suspect that the containers in the later pictures are sliding because there no longer is a nice suction face behind a full stack with all the jumbled containers behind the next stack (similar to a tapered tail on a car).

Looking at this information I realized that I never think in terms of negative pressure (suction pressure) in drag situations. I deal with drag and lift forces all the time, but I think in terms of drag coefficients and lift coefficients in the context of the total drag and lift that is produced by the wind on the total object that is a free body (ship, sailboat or airplane). I never really cared what part of these coefficients provides pressure force and what part provides suction force. (The only place where this occurs is on propellers and cavitation, but I never spent much time delving into that subject).

The internet provided some interesting information, and it comes from civil engineering since buildings are stationary (aerospace engineers call them stationary targets) with pressure and suction sides, and that information opened an engineering window that I had never fully considered.

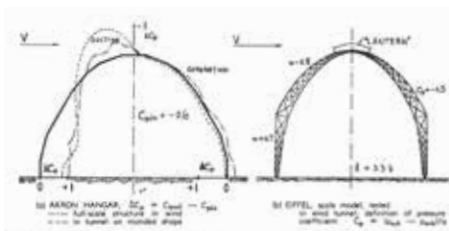
Building codes show that suction coefficients can be as high as -0.8. Taking into account that the stagnation pressure coefficient is 1.0, that means that the combination of stagnation pressure (completely stalled flow on the windward face) and a suction coefficient on the backside can start to work towards a drag coefficient total of 1.8. That is just order of magnitude thinking, since you cannot have full stagnation on the windward side and suction on the leeward side, because then there will be no flow around the building to produce suction at the leeward side, but let's go on.

I reached for Hoerner's Drag, and, yes, this hefty incredibly useful 1965 reference has 2 pages (out of hundreds of other drag discussions) on building leeward side suction. Then I reached for my EIT training manual (Lindeberg 6th edition). This manual only provides whole drag coefficients, but now, when I study with newfound knowledge, it provides a deeper understanding that I never appreciated before.



*Pictured: "Figure 4", extracted from Hoerner's Drag. It shows the flow pattern and pressure distribution (on center line) of a simple house shape.*



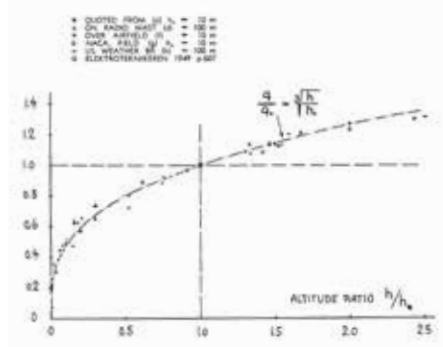


Pictured: "Figure 6", extracted from Hoerner's Drag. It shows the pressure distribution on airship hangers.

It shows that (higher Reynolds number) flat plate drags are higher than stagnation pressure, starting at 1.16 and can reach 2.0 for infinitely long plates. In other words, for an infinitely long flat plate, it produces full stagnation pressure on the windward side plus the same suction (negative pressure) on the leeward side. In retrospect that makes sense, and I can only expect the engineers that developed lashing calculations on container vessels are aware of these concepts and took that into account in their calculations.

However... what works for smaller container vessels may not work for larger container vessels. Calculations become reliable once there is proof in the pudding and for many years the pudding looked pretty good, but recently things have gotten a little weird. There are other factors that may have ruined the pudding for large containers ships, but let's just follow this one a little deeper into the rabbit hole.

Windspeeds increase with increasing altitudes. Due to drag from the ground there is a wind gradient where windspeeds near the ground are much lower than further away from the ground. This is called the wind gradient. Wind gradient is a huge and complex issue in large racing sailboat design, and I spent a lot of time thinking about it in my America's Cup design days.



Graph: "Figure 1", extracted from Hoerner's Drag. It is a graph showing the increase of dynamic pressure with altitude in steady winds over smooth surfaces.

Hoerner provides a clever graphic depiction of the effect of wind gradients. What the "Figure 1" graph shows is that if a container stack is 50 % higher, the dynamic pressure (and suction) is about 20 percent higher at a certain recorded wind speed.

In other words, if one were to use a certain assumed wind speed for container lashings, but now my container stack is 50% higher my suction pressure will be 20% higher (note: that is pressure; the suction force on the whole stack will be  $1.2 \times 1.5 = 1.8$  times larger). For the same wind speed suction pressures will be higher on taller container ships. A 20% increase in suction pressure is not a huge increase, but there are a number of other factors that are gradually eroding the design safety factors on large container ship lashings using conventionally accepted calculation approaches. I will only discuss the aerodynamic assumptions here, but there are also other assumptions that no longer make sense.

Due to the existence of wind gradients, when performing a forensic analysis, it is significant to take note of the height of the anemometer of the vessel that lost the containers. A large container ship that records 60 mph sustained winds, was probably in somewhat lighter conditions than a smaller container ships that records 60 mph sustained winds.

Aerodynamically I am gut estimating that the suction pressure increase is larger than 20 % for a 50% taller stack of containers on a container ship.

When a container ship rolls into a beam wind, for the same roll period, the maximum apparent beam wind (free flow wind speed plus the wind of the object moving through the wind) across the top of the container stack will be higher on the taller ship than the lower ship. The longer arm from the roll center to the top of the stack at the same rotational speed will result in a higher velocity at the top of the container stack. That velocity then needs to be added to the assumed windspeed used in the lashing calculations. It will not hugely increase the windspeed, but wind force increases with the square of the total windspeed and, as such, this motion will be another straw added to the camel's back.

It is also significant to note that the suction  $C_d$  is not even from the tips to midspan on a flat plate. At midspan the local suction

pressure can be higher than at the ends. Since a ship is loaded with individual container cells, one cannot assume that a single independently secured cell is exposed to an average  $C_d$ , and instead it should be assumed that it could be exposed to the maximum  $C_d$ , which, as noted above, would be in the range of -1.0.

Moreover, in large waves, the wind gradient is more pronounced above the wave tips than it is in the wave troughs. Smaller container vessels will have a larger portion of their exposed side sheltered in these troughs. Combined, these factors may very well result in suction pressures that are occasionally 50% higher than can be reasonably assumed for smaller container vessels.

"Traditionally" we have seen container losses in the stern or bow of containers ships (ignoring other securing failures), because these locations can be most heavily exposed to waves (bow) or unusual motion combinations of heave and roll (stern). Losses such as those seen on ONE APUS have left me rather baffled, because the failures were mostly midship, but midship is where one can expect the highest suction loads on ships like this, and if these loads are underestimated, the midship securings can become inadequate.

Please note that these are just wind load considerations and our work on these issues is showing there are manifold other issues and assumptions that are resulting in bad lashing pudding.

Generally technical societies start discussions when unusual failures are occurring. In this case I am surprised that, as near as I can figure, the silence on this subject by lashing engineers has been deafening. Hopefully this will start a deeper discussion and we all will learn more. ▲

## OFFICIAL High ocean freight rates were caused by supply and demand

High ocean freight rates of recent years were caused by the market forces of supply and demand in a supply chain challenged by the COVID-19 pandemic and an unprecedented surge in consumer demand.

That's the OFFICIAL finding from the U.S. Federal Maritime Commission, which has carried out a two-year investigation into the ocean shipping industry.

On March 31, 2020, the US FMC instructed Commissioner Rebecca Dye to carry out the Fact Finding 29 investigation into the US supply chain.

Based on her investigations, the Commissioner discovered that "notwithstanding certain misconceptions," that the current market for ocean liner

services in the Trans-Pacific trade is NOT concentrated and is only minimally concentrated on the Trans-Atlantic.

"Competition among ocean common carriers, among the three major alliances, and among the members in each of these alliances is vigorous," Fact Finding 29 asserts.

In her report, Commissioner Dye also noted that "based on the information gathered, the Fact Finding Officer [i.e. Commissioner Dye] believes that the most productive path forward for shippers and ocean carriers alike would be to enter into mutually enforceable and binding service contracts — true "meeting of the minds" — that are enforceable commercial documents".

Shipping Australia CEO Melwyn Noronha commented: "throughout the COVID crisis, there have been many voices asserting – quite without evidence – that there was some kind of collusion that was driving up freight rates. Such commentators also argued that the existence of alliances proved that there was collusion. After a thorough two-year investigation, it has been revealed that these unjust, unsubstantiated, and groundless allegations against shipping lines were exactly that: unjust, unsubstantiated, and groundless.

"It is also therefore pleasing to see that it is now officially recorded and confirmed that the recent maritime issues were simply a result of market forces – as the shipping industry has been reporting all along". ▲

## New academic research indicates factors linked to discrimination against female officers

Nationality, high qualifications and male support may be factors that can reduce the degree of discrimination against female maritime officers, according to Indian researchers.

"Higher qualification marine women officers and her male companion's support are highly essential to reduce the discrimination experience onboard," the researchers concluded in their paper, "Exploring the Discrimination Factors of Marine Women Officers Onboard," by Das et al.

Discrimination can also be partially linked to age and the type of contract of employment, the researchers also found.

Following a literature review, the researchers observed that there are few articles using scientific methodology about the causal factors determining whether, or the intensity of, discrimination as experienced by female officers.

The researchers set out to carry out hypothesis testing, examining the questions of: what are the discrimination factors? How can the factors be derived? What are the roles of the discrimination factors?

Ten explanatory variables were considered: age, nationality, group, cohabitation,

type of contract, current position on board, professional qualifications, years of sailing as an officer, vessel and route characteristics, and, finally, whether the respondents felt that their male colleagues were supportive.

Data was collected from a previously published data-set that was generated through the issue of a questionnaire sent to randomly-selected persons.

The research was carried out by researchers from the University of Burdwan, the Government Degree College, and the Planning Department of the Government of Tripura, all located in India.

As with all academic research, there are a variety of qualifications.

The researchers did not precisely describe what they meant by "seafaring" or "officer" and it is not known what sub-sectors of the maritime industries were researched e.g. cruise, ferries, containers, naval, other etc.

The sample size of the study relative to the total numbers of female marine officers was quite low. The academic study looked at the responses from 149 female officers. According to BIMCO's Seafarer Workforce Report 2021 the estimated global supply of STCW-

qualified female officers in 2021 was 7,289 people. As a general rule-of-thumb, survey samples should equate to about 10% of the surveyed population to get the most accurate results.

The survey was also limited in that it surveyed individuals from 18 countries when it is thought that close to all countries in the world supply seafarers.

The survey was a subjective survey rather than an objective survey in that it reflected thoughts and opinions rather than factors that can be independently verified by third parties. Subjective surveys have a number of advantages and disadvantages. For instance, one advantage is that they are usually cheap to carry out and do not impose a large burden on respondents (which explains why they are often used). However, they do not objectively, precisely and accurately measure phenomena. Nothing we have written here should be taken in any way as an attempt to reduce or diminish the experiences as reported by the survey respondents; it is merely an explanation of some of the qualifying matters that are relevant to a massively wide variety of topics right across the field of research. ▲



# Digitalisation and standardisation marches on!

It's been about three years since the founding of the Digital Container Shipping Association in April 2019. In that time, it has gained allies around the world. Four container shipping companies set up the neutral, not-for-profit, association with the aim of driving standardisation, digitalisation and interoperability.

One of the first projects was to focus on standards to overcome a lack of a common foundation for technical interfaces and data. In a move somewhat reminiscent of the early days of containerisation when the patents were released on the twist-lock, the DCSA vowed to openly publish its standards free of charge for the benefit of the entire industry.

## Global collaboration

Since the last edition of this publication, the DCSA joined forces with shipowner group BIMCO, global freight forwarding group FIATA, the International Chamber of Commerce and world financial messaging service SWIFT, to set up the Future International Trade (FIT) Alliance. The FIT Alliance works to generate awareness about the importance of common and interoperable data standards and common legislative conditions across international jurisdictions and platforms. The aim is to facilitate the acceptance and adoption of an electronic Bill of Lading by regulators, banks and insurers and all other stakeholders involved in global trade.

## DCSA in the US

Since then, Carl W Bentzel, a commissioner of the US Federal Maritime Commission, has stated that the US FMC intends to use "much of what [the Digital Container Shipping Association] has done as a template for emerging national standards for intermodal maritime data, from point of origin to ultimate destination".

The DCSA has been collaborating with the Commission on the Maritime Data Transport Initiative, which aims to identify how constraints on data communication impede the flow of ocean cargo and add to supply chain inefficiencies. The



Commission will propose the use of common data standards and definitions to harmonize digital data sharing and to streamline information exchange.

In an interview with the DCSA, Commissioner Bentzel gave the opinion that the COVID pandemic revealed there is a data communication problem: "tremendous amounts of data were being generated with no common data lexicon and no timely method for sharing it with other stakeholders engaged in moving the cargo and with the public".

Much of the collected data is stored in different formats, can be mis-described, and cannot be "sufficiently or efficiently" provided to other stakeholders.

It became clear that much of the data needed harmonisation. "DCSA standards provide an invaluable tool for achieving standardized, digital data communication in the industry," the Commissioner said, adding, "we are not going to reinvent the wheel. Our intention is to use what already exists and works in practice. We want to make sure there are harmonized definitions and a structure around them. It should therefore not be difficult for stakeholders to comply".

## DCSA in Europe

Recently, in early August 2022, the DCSA and the European Shippers' Council (which represents cargo owners – about 10,000 manufacturers, retailers and wholesalers) announced they had joined

forces to accelerate the adoption of the DCSA standards. The associations will use DCSA's open source, vendor neutral, standards. They will also work together to conduct structured, cross-member engagement to ensure DCSA standards meet shipper needs.

Commenting on the collaboration, Thomas Bagge, Chief Executive Officer for DCSA, said: "global supply chains have been continuously optimised over decades; present-day technologies allow for the further improvement in customer experience. Unstandardised, paper-based processes for exchanging information to conduct business and keep goods moving should not be needed in the 21st century. The lack of digitalisation limits progress towards greater transparency and end-to-end, real-time cargo visibility. We can only bring about digital transformation together. That is why we are committed to closer collaboration with the ESC and its like-minded members and are confident our joint efforts will accelerate standards adoption among cargo owners and other industry stakeholders."

The DCSA and the ESC will collaborate by investing time and resources in helping members adopt and implement the DCSA standards. This is likely to include the participation of ESC members in proof-of-concept trials. Secondly, there will be knowledge sharing and, thirdly, the DCSA will gather input from ESC member to optimise existing standards. ▲



Personal profile

# Sam Askins

By SHIPPING AUSTRALIA

Sam Askin was appointed as the new CEO of well-known logistics systems provider, 1-Stop, last December. The company has since been rebranded as “OneStop”.

Sam set out her leadership vision to Shipping Australia over a hot coffee on a cold morning in northern Sydney, saying that her vision for the company involves achieving together, teamwork and real time data.

“It’s not just about OneStop for me, it’s about the whole industry, especially our clients. We need to live the team value so that we can start becoming really effective together. Right now, our focus is on connecting people, goods, and technology. The best way of doing that is [by] giving them the opportunity to access and analyse the best data,” she says.

And that’s real time data. But as Sam points out, it’s what you do with the data that’s more important. “For many companies, data is like having 12,000 orange trees but never having any juice. We need to start identifying needs and looking at how we can address them with that data. Otherwise, we just get stuck with 12,000 orange trees,” she explains.

Sam joined OneStop as the Chief Product Officer in early 2021. It was a quick and steep learning curve, moving

from product executive roles in media and the software as a service sector to the logistics industry.

“I did not realise how complex it was! Like a lot of people who’ve never worked in logistics, I just took it for granted that something came from ‘here’ and went to ‘there’. People, including, myself, had this simple view that you order something, and it turns up. Easy, right?” she laughs.

The CTO took her through a deep dive on the industry works during her first week. Starting with “here are the ships...” Sam recalls that the diagram “went on and on and on...” by the time we’d gone through all the acronyms, and the forms, and all the steps, and all the data... customs, ECPs, warehouses... wow!”

It’s not the first time Sam has entered a new industry and has been faced with completely new lingo. She says that, while the sector she works in might have changed and the technology is constantly advancing, the essential framework and role that technology and data play remains similar.

It might be her first CEO role, but Sam’s been in senior leadership roles for some time (see Sam’s biography box). For instance, in 2018, Sam became the Global Head of Product at Coates, a provider of

digital merchandising services, she was then given the Engineering portfolio as well. She helped companies bring digital media to in-store experiences.

“For example, we used this type of software to enhance ordering opportunities at some retail outlets by providing relevant information on screen, to save time and speed up customer queues.”

Prior to that, her team at NewsCorp created a machine learning app that identified and removed scam ads within classified listings, which Sam explains was a big thing at the time. “That type of technology has moved on and it’s mainstream within the retail space, but now it’s adapted to multiple types of applications,” she adds. “Now companies are using that type of technology to do things like stream music in store and change the music in real time to suit the customers and environment. It’s all about using the data to improve the customer experience and create efficiencies for the business.”

Sam’s media career continued, and it was through media that she became engaged with product management.

“It is the engine of growth in any company. We’re trying to innovate, to outrace the changes around us, to deliver real value, to find and develop





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new markets,” she says. “Media back in the day wasn’t the fastest to adapt... it was a bit like dinosaurs foreseeing that the Ice Age was coming but only putting a little scarf on,” Sam explains.

The early 2000’s really was a time of trying to innovate to outrace changes – the Web part of the internet had only been released to the public in 1991 – and methods of consumption and the presentation of information were changing from desktop computers to laptops, to phones and social media. There was huge disruption.

It was a fundamentally important time for Sam. She learned that digital product platforms are experimental and that the key qualities are to be fearless in experimentation and to be able to learn from failure.

“Failure isn’t failing,” she says, “it’s a learning experience.”

For Sam, that’s been a lifelong motto, she’s always had a keen interest in learning how things work, meeting new people and understanding different cultures.

Back when she left high school, she knew that she wanted to travel the world. She also knew that she needed about AUD\$5,000 to pay for the ticket. So, she started working in the back office of a magazine publisher.

She began by stuffing magazines into envelopes and posting them, and then later progressed to working with bromides – little squares of filmy paper used to print classified ads – back in the days before digital printing. She would have to slot them together, like a puzzle, and create a full page of ads. From there, she went on to become increasingly involved in the running of the business.

“I was working for an independent publisher, Barbara McGregor, who provided strong female leadership. She was working with ecological organisations, trying to bring concepts like environmentally friendly practices, and alternative health-and-nutrition into the mainstream before it was widely accepted,” explains Sam.

“Barbara was a strong woman, and she was really trying to make a difference in the world. She brought that philosophy to her company, and we were exposed to things that we wouldn’t have been exposed to elsewhere. She was a risk taker. And she stood behind her convictions. I respected that she wasn’t

scared to put herself out there. It was a great step into my first job. I was very lucky to have the experience. It’s where my love of magazines started,” she recalls.

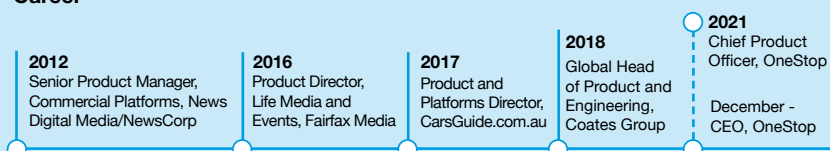
Sam worked her way up through the ranks and was promoted to Marketing Manager at the age of 23, at the same time she was gaining her Bachelor’s degree in Humanities from Macquarie University. This course was particularly appealing to Sam because it was flexible, and she was able to tailor it to her interests. Among

other things, she studied sociology and anthropology to further her interest of understanding how society works.

“University should be a place of exploration and a place for people to find out what excites them... the point of education is to expose people to different ways of thinking and to help people develop critical thinking which is vital in business, and in life,” she explains. ▲

## Sam Askins: a life

### Career



**Family:** Her partner is Sercan. “Just call him ‘Serge’,” Sam says, because “it makes everyone’s life easier.” Mum is “Desiree”. Meanwhile, a 60kg Alaskan Malamute (a breed of dog) by the name of “Odin” rounds out the family. Sam had great hopes for him to be a “grand, big, dog” but he “grew up more like Scooby Doo,” she chuckles. Sam enjoys walking her dog, “Odin isn’t so much obedient as occasionally co-operative,” she chuckles.

**Reading:** Sam’s a “massive book nerd” and is an avid reader. She loves inspirational biographies such as those of the Dalai Lama and Nelson Mandela. She also enjoys true crime, sociology, fantasy and fictional crime. Her favourite aeroplane author is James Patterson – every “chapter is only a few pages long, so you can flick through a few chapters at a time”.

**Travel:** Her real hobby is travel, she says, but that had to take somewhat of a backseat during the COVID lockdowns. “Now that COVID’s lifted, it’s something I’m going to have to get back into.” Sam loves travelling backpacker style, getting into a country, understanding a bit of the culture and seeing it from the ground. She’s been to Asia, Europe, South America and Africa. “It’s very diverse. I like the differences. To me, it is so important to understand how different people live and how places operate,” she says.

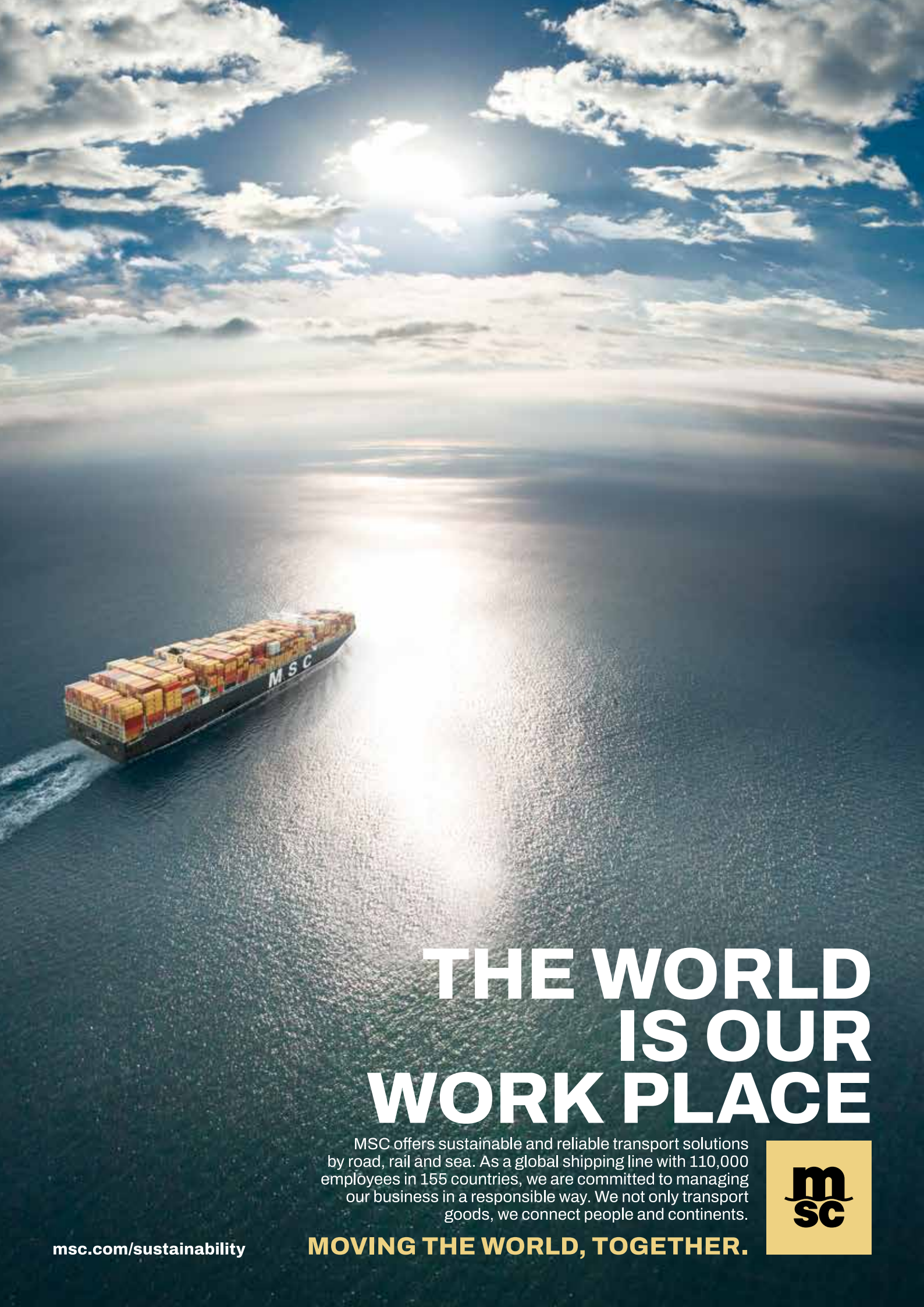
She loves yoga, and especially meditative yoga. “I can’t sit at home and meditate, but mixing in the physicality of it, it brings a calm to my life and the calm brings clarity. It just helps, especially when you’re in a high-stress environment. It grounds you and brings you back to what’s important”.

**Sports:** She once earned an archery certificate. “I felt that I had no survival skills at all! So, I felt like learning how to do it, now I’ve got a survival skill”.

**Movies and TV:** Sam likes her down days. She’s not a huge movie-watcher although she does love TV. Favourites include documentaries – anything from neuroscience to David Attenborough... or, on the other hand... anything that “completely shuts the brain down.” Sam’s currently watching “FBI: Most Wanted,” she simultaneously grimaces and chuckles, “because Julian McMahon, an Aussie, is in it. Is it exactly what you think it is? Yes, yes, it is!” she laughs.

**Music:** Alternative rock is her preferred music, and this includes such legendary names as The Cranberries and Janis Joplin. But she has diverse taste in music too, encompassing such musical styles as the Blues and also folk-rock such as the House of the Rising Sun.





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# Victorian and Western Australian port reforms rumble on

*Pictured: an aerial view of the Port of Melbourne showing Swanson Dock in the foreground and Appleton Dock in the background. Photo credit: Port of Melbourne.*

Reform of port governance has been a big topic.

A major port reform bill, the Transport Legislation Amendment (Port Reforms and Other Matters) Bill 2022, was introduced into the Victorian Parliament in March 2022 by Melissa Horne, the Victorian Minister for Ports & Freight.

The Bill has passed both Victorian Houses but, at the time of writing, is yet to be enacted. The Bill is based on the recent review of the Victorian port system.

“The Review found that the high level of fragmentation that existed in 2020 impacted the State’s ability to plan and coordinate. It has also reduced confidence in the safe, efficient, and effective functioning of the ports system,” Ms Horne told Parliament.

As Ms Horne noted in parliament, the Victorian government has already implemented the main recommendation which was to establish Ports Victoria.

The Bill defines the Victorian port system and links the objectives of Ports Victoria to this definition.

“The implications are that [the responsibilities of Ports Victoria] are to promote and facilitate trade; support strategic planning and development; undertake operational activities; and provide technical and consultancy services in relation to the whole of the Victorian ports system, not just the commercial trading ports”.

Two existing bodies, the Victorian Regional Channels Authority and the Victorian Ports Corporation (Melbourne) were subsumed into the new body.

The new Bill implements review recommendations in relation to local ports, port development strategies and

regulatory arrangements relating to harbour masters, towage and pilotage.

A licensing regime will be governed by the Bill and it will be an offence to provide towage services without a licence. The Bill will also specify the processes that Ports Victoria must follow when setting requirements and standards for the provision of towage; grants powers to Ports Victoria to specify licence conditions; sets the licence period to five years; specifies the application process for licences and the renewal of licences; specifies the application process for licences and the renewal of licenses and the processes by which licenses be suspended or cancelled.

Ports Victoria will also have the ability to set different standards and requirements across different ports and port waters.

Transport Safety Victoria will retain responsibility for licensing individual pilots and registering pilotage service providers, however, the Bill provides that registration must follow the issue of a licence by Ports Victoria.

The review also noted that some oversight arrangements are spread across multiple bodies in Victoria and the new bill gives Ports Victoria the power to request that Transport Safety Victoria impose or modify conditions on harbour master licences.

Meanwhile, on the other side of Australia, the major port reform in Western Australia, which began over a decade ago, continues to rumble along with responsibility for several of the states’ ports changing hands at the beginning of the financial year.

Oversight of the Port of Varanus Island has been transferred from the WA Department of Transport to the Pilbara

Ports Authority. Varanus is the first of five ports in the Pilbara region to be transferred to the Authority.

Varanus is a minor port, receiving about five vessel calls each year and it primarily handles the export of condensate. It is located about 75km from the Pilbara mainland and 140km west of the Port of Dampier.

“Pilbara Ports Authority welcomes the transfer of the Port of Varanus Island, which will transition from the Shipping and Pilotage Act to the Ports Authorities Act. The consolidation of commercial ports will ensure better safety, planning and coordination of port development in the Pilbara region,” said Pilbara Ports Authority CEO, Roger Johnston.

In addition to responsibility for the Port of Broome, Kimberley Port Authority has assumed responsibility from the Department of Transport for the ports of Wyndham (leased and managed by Cambridge Gulf); Port of Derby (leased and managed by the Shire of Derby West Kimberley) and the Port of Yampi Sound.

The following roles will be transferred: approval of pilotage areas and pilots (including exemption certificates); harbour master functions; overall marine safety oversight; declaration of channel depths; declaration of the formal closure of ports due to cyclone or other weather conditions; approval of jetties in port areas; management of the navigational aids for ships currently owned by DoT in port areas; management of current leases issued under the MHA and port operating agreements at common user ports; and any other port services provided to State Agreement customers by agreement.

The Department of Transport retains responsibility for policy and the oversight of ports authority governance. ▲





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# A U.S. style Federal Maritime Commission for Australia? It's a Frankly Mad Call!

*Pictured: crazy eggs. Well, we've heard some pretty crazy policy proposals of late, but the call for a maritime regulator? It's a Frankly Mad Call! Photo credit: Tengyart via Unsplash.*

Well, we've heard of some really terrible policy proposals, but the call to set up a Federal Maritime Commission (FMC) in Australia is probably one of worst of recent years. And that's saying something!

## Who staffs the regulator?

The United States' FMC Commissioners basically come from backgrounds that are either bureaucratic, political or legal, or a mix of all three. So, if we follow the US FMC model, the Australian FMC would probably also be politicised, bureaucratic and legalistic too.

## Duplicates existing regulators

The FMC's mission is to ensure a competitive and reliable ocean supply chain that supports the US economy and protects the public from unfair and deceptive practices. Sounds familiar. It's not a million miles away from what the Australian Competition and Consumer Commission already does. Australia doesn't need an FMC because we've already got one: the ACCC.

## Perceptions of bias and one-sidedness

The FMC's predecessors were born out of World War One. The demands on global shipping were enormous, there was a loss of shipping supply, and the US was a fast-growing nation. There were fears at the time that liner conferences might gain market power. The United States Shipping Board was created under the Shipping Act of 1916 to "protect American exporters and importers", the FMC says. The predecessors of the FMC were explicitly protectionist bodies. The US FMC itself was set up in 1961 under the Kennedy Administration by executive order (Reorganization Plan No. 7).

## Still a protectionist body today

The US FMC is still a protectionist body today and it appears to be institutionally prejudiced against ocean carriers. Consider this line: "[The FMC provides] a forum for exporters, importers, and other members of the shipping public to obtain relief from ocean shipping practices". And this: "reviewing and monitoring agreements among ocean carriers and marine terminal operators ... to ensure that they do not cause substantial increases in transportation costs".

It's hardly free-market stuff and it starts from a position of bias against ocean carriers.

## Not exactly a neutrally balanced advisory committee

The main FMC advisory membership committee advises on policies relating to the fairness of the international ocean freight delivery system. What a marvellously unbiased body it must be, this "National Shipper Advisory Committee"!

The FMC helpfully discusses its advisory committee: "membership will be comprised of 12 representatives of entities who export cargo and 12 representatives of entities who import cargo".

It's hard to see how supporters of an FMC-style body set-up to promote the interests of shippers, with an industry advisory committee wholly comprising of shippers, could plausibly claim it would be fair. No matter what it said or decided, every act would be tainted by the perception of bias.

## A fair and accurate description

So, shipper representatives want to replace Australia's existing, open, competitive, unbiased and free market system with a protectionist government body.

This proposed body would give shipper

representatives, but no-one else, extra opportunities to influence government policy and to regulate behaviour of market participants. While it would generally be described with the neutral term of "regulator", in reality it would be a government body set up for the specific purpose of regulating the market for the benefit of importers and exporters.

## Interventionist regulator cannot solve market issues

Everything that shippers have been complaining about – delays, blanked sailings, difficulties getting space, congestion – have all happened in recent years in the United States... which is the home of the US FMC. If the US FMC – which was explicitly set up to favour shippers – was willing and capable of engaging in regulatory intervention to solve all these problems then, surely, it would have done so? But it didn't. Because it can't.

Not because it doesn't have the resources or power but because of the fundamental point: government control of markets doesn't work.

This was something the legendary Labour Prime Ministers, Bob Hawke and Paul Keating, knew. It's why they dismantled the old protectionist system.

Every now and then we forget the lessons taught to us by Hawke and Keating. Case in point: the Road Safety Remuneration Tribunal. Hated by nearly all, independent reviewers and experts condemned it for its bureaucracy-spawning and economy-hurting effects. It's gone now, thankfully.

An FMC-style regulator in Australia would be unnecessary, biased, and economy-damaging.

It's a Frankly Mad Call. Dismiss. ▲



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# Shipping could support a repeal of Part X and replacement by a block exemption

By SHIPPING AUSTRALIA

*Pictured: athletes compete for the ball during a game of soccer while the referee (background) looks on. Today, in shipping, some of the players want the referee to change the rules. Photo credit: Jeffery F Lin via Unsplash.*

Various commentators like to beat on the shipping industry with calls for the repeal of Part X, which is a bit of law that gives various exemptions to liner shipping companies from normal competition law.

Here's a shocker for you... most shipping lines would largely be OK with a repeal of Part X, provided that there is a block exemption instead.

So, why does shipping need an exemption from competition law?

Well, shipping doesn't.

Shippers, however, very much do.

## **Financial exemptions are unwanted and un-needed**

Part X (which is a pretty bureaucratic and expensive way to provide an exemption) basically allows ocean carriers to work co-operatively in a range of situations. Some of those situations are financial in nature and in theory allow the sharing of profits and the like.

It is those financial provisions that get shippers hot under the collar, leading them to accuse "collusion!", during times of high freight rates. But, the truth of it, is that freight rates have been high in recent years because of supply and demand. And a further truth is that ocean shipping lines serving Australia don't use these financial exemptions anyway.

Back in 2015, the Competition Policy Review (the Harper Review) recommended that Part X be repealed and that the ACCC develop a class exemption for liner shipping agreements that meet a minimum standard of pro-competitive features. A "class exemption" is a way to grant exemption from competition law for certain types of conduct provided it does not substantially lessen competition and / or provided that it generally results in public benefits.

The Competition Watchdog issued a discussion paper on the possibility of an ocean liner shipping class exemption

back in December 2019. That particular consultation got clobbered by COVID (as did just about everyone and everything else) and it was put on the backburner for a while. Later, the Productivity Commission's inquiry into Australia's maritime logistics system was set up and the Terms of Reference indicated that the Productivity Commission should have regard to the Government's in-principal recommendation to repeal Part X and consult with the ACCC. Work may re-start on the ACCC paper at some point in the future.

You can read all about the shipping industry's stance on the Part X financial exemptions to competition law in our submission to the ACCC.

We'll save you a bit of bother though. The ocean shipping industry in Australia doesn't use these financial exemptions, doesn't want these financial exemptions, and would be pleased to see the back of them.



## Operational matters are wanted, needed and competition-boosting

However, shipping companies do very much use the other exemptions from competition law on operational matters such as jointly fixing sailing timetables and port calls; exchanging, hiring, selling, leasing and sub-leasing spaces on vessels; pooling vessels; adjust capacity in response to fluctuations in supply and demand; managing capacity and so on.

Use of these exemptions does not restrict or lessen competition, instead, they boost it.

Shipping is an expensive and complicated business. One way to lessen risk and become more able to handle complexity is to co-ordinate and collaborate on services. Ultimately, this produces a more stable service that benefits importers, exporters and the general Australian public.

Case in point: it was announced in early 2022 that a new entrant to the Australian trades had decided to commit a single vessel to “CA2”, the China Australia Service, which calls at ports in the rotation Qingdao, Ningbo, Shanghai, Nansha, Brisbane, Sydney, Melbourne on a 41-day loop (24 days from Qingdao to Brisbane; 17 days from Brisbane back to Qingdao calling at the other ports en-route).

## Too small companies are too small to take part in the trade

A shipping company would be highly unlikely to commit one vessel to such a loop by itself without being part of a consortia. It would be far too costly, and it would be of little value to Australian importers / exporters because they would only have one opportunity every 41-days to import / export around the loop on that one-ship-loop.

If there was no operational exemption from Australian competition law then a one-ship-company simply could not offer a service in Australia. Because of the Part X exemption, the new entrant described above has the ability to slot a vessel into the service and that benefits everybody. The new entrant gets to do business with Australian shippers, the other participants in the loop have an extra vessel to provide stability and services and (presumably) extra slots etc.; Australian importers and exporters experience a boost in the reliability, resilience and frequency of calls.

It benefits everybody. But, most of all, it benefits shippers.

## Counterfactual: what would happen if the operational exemption evaporated?

What would likely happen if there was no operational exemption for ocean shipping companies?

Well, conferences would have to cease to exist, obviously.

Smaller ocean shipping companies would not be able to afford to run an Australian loop by themselves and so they would likely have to pull out of the Australian trades. That would mean fewer services to / from Australia, less frequency of ship calls and a supply chain more prone to shock than it is now. There would be less opportunity for exporters, such as farmers to get their time-sensitive stock to customers.

There would also likely be a concentration of shipping services in Australia. Remember: despite what the naysayers claim, Australia benefits from plentiful container shipping. Liner shipping connectivity has never been higher. We have at least 23 competing container shipping companies calling at Australia and there are also shipping companies (break bulk operators and PCTC operators) that can take containers. Ocean shipping is competitive in Australia and shippers have a wide choice of operators.

But back to the counterfactual. If the operational exemptions to competition law evaporate, the smaller companies would have to pull out of the Australia trade, leading to fewer operators in this market.

We can't know for sure what would happen in this hypothetical situation, and we don't discuss matters such as pricing with our members, but basic supply and demand theory would suggest that if there is less supply serving Australia then freight rates would probably increase.

If the bigger companies decided to cover the gaps caused by an exodus of smaller operators, they'd have to deploy more assets, burn more fuel and their costs would generally increase. It makes sense then, that they might increase their rates to cover their increased costs.

So, the counterfactual suggests that Australia would have fewer services

of lesser quality at a higher price. All importers would be harmed by that. All exporters would be harmed by that. Given that 1-in-5 jobs in Australia are supported by international trade and given that about 35% of our economy (GDP) is supported by merchandise trade, then all Australians would be harmed by that too.

And that's why Australian shippers, and the Australian general public, need an exemption for operational co-operation in container shipping.

## Replacing Part X with a block exemption

Part X has the advantage that everyone knows how it works. There are no nasty surprises with that legislation because it is pretty old by now. But, it's also really cumbersome and is generally a real pain to administer. No-one really likes it very much. Many people would be glad to see the back of it if possible.

Australia's ocean shipping industry would support reform that preserves the operational exemptions in the current Part X and which does away with the burdens of registration and administration. There's a fairly simple tool for this: the block exemption.

Simply put, the regulator (in this case the ACCC) writes up a series of conditions that would result in an exemption to competition law. If the regulated entities (in this case, ocean shipping companies) meet those conditions then they're entitled to – and benefit from – the block exemption. Done. No need for registration, administration, hiring consultants, or consulting with third parties who are not directly involved in the business.

Meanwhile, there is nothing to stop shippers from reporting any competition concerns to the ACCC, or, indeed, from the ACCC using its extensive investigation, compliance and enforcement powers to make sure everyone sticks to the law.

Replacement of Part X with a good quality block exemption boosts competition, boosts the service to shippers, lowers costs, benefits Australians and saves time, money, and effort.

And that's something that all right-thinking people ought to welcome. ▲



*Pictured: the "Yara Birkeland" on a maiden journey. This vessel may become the world's first fully autonomous vessel deployed in commercial service. It's currently on a two year trial. Photo credit: Yara International.*

# Seafaring workforce likely to be replaced by robot ships

One of the justifications used to promote the unsound protectionist coastal shipping and national fleet policies is that they are vital for maritime skilling. But that "justification" might soon be made redundant.

## Robot ships and boats are being trialled

Japanese shipping giant NYK completed a trial with an autonomous pure car and truck carrier in September 2019 from Xinsha (China) to Nagoya (Japan) and then from Nagoya to Yokohama (Japan). Mitsui OSK Lines carried out a port-to-port sea trial with a coastal containership on 24 January 2022 and carried out mooring tests with a drone. Shipping companies on the Great Lakes in North America are experimenting with autonomous technologies.

The "Yara Birkeland" is a 120 TEU coastal container ship. It may become the world's first fully electric powered and autonomous cargo ship. We say "may" because, although it had a maiden voyage in November 2021, it is about to start a two-year operational trial in which it will be certified as "autonomous" if it is successful.

Then there is the epic voyage of the

autonomous tug "Nellie Bly," which carried out a 1,027 nautical mile journey around the coast of Denmark in 129 hours. The vessel was under autonomous control for 96.9% of that time. The Nellie Bly used artificial intelligence, computer vision, and nautical chart data to carry out a journey in which it executed 31 collision avoidance and traffic separation manoeuvres. Starting at Cuxhaven (Germany), the ship transited the Kiel Canal, circumnavigated Denmark, and returned to Cuxhaven. The voyage was supervised by US Coast Guard mariners... remotely stationed 3,000 miles (4,828 km) away in Boston, in the United States. By way of comparison, 1,027 nautical miles is about 1,900 kilometres.

## Diffusion of innovation

If a tug can sail itself around Denmark, then the sensible question to ask, is: "how long will it be before robot ships are commonplace?"

The theory of the diffusion of innovation (Rogers, 1962) provides clues. Diffusion theory asks: how complex is the innovation to use? How compatible is it with the existing system? How testable is it? What are the observed effects of the

innovation? What are its benefits relative to the current system?

Given that autonomous robot ships will largely operate themselves and will initially use the same ports, berth pockets, access channels, turning circles and the like, they are not likely to be any more complex to use than manned ships. They will likely be compatible with the existing system. As for testability, well, robot ships are being tested right now. Observability: there are no examples of shipping robots deployed on a commercial service so, as yet, there are currently no effects to observe.

So, the most important question is going to be: "what benefit will robots provide when compared to manned ships?" History gives two examples of marine technologies that changed the world at very different speeds because of the answer to this question.

## Sailing ships vs motorised ships

Initially, sail-powered cargo ships were superior in nearly every way when compared to the early motorised ships. Sailing ships were faster long-distance, didn't require fuel, and they were cheaper to build and operate.

The first motorised vessels (steamships)



appeared in the late 1770s and were mostly prototypes. By the 1810s the first ocean-going paddle steamships appeared, albeit on coastal routes. By 1819, the hybrid sailing / motor ship “Savannah” transported cargo of mail and passengers from the United States to Liverpool, England under sail power with assistance from its engines. In 1838 the paddlewheel-driven “Great Western” was launched. It was the first substantially steam-powered ship designed and built for regular trans-Atlantic crossings. At about the same time, the screw propeller was invented. Excluding steamboats, the first propeller-driven steamship, the “Archimedes”, had its maiden voyage in 1839. The screw-propeller quickly displaced paddlewheels because, among other reasons, propellers gave more consistent propulsion than paddlewheels, were less prone to damage, were more stable, were smaller, lighter (allowing more cargo to be carried) and were cheaper.

Commercial steam-powered shipping got going in the British Isles, and with good reason. Coal was plentiful, widely available, and cheap. There was a strong local coastal trade, and the weather was often bad. That played into the advantages of early steam ships. They weren’t disrupted by bad weather, they were regular, and they were good at carrying heavy volumes short distances.

Early steamships were cheaper than sail on a per ton / mile at certain distances and certain coal prices, which is why steamships got a foothold in the market at all. They first displaced sail on short routes, with passengers (who put a high priority on regular sailings), and where bulk cargoes were valuable.

Motorised ships improved over time. Wooden hulls gave way to metal hulls. Steam engines improved and eventually gave way to diesel engines. The first diesel engine prototype was built in 1893, the first diesel-powered river vessels were launched in 1903 and the first ocean-going passenger-cargo ship, the “Sealandia” had its first voyage in 1912.

But, even by then, motorised ships had still not displaced sailing ships.

Sailing ships were a moving target as their technology also improved over time. The “windjammers” were the last word in efficient cargo-carrying sailing ship design. Huge, five-masted, steel-

built sailing ships, they were ideal for the ultra-long-distance trades, such as circumnavigation, and could benefit from the strong winds at the “roaring forties” that were dangerous to steamships. The windjammers were the last widely deployed commercial cargo ships and they went out of business in the early- to mid-1950s.

At long last, because of the combination of metal hulls, screw propellers, and advanced diesel engines, motorised ships offered massively more benefits than sailing ships. And so motorised ships dominated seaborne trade.

Incidentally, we can see diffusion theory at work in the adoption of the different technologies in the history of motorised ships. Metal hulls became the norm because they were much better than wooden hulls: they don’t rot, don’t get eaten by shipworm, are more robust, and enable the building of bigger ships. Paddlewheels and steam engines made advances on, but did not end, the dominance of sails. Screw propellers knocked out paddlewheels because propellers were so much better. Diesel engines knocked out steam engines for the same reason.

It took motorised ships about 180 years or so to displace sailing ships from the carriage of freight.

### Containerisation vs Break-bulk

The first experimental modern containerised cargo journey took place in 1956 with the sailing of Malcolm

McLean’s Ideal-X (a converted tanker) from Port Newark, New Jersey (near New York).

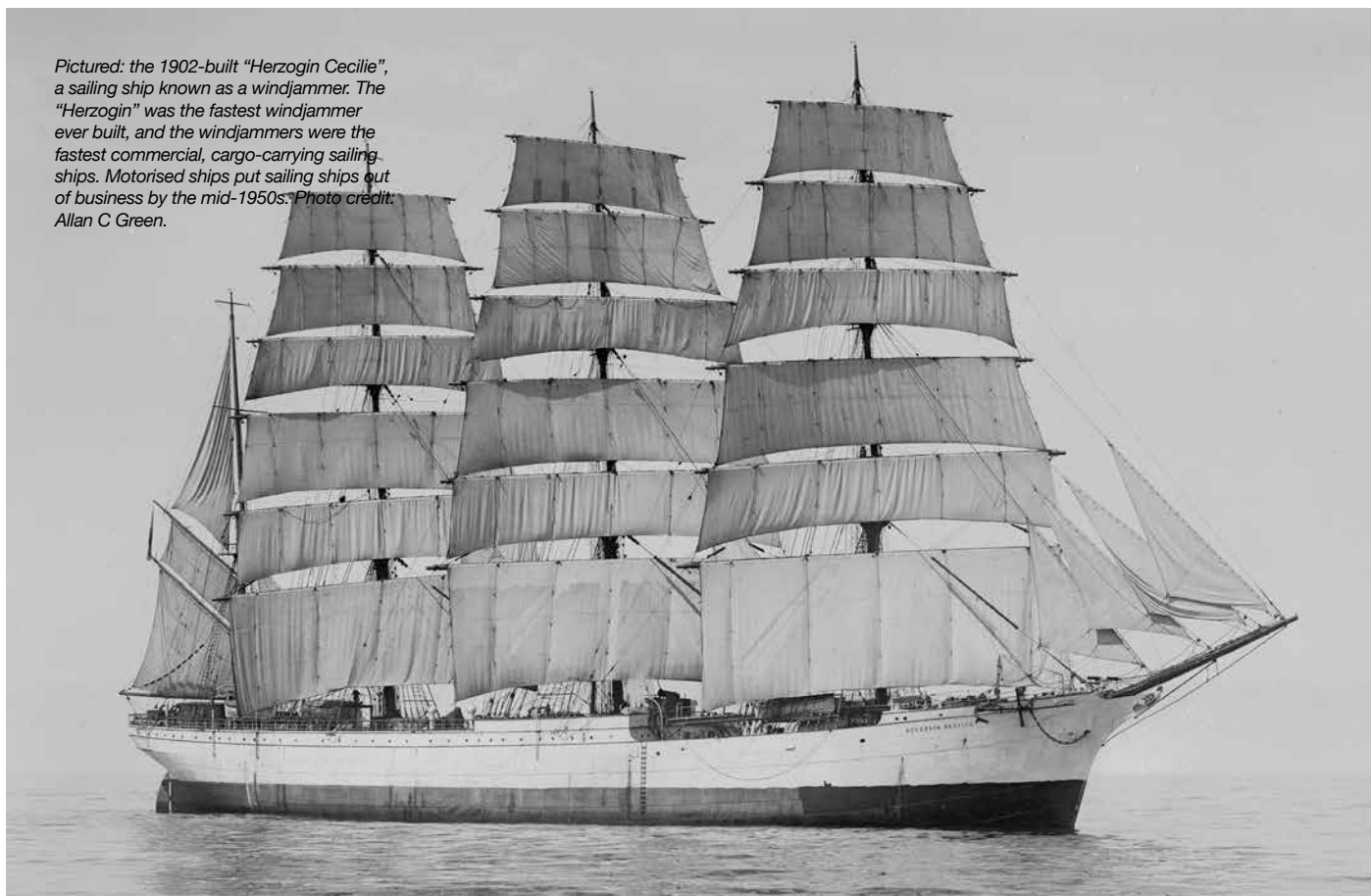
Containerisation was manifestly superior to break bulk for the seaborne transport of most cargo in nearly every way right from day one. Containerisation led to less breakage, less pilfering and less time in port (hours vs weeks). The loading of the Ideal-X cost about US\$0.16 / ton whereas the loading of “Warrior”, a contemporary medium-sized break bulk vessel, was about US\$5.83 / ton. Containerisation was cheaper than break bulk by about 36 times.

In 1962, the Elizabeth Port Authority Marine Terminal opened for business as the world’s first marine container terminal. It was, in effect, the prototype for every marine container terminal ever built. The extensive break bulk complex on Manhattan, New York, was soon obsolete despite massive capital injections that made those break bulk docks among the most efficient in the world.

Meanwhile, on our side of the planet, the world’s first, purpose-built, fully cellular container ship, the “Koorunga,” was built at Newcastle, New South Wales, in 1964 for the Melbourne-Fremantle trade. It could handle up to 10,000 tonnes of cargo in 36 hours through simultaneous loading and discharge. In 1971, construction on Port Botany had begun and the facility opened in December 1979, thereby displacing the old wharfs in Sydney Harbour.



*Pictured: the 1902-built "Herzogin Cecilie", a sailing ship known as a windjammer. The "Herzogin" was the fastest windjammer ever built, and the windjammers were the fastest commercial, cargo-carrying sailing ships. Motorised ships put sailing ships out of business by the mid-1950s." Photo credit: Allan C Green.*



The benefits of containerisation massively and immediately exceeded the benefits of break-bulk for transport most cargo and those benefits continued to grow over time, which is why containerisation changed the world in about 25 years.

### **Which path will robot ships follow?**

Containerisation displaced break bulk about seven times faster than motorised ships displaced sailing ships. The relative benefits of containerisation vastly outweighed break bulk in nearly all ways right from the first day. Motorised ships were initially inferior to sailing ships in nearly all ways, in nearly all trades, and were far more expensive to boot. Motorised ships had to improve to displace sailing ships and that took a very long time.

Will robot ships follow the same path as their steamship forebears? Or will they follow in Malcolm McLean's path?

In "A pre-analysis on autonomous ships," Blanke et al (2018) estimated the annual gross costs per island ferry employee to be about one million Danish Kroner (about AUD\$206k at 2018 rates). Crew costs for larger product tankers are in the region of USD\$4,000 to USD\$4,700 a day; for capesize bulkers, about USD\$3,000 a day; for 10,000 TEU box

ships, about USD\$3,400 a day. These costs multiply rapidly if a ship operator has hundreds of ships.

Savings on crew costs are just the start. Robots don't need accommodation blocks. Re-designed ships would realise up-front capital savings on the construction of a vessel. Huge fuel savings over the lifespan of the could be realised. The space used by an accommodation block could be used to carry cargo thereby offering additional revenue-generation. Robot ships could go faster, or safely sail through rougher sea, or sail closer to other ships, compared to manned ships.

Faster ships could lead to, say, every "nth" ship in a loop being taken out of the loop and re-deployed elsewhere, while maintaining the same level of service in the loop. Robot ships might not need marine pilots, or tugs, or a host of other services.

And we haven't even begun to consider other changes, such as a fundamental re-design of the shape of a ship. There are already concept ideas for zero-emission hydrofoil containerships that could offer fast sea freight over certain distances at half the cost of air freight.

Robot ships appear to offer immediate benefits on the scale of containerisation

rather than on the scale of motorised ships. If autonomous ships work – and the early trial results suggest they might – then it seems likely that robots will come to dominate maritime shipping quickly rather than slowly.

### **Policy implications of robot ships**

Which leads us back to where we came in. The push to justify coastal shipping and national fleets on the grounds that they will provide opportunities for maritime training and skilling now looks decidedly iffy. Robot ships will likely massively outcompete manned ships in cost, service, and efficiency. They will likely be widely deployed, and quickly, if (when?) the technology is proven.

Deployment of robot ships is likely to reduce the demand for, and size of, a seafarer workforce. We've already seen something like that happen on the Australian docks. Marine terminal automation has already massively reduced the size of the waterfront labour force.

Before wasting hundreds of millions, maybe billions, of dollars on a national fleet or continuing a coastal shipping regime that has been injurious to Australia, policy makers would be wise to consider the likely impact of robot ships. Caution in policy is warranted. ▲





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# Developments in decarbonisation

Decarbonisation of shipping continues to pick up speed. While ocean shipping will definitely do away with carbon dioxide emissions, exactly how it will do it is uncertain right now. We are currently seeing a lot of Liquefied Natural Gas-powered ships but, ultimately, LNG can only be a transition fuel. While it is a lot cleaner than heavy fuel oil, it still contains a lot of carbon dioxide. However, there are a variety of other green technologies that could greatly change how ships are propelled.

## Maersk's major methanol move

Maersk stunned the shipping world last year with its big announcement that it had placed a massive order for eight methanol-fuelled vessels, shortly after announcing it had identified partners to help produce the green fuel. These partners comprise (so far) CIMC Enric, Europa Energy, Green Technology Bank, Orsted, Proman and Wastefuel with the intent of sourcing about 730,000 tonnes per year. In August this year, Maersk announced a further partnership, this time with Chinese bio-energy company, Debo. The Chinese company is due to develop a 200,000 tonne per year bio-methanol project for Maersk in China.

Methanol has an energy density of 20.16 megajoules per kilogram and 15.91 megajoules per litre. It is the simplest form of alcohol and it is composed of four hydrogen molecules, one oxygen molecule and one carbon molecule. Although combustion results in carbon dioxide emissions it is still a green fuel if it is made from organic materials. The carbon emitted at combustion would have originated in the atmosphere, so methanol combustion does not add any extra carbon to the atmosphere unlike the burning of fossil fuels.

At the time of writing, the world produces about 148 million tonnes of methanol each year as the chemical is an internationally traded product and has a wide variety of industrial uses. Accordingly, there is already a global transport network in place with total

carriage capacity found on about 1,283 operational chemical tankers and there are standardised bunkering facilities available for the supply of methanol at about 100 ports around the world, according to analysis by doctoral research Colin Robertshaw of the University College London.

## Bulk shipping goes green

And it's not only Big Blue that's going green. Oldendorff Carriers, one of the world's largest dry bulk operators, has long been committed to reducing its environmental footprint. It has ordered the installation of energy-saving devices on the stern of 12 of its newbuilding vessels, which are due for delivery in the first half of next year.

"Mewis" ducts and rudder bulbs will be installed on seven babycares (bulkers typically between 100,000 and 120,000 deadweight) and five post-panamax. A Mewis Duct is a wide, thin, ring that is installed on the external part of the propeller shaft, immediately before the propeller. The ring is affixed to the ship using broad blades / fins, which are installed at an angle relative to the forward direction of the ship.

The duct helps increase efficiency in several ways. Firstly, the presence of the duct causes the flow of water into the propeller to be straightened and accelerated, which creates a forward thrust.

Secondly, the angled fins cause seawater to swirl in a counter-direction to the spin of the propeller, which is said to recover rotational energy from the slipstream.

Ship propellers have a boss cap at the hub of the propeller, which causes a vortex to form when the propeller is in operation. So, thirdly, the improved slipstream reduces the hub vortex, which improves efficiency with improved thrust and inflow to the rudder.

Pre- and post-installation testing by the Mewis duct manufacturer on a 57,000 dwt bulker revealed a 5% saving in fuel consumption.

If a bulb is installed on the front edge of the rudder and it extends to just behind the boss cap of a propeller it will straighten the flow of water (thereby reducing the amount of drag, which, in turn, reduces fuel consumption and greenhouse gas emissions). It also reduces cavitation (the creation of a void space caused when a propeller spins in sea water), which, again, increases efficiency. Rudder bulb test have shown that rudder bulbs can produce a 1.5% saving in fuel consumption.

Oldendorff Carriers has a variety of energy saving devices installed on many ships in its fleet.

"By next year, 45 of our ships will have a Wake Equalizing Duct, which will help achieve better C.I.I. ratings, lower fuel consumption and reduced emissions. In addition, at least 20 of our ships have asymmetric fins, rudder bulbs, boss cap fin propellers and other fuel savings devices. Furthermore, since 2019, we invested more than US\$ 300 Million in Exhaust Gas Cleaning System (EGCS), which abate nearly all of the sulphur oxide emissions. Compared to ships that burn VLSFO without such systems, our ships emit up to 90% less particulate matter and up to 60% less black carbon than ships consuming VLSFO, which leads to much cleaner exhaust at sea and in port," the company said in a statement.

## Re-working with the wind

The capture of wind power in sails was likely the third form of watercraft propulsion used by boat sailors – likely deployed right after human sailors stopped paddling with their hands or a big stick. It's a pretty ancient technology and it lasted a long time – the last commercial sailing ships that went out of business were the steel-hulled and masted Windjammers, which stopped carrying cargo-for-reward back in the early-to-mid-1950s. Humanity's love affair with wind-propulsion never truly went away though, and there have been multiple efforts over the last 70 years or so to resume its use.



These have included putting masts and sails back on decks, deploying kites, using rotor-sails (spinning towers that leverage a principle of physics for wind-propulsion), suction sails and the like. However, these wind devices were never popular from the 1950s to now because heavy fuel oil was comparatively cheap, environmental protectionism wasn't the force it is today, there were issues with potential damage to sails during heavy seas, and possible difficulties during cargo operations.

Today, many of those problems may have been resolved with changing attitudes to the environment, a surging fuel price (including the switch to very low sulphur fuel which is, typically, more expensive than traditional heavy fuel oil), the advent of advanced materials and far superior information technology.

### **MOL in world-first hard-sail equipped bulker**

In a world-first, Mitsui O.S.K. Lines (MOL) is due to bring a new type of hard sail equipped bulker to Newcastle, Australia later in 2022.

The single sail will produce enough propulsive force to save 5% of greenhouse gas emissions on the Japan-Australia route. However, the company notes that, in future, multiple copies of the sail could be installed on a ship and in a variety of different configurations. Larger ships with flat decks – such as the larger bulkers and tankers – could also be especially suitable for the new sail type. MOL also notes that the system could, in future, also be installed on ships that are running on non-fossil fuels.

Bulkers and tankers are particularly suitable for wind assisted propulsion as wind systems on such vessels are much less likely to interfere with cargo operations when compared with other ship types. Bulkers and tankers also typically do not have high-speed requirements. Whereas a fully-laden containership will travel at about 25 knots (approx 46 km/h) a large fully laden bulker will more likely be travelling at about 10 knots (about 18.5 km/h).

The hard sail system is called the “Wind Challenger”. It started life back in 2009 as a joint industry / academic project led by the University of Tokyo. In January 2018, MOL and Oshima

Shipbuilding took over the plan and, in October 2019, Approval in Principle was granted by Class NK of Japan for the hard sail system.

The Wind Challenger system (in its first iteration) is installed near the prow of a bulker. It consists (in the first iteration) of four tiers of 15 metres wide by 20 metres high that are assembled on top of each other. However, the system at full extension will be 54m tall.

The biggest of the tiers is at the top and the smallest is at the bottom, which means that the sail-system can be made to telescopically extend or contract at will. So, if the wind is too strong, or if the seas are too rough, the system can be made to contract and it can also be rotated to provide maximum protection against damage. Similarly, when a ship is entering or leaving port, the system can be reduced in size so as to enable ease of navigation.

The sail is made of lightweight, strong, glass-fibre-reinforced plastic. This material enables easy control of thrust and load while “dramatically improving safety”, according to MOL, which adds that this is the first time that this particular fibre reinforced plastic has been used on large merchant ships.

The system will monitor sail and other environmental data, such as wind

and wave) to optimise propulsion. Meanwhile, the ship will also sail more favourable routes, taking advantage of such phenomena as ocean currents, to maximise efficiency.

MOL set out its plan to achieve net zero GHG emissions by 2050 through concerted group-wide efforts in its MOL Group Environmental Vision 2.1. The company states it will contribute to reduce GHG emissions from society at large, and realize a low-carbon and decarbonized society by proactively participating not only in this project, but also by establishing clean energy supply chains. It states that it will “move assertively to promote wind-related businesses including the Wind Challenger-developed hard sail”.

The first Wind Challenger-equipped ship will also be named “Wind Challenger”. It will have a deadweight of approximately 98,9000 tonnes and seven hatches/holds. Hatch 1 (at the prow) will be 13.35m x 21.00 metres and the others will be 18.69 metres x 21 metres. Length between perpendiculars will be 321 metres and it will have a breadth of 43 metres, a depth of 20 metres and a designed draft of 12.8 metres. ▲



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# ECTA! ECTA! ECTA!

## Read all about it! “Historic” trade deal between India and Australia!

*Pictured: a young Indian girl holds the national flag. The IA-ECTA will knock-out tariffs on more than 85 per cent of Australian goods entering India and on more than 96 per cent of Indian goods entering Australia. Photo credit: Sikandar Ali via Unsplash.*

In April, Canberra and New Delhi broke through ten years of trade-talks frustration and signed a free trade deal between Australia and India.

The Australia-India Economic Co-operation and Trade Agreement (ECTA) will knock-out tariffs on more than 85 per cent of Australian goods entering India and over 96 per cent of Indian goods entering Australia.

Australia's Prime Minister, Scott Morrison, stated that the “goal is to lift India into our top three export markets by 2035, and to make India the third largest destination in Asia for outward Australian investment.”. He also noted that India is the “the world's fastest-growing major economy, with GDP projected to grow at nine per cent in 2021-22 and 2022-23 and 7.1 per cent in 2023-24”.

“The agreement would create enormous trade diversification opportunities for Australian producers and service providers bound for India, valued at up to \$14.8 billion each year. This agreement opens a big door into the world's fastest growing major economy for Australian farmers, manufacturers, producers and so many more. By unlocking the huge market of around 1.4 billion consumers in India, we are strengthening the economy and growing jobs right here at home,” said Scott Morrison, who was the Prime Minister of Australia at the time.

In an April 2022 statement, issued jointly with the Prime Minister, the April 2022 Australian Trade Minister, Dan Tehan, noted that India is the world's fastest-growing major economy, with GDP projected to grow at nine per cent in 2021-22 and

2022-23 and 7.1 per cent in 2023-24.

Minister Tehan said that: “This agreement will turbocharge our close, long-standing and highly complementary economic relationship in areas such as critical minerals, professional services, education and tourism. It will create new opportunities for jobs and businesses in both countries, while laying the foundations for a full free trade agreement.”

In 2020, India was Australia's seventh largest trading partner, with two-way trade valued at \$24.3 billion, and sixth largest goods and services export market, valued at \$16.9 billion. The former Government's goal was to lift India into our top three export markets by 2035, and to make India the third largest destination in Asia for outward Australian investment.

A 2008 joint Indian-Australian feasibility study found that the welfare of Australia and India would both increase with the conclusion of a free trade agreement. The welfare gains for both of the countries could be in the range of 0.15 and 1.14 per cent of Gross Domestic Product (GDP) for India and 0.23 and 1.17 per cent of GDP for Australia.

Economic modelling further added that about 70 per cent of Australian sectors and 68 per cent of Indian sectors are expected to experience an increase in output under a free trade agreement.

A wide range of goods exports from Australia to India will benefit and these include sheep meat, wool, seafood, infant formula, barley / oats / lentils, nuts, fruit & veg, wine, and resources such as coal, alumina, metallic ores such as copper,

manganese, and zirconium, among others, and exports of Liquefied Natural Gas.

Writing for the Indian domestic media, the Indian Minister for Commerce, Piyush Goyal, noted that Indian will enjoy greater market access to Australia, which will open up our \$12 billion pharmaceutical market. Indian textile exports are expected to triple to \$1.1 billion within three years, creating up to 40,000 new jobs. Engineering product exports from India are forecast to jump from \$1.2 billion to \$2.7 billion in five years. Ultimately, the trade deal is forecast to create up to one million jobs in India.

Certain products are not included in the deal. The Indian Government continues to protect its dairy market, along with its markets for chickpeas, walnuts, pistachios, wheat, rice, bajra, apple, sunflowers, seed oil, sugar, oil cake, gold, silver, platinum, jewellery, iron ore and most medical devices.

Other benefits of the deal include greater visa benefits for students, young professionals, Indians on intra-corporate transfers and various other service providers.

The deal has been a long-time in the making. Canberra and New Delhi launched negotiations for a Cooperation Agreement in May 2011. There were nine rounds of negotiations and it was then decided to suspend negotiations in September 2015, pending the results of other negotiations.

The ECTA deal may yet be a prelude to a bigger-yet deal to come. Canberra and New Delhi announced at the signing of the ECTA deal that both nations continue to work towards as “full Comprehensive Economic Cooperation Agreement”. ▲



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# Benefits of regulated futures markets for Australian exports

By ANIEL MARSH, Deputy Ceo, Fex Global And Les Hosking, Group Executive Market Infrastructure, Fex Global

Humanity has embraced forward markets since biblical times. In the Bible, Joseph was the first to put on a buy hedge – he told the Pharaohs to buy grain during seven years of plenty to store for use during seven years of famine.

Over time, storage and shipment of goods evolved from “to arrive” contracts, which relate to goods on ships scheduled to arrive at a processing destination, into forward markets, and then into futures markets.

Markets for future pricing will naturally continue to evolve for economic efficiency on any primary product, financial instrument, certificate of ownership or currency as they move from producer to consumer.

An interesting example is the export forward pricing of one of Australia's original exports, raw ‘greasy’ wool. After initial purchase, the onward logistics of shipping schedules, currency conversion and time zone differences resulted in forward prices being determined at the point of arrival, for instance in England. Consequently, The London Wool Terminal Market dictated the forward market transactions.

Eventually Australian wool growers questioned whether forward pricing would be better determined at the point of production, in Australia. At this time another market was developing in Chicago and was being closely watched from Sydney. The American Civil War disrupted barge and steamer

schedules carrying hogs, cotton, grains and beef moving between point of production, warehousing, and then sale to processors. The Sydney Greasy Wool Exchange was established in 1960.

In 1972 the name changed to the Sydney Futures Exchange (SFE). In the period 1980 to 2000, SFE developed Australian dollar-denominated markets with globally recognised trading rules in markets including fat lambs, boneless beef, live cattle, gold, the Australian share price Index, and Australian interest rates. SFE became the largest financial futures exchange in the Asia-Pacific region and globally recognized as the marketplace for price discovery and risk management of Australia's domestic products and financial instruments. After SFE was acquired in 2004 the focus of domestically regulated exchange traded markets to manage the chain of risks and uncertainties between production to consumer returned to the forward markets served by fixed contracting or proxy markets located in other major trading centres overseas.

Today, Australia is at the brink of economic change once again as demand for Australian products continues to surge for existing and new contemporary markets. Developments observed in today's markets are being driven by regulatory requirements and by rapid development of technology. Exchange traded derivatives listed on regulated market venues can improve risk management, cost of capital and capital efficiency when compared

to conventional bilateral trade and trade financing. Technology can instantaneously distribute information and data of online market trading activity.

Well designed and supported exchange traded derivatives increase predictability and stability of both cost and revenue streams and will attract investors who desire improved level of gross margin certainty to participate in the development of emerging and contemporary markets such as clean energy. In times of global uncertainty regulated exchange markets provide more confidence and assurance in transactions.

This future looks bright for shipping. Technology can integrate entire supply chains, shipping schedules with physically delivered regulated Australian futures markets. In comparison to traditional bilateral transactions, futures can help enable greater efficiency, greater productivity and certainty of profitability for entire supply chains that, in turn, will support investment and continued stable growth.

## FEX Global

FEX Global was founded by a group of ex-SFE Staff and participants. Launched in 2021, FEX Global operates cleared futures and options markets for energy, environmental and commodity derivative products. FEX Global, alongside the ASX 24, is one of only two licensed (AML holders) for futures markets in Australia. Visit [www.fexglobal.com.au](http://www.fexglobal.com.au) for more. ▲



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