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Dr Tony Fletcher
Master Mariner
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CV 1947-1957 Midshipman 3rd Mate 2nd Mate with A.Holt & Co Liverpool Blue Funnel Line

1954-1960 3rd Mate Chief Mate & Master Australian coastal shipping company McIlwraith McEacharn Ltd of Melbourne.

1960-1968 Stevedore Supervisor & Manager Stevedoring Department Fremantle for Associated Steamships Pty Ltd (ASP). During this period ASP pioneered the conversion from piece-by-piece general cargo handling at 6 tons per gang hour to full-scale container handling at 360 tons per crane hour using a purpose built cellular container ship MV Kooringa and shipside direct receival onto motor trucks. 1968-1973 Assistant Manager and Manager, Ships' Husbandry Department ASP Fremantle 1973-1977 Shipping Superintendent & Production Manager Shark Bay Salt & Gypsum Useless Loop WA. Also Acting Site Manager, Licensed Shot-firer mine explosives, Safety Officer & Acting Site Medical Officer. Useless Loop was a small very remote community where management had to act many varied capacities. Communication was by Flying Doctor Radio or Coastal Radio Carnarvon. Company radio to Perth only operated 9am-5pm Mon-Fri. 1977-1987 Stevedore Supervisor & Ships' Agent Wyndham WA for Mercantile Stevedores, Conaust, P&O Ports acting for livestock exporters Desa Cattle Company (Borneo) Livestock Express Line. The main part of our work was with Bakke Line, Atlantraffic Express, Columbus LineABC Container Line, and others chartered by AMLC to carry containerised meat and by-products exports from Wyndham. In 1982 Stateships took over as sole sea container transporter for the AMLC to centralize all shipments from the North West to Fremantle. We acted as stevedores and agents for Stateships until 1988 when Conaust withdrew from Wyndham (the meatworks had closed in 1986). Also during this period there was a steady growth in exports of sorghum, sunflower seed, rapeseed, mung beans and other agricultural produce from the Ord River Scheme. 1988-1991 Studied for BA in history at Murdoch University obtained degree in 1991

1991-1993 Researched a BA honours at Curtin University passed with an Upper Second dissertation "Scuttled or Shipwrecked" The reasons for the closure of the Interstate east-west sea link in 1975" 1993-1999 PhD by research Curtin University passed with three A's dissertation " How Local Autonomy was Lost" A history of Stevedoring at Fremantle 1880-1950. Currently researching the reasons for the closure of the WA State Shipping Service in 1995.

I have given a full CV to give credence to my submission.

2004 Review of Part X of the Trade Practices Act 1974: International Liner Cargo Shipping

SUBMISSION.

Australia does not have the maritime industry strength or ability to put pressure on overseas shipping lines because we do not have Merchant Marine of any international or coastal consequence. We are, therefore, unable to apply any competitive force on other shipping lines. Furthermore, because many shipping lines worldwide are registered under F.O.C. there is no ability to put government-to-government pressure to obtain favourable carriage of goods by sea conditions.

The only way that we, as a trading nation, can exert an influence on these shipping lines is by applying the old adage “if you can’t beat them join them”. Exporters and importers must make a concerted effort to persuade the Australian government to legislate that a percentage of trade to and from Australia must be carried in Australian registered and flagged vessels. Although the USA “Jones Act” is specifically to protect US coastal trade ships, there are elements of this Act, which can be applied to Australian ships. Certainly in the case of requiring that ships built in Australian shipyards to world first class safety standards carry Australian goods.

The avenue for the application of this caveat to trade from and to Australia is through Free Trade Agreements, which are negotiated on a national basis. To encourage and protect Australian importers, exporters and an Australian Merchant Marine there must be a section specifying that a percentage of the trade be carried in the ships of each signatory to the FTA. The present Conference arrangements must be modified by use of the FTA provisions specifying signatories flagged vessels in a particular trade. By using the percentage rule the tonnage and freight charges of cargo carried by Conference liners can be closely observed and regulated. In this way Australian exporters and importers are able to dictate conditions where at present those terms of carriage are dictated by the Conference Lines.

Shipowners are notorious for keeping their running costs very close to their chests. By operating Australian ships on trade routes normally serviced by Conference Lines these costs and hence the basis for freight rates can be monitored closely. The use of “discounts or rebates” by stevedores and port authorities to give favourable treatment to shipping line clients will also be soon exposed and eliminated.

A resurgent overseas trading Merchant Marine gives the green light to a resurrected coastal trading fleet protected by cabotage laws. There are virtually no coastal ships available to carry interstate cargoes therefore what little there is must be carried by overseas ships under licence.

Table 2 2000–01 Container Throughput (TEUs)

Port	Full imports	Empty import	All import	Full export	Empty export	All export	Total	% Ch 76-77	% Ch annual
Five Ports	1 390 854	261 515	1 652 369	1 212 659	381 023	1 593 682	3 246 051	397	16

Source BTRE estimates

Taking the above figures as a calculation base, 3,246,051 TEU's are handled in and out of Australian ports annually, or 270504 per month. At a very modest claim of 10% of the trade this represents 27,000 TEU's per month. At 3,000 TEU's per ship load there is work for about nine ships on a monthly turnaround basis. These figures are of course very approximate but are indicative of the potential for a viable Australian Merchant Marine trading overseas. Since the demise of the interstate cargo fleet in 1975 followed by the WA State Shipping Service in 1995 coastal shipping has been a nonexistent factor in the transportation scene within Australia. This has been handed to road transport and rail. The infrastructure to support each mode is expensive to maintain. (See Appendix two) It also puts the general population in a hostage situation to either private road transport or government rail transport with no third alternative to balance the cost of operating and using two modes. Furthermore there are environmental factors from diesel exhaust emissions, which are detrimental to personal health and greenhouse effect on climate. These do not happen with the operation of ships.

I have already stated a case for a resurgent mercantile marine trading overseas. To have a viable overseas sea freight service it is logical to have an equally viable coastal service. This all hinges on the fact that most of what was called "general cargo" is now packed in containers. Some homogeneous cargoes can also be shipped in container form – "tanktainers" and the like. Containers can be centralised on major ports by sea from minor ports for export; equally the reverse applies.

Where are the ships and crews to come from? Take the latter first. Technology has enabled ships to operate with minimal crews of eleven persons. This includes engineers and cook/stewards. There can be a further reduction made to seven persons three times two person watch keepers maintaining the traditional fours hours on and eight hours off duty the seventh man to be a backup watch-keeper. All cleaning and ship maintenance to be carried out by shore based crews. Tying up crews to board with the Harbour Pilot on arrival. All meals to be prepacked in frozen form, adequate recreational and crew communication facilities to be part of the ship's equipment. Engines to be monitored by computer and satellite sensors. Backup facilities for all communication equipment to be set at safe plus levels.

Ships can be tailor built with firm trading routes and ports guaranteed. Either taking up the trade waits for the ships to be ready or ships can be engaged on bare-boat charters but this would mean expenditure on making them suitable for the above-mentioned manning scales. Better to wait for the ships to be built.

The age-old question in shipping arises "Who pays?"

There is a fixed trade, guaranteed cargoes, freight rates fixed by inter-national FTA legislation. There are little of the risks involved in traditional ship owning, which can be covered by the normal ship insurance schemes. Therefore a government agency, bank or entrepreneur Australian shipowner should find it within their ability to bankroll the purchase or charter of a ship tailored for the trade. There is a tradition among Greek shipowners and seafarers that a ship is owned and operated by the Captain and often his Family members as crew. This is a tradition, which could apply in these circumstances.

The last but not inconsiderable factor in this proposal is the attitude of the maritime unions. It has long been my firmly held opinion formed from many years spent at the sharp end of industrial relations on Australian ships and the Australian waterfront that disputes can be resolved by reasonable dialogue. The unions involved are the MUA who would see work coming to their members as tie up gangs and ship maintenance workers. The Cooks and Sewards would be employed in food preparation and packing, also cleaning accommodation while the ship is in port. Marine Engineers & Electricians would carry out planned maintenance on main engines and auxiliary engines. All these would be spared the onus of having to go to sae while still carrying out their traditional roles.

The shipboard watch keepers' duty is to get the ship from port to port, which is what they are, trained to do.

I may have stayed some way from the import of the Productivity Commission brief to find ways to limit the effect of Conference Liners on the business of transporting Australian exports and imports. However, I have shown a way in which encouraging a strong Australian Merchant Marine can do this.

Dr Tony Fletcher Master Mariner PhD
9 September 2004

APPENDIX ONE

Forecasting Australia's international container trade
Johnson Amoako Bureau of Transport and Regional Economics,

Abstract

A substantial part of Australia's trade is currently carried in containers. The proportion of goods traded internationally in containers is expected to increase, as traditional bulk cargoes such as coal, grain and salt are increasingly being shipped in containers. Container trade is thus of vital importance to liner shipping and waterfront activities. The quantity of containers discharged and loaded at a port drives port infrastructure investment, as port authorities seek to improve efficiency by means of faster vessel turnaround times. This paper provides forecasts of future numbers of containers traded by using two different methods: dynamic econometric modelling and multivariate autoregressive modelling. The two methods are applied to two sets of data obtained from different sources. Most empirical studies focus on trade volumes in mass tonnes. Where these studies focus on actual containers, they often include double-handled containers. This paper, however, focuses on actual container quantities, and in so doing is able to model the impact of the increasing use of 40-foot containers. Although trade volumes may be rising, the increasing use of larger containers could actually cause a decline in the total number of containers used. This issue is of importance to port planners, as it may mean they need to make different kinds of investments.

Johnson Amoako Bureau of Transport and Regional Economics Tel 02 6274 7127 e-mail johnson.amoako@dotars.gov.au Introduction The purpose of this paper is to provide a broad overview of container trade in Australia and to identify future trends in the trade. The analysis is broad in the sense that it is carried out at the national level

rather than by port. The paper provides aggregate forecasts of future levels of container quantities by using two different methods: dynamic econometric modelling and multivariate autoregressive modelling. It also considers the likely impact of rapid growth in the use of 40-foot containers.

This paper focuses on actual container quantities (boxes) rather than mass tonnes or twenty-foot equivalent units (TEUs). It uses data that exclude double handling, as figures that include double handling or trans-shipment may invalidate growth forecasts. This approach allows for the separate modelling of the impact of the increasing use of 40-foot containers. Although trade volumes may be rising, the increasing use of larger containers could actually cause a decline in the total number of containers used. This issue is of importance to port planners, as it may mean they need to make different kinds of investments.

Container trade is of vital importance to liner shipping and container port development. It drives over fifty per cent by value (see table 3) of Australia's seaborne trade and therefore is a key player in the national economy. The proportion of goods traded internationally in containers is expected to increase, as traditional bulk cargoes such as coal, grain and salt are increasingly being shipped in containers.

Table 1 1976–77 International Container Throughput (TEUs)

Port	Full import	Empty import	All import	Full export	Empty export	All export	Total
Melbourne	144 243	5 699	149 942	126 519	27 425	153 944	303 886
Sydney	138 493	2 519	141 012	66 267	45 127	111 394	252 406
Brisbane	18 582	2 791	21 373	27 939	63 22	34 261	55 634
Adelaide	3 312	29	3 341	36 48	174	3 822	71 63
Fremantle	11 650	1 246	12 896	16 484	5 250	21 734	34 630
Five Ports	316 280	12 284	328 564	240 857	84 298	325 155	653 719

Source BTE (1982)

The levels of growth in container trade experienced by these five ports have been in double digits and are unlikely to be repeated in the next decade as shown by the forecast contained in this paper, even though the volume of trade is expected to grow rather than plateau.

Table 2 2000–01 Container Throughput (TEUs)

Port	Full import	Empty import	All Import	Full export	Empty export	All Export	Total	% ch 76-77	% ch annual
Melbourne	571 177	98 394	669 571	523 519	123 575	647 094	1 316 665	333	13
Sydney	491 689	19 905	511 594	306 099	171 274	477 373	988 967	292	12
Brisbane	153 486	74 575	228 061	194 173	30 805	224 978	453 039	714	29
Adelaide	38 008	21 059	59 067	63 294	10 875	74 169	133 236	1 760	70
Fremantle	136 494	47 582	184 076	125 574	44 494	170 068	354 144	923	37
Five Ports	1 390 854	261 515	1 652 369	1 212 659	381 023	1 593 682	3 246 051	397	16

Source BTRE estimates

In future, growth in container trade is expected to be driven largely by the containerisation of traditionally non-containerised bulk cargo, such as grain and coal. If trade liberalisation impacted on the current centralised grain marketing arrangements, many small and niche markets could be better supplied by the use of containers.

Melbourne, Sydney and Brisbane have consistently had greater shares of container trade than other ports. Melbourne exchanged the largest number of TEUs (1 316 665 or 41 per cent) in 2000–01, followed by Sydney (988 967 or 30 per cent). Their relative shares are set to increase even further, given the upward trend in vessel sizes. Larger vessels cannot call at all ports. Many ports have limited infrastructure and physical constraints, such as insufficient depth, which preclude them from servicing larger vessels. The scale of the investment required to enable them to do so would in most cases be prohibitive. Containers that are presently discharged at ports by relatively small ships will, in future, be discharged at ports that can handle them. Crisp (2000) reported that the largest vessel deployed in the Australian trade had a capacity of 3 450 TEU. This is set to increase to 4 200 TEU, as P&O Nedlloyd and its partner Contship Containers have placed orders for vessels of this size to be deployed in 2002, (the first of such vessel was deployed in July 2002). It is thus clear that in the medium to long term, as more large vessels are deployed in Australian trade, more port calls will be dropped. However, the penetration of larger vessels into the Australian trade is expected to be slow because the market is so thin.
There are container ships presently in use around the world with a capacity of 7 060 TEUs. Haralamdides et al (2000) outlined some of the characteristics that ports need to possess in order to receive such vessels. These include: sufficient channel depth, better proximity to markets, established processing facilities with sufficient storage and processing, modern cargo handling equipment, large breakwaters, reinforced piers and enough space for future expansion. Baker (1996) believes that the Australian trade does not warrant ships of this size because trade is too thin, at least in the short to medium term. According to Baker, if 6 000 TEU or larger ships entered the Australian trade, there would have to be offsetting changes to balance capacity and ensure cost-efficient slot utilisation, such as lower frequency port calls, which would not be beneficial to Australian trade.

Developments in vessel sizes highlight the need for trade analysis that focuses on actual imports and export volumes excluding trans-shipment, because these figures truly represent the size of the trade task, even though trans-shipment is important for efficient port management.

Another development that is set to enhance container trade is the increasing adoption of electronic-commerce technology. It is clear that greater efficiencies can be achieved by the adoption of e-commerce on a wider scale. Communication and administrative costs could be reduced significantly, particularly if the technology provides the customer with access, information and schedules to manage booking, financial transactions, and container tracking. In the case of container tracking, this may include the ability to divert containers in transit. These technological advances, if adopted, could translate into potential cost and price reductions. Trade that until now has been expensive to containerise could then become attractive because of lower prices.

Container trade is thus expected to continue to be an important part of Australian export and import trade. Table 3 shows the relative importance of containerised trade in comparison with bulk commodities.

Table 3 1999–2001 Relative Shares Of Liner And Bulk Trade

	Liner		Non Liner		ALL		% Liner by	
Year	Kilotonnes	$ billion	Kilotonnes	$ billion	Kilotonnes	$ billion	Value	Volume
1999	34 001	86	462 098	55	496 100	141	61	7
2000	32 125	93	508 775	79	540 900	172	54	6
2001	38 144	111	515 500	75	553 644	185	59	7

Source BTRE estimates

Empty containers

Australia's trade is affected by the movement of empty containers. A relatively high proportion of Australia's exports require shipping in refrigerated containers largely for meat and dairy products. Imports are largely manufactured products. As a result, it is necessary to import large numbers of empty refrigerated containers into Australia, as many of Australia's imports cannot be carried in refrigerated containers. Empty dry containers are carried from Australia for subsequent use in other trades (Productivity Commission 1999). The cost of moving empty containers has been reduced by improvements in the logistics of empty container movements, and further reductions are likely to be achieved with the introduction of collapsible twenty-foot shipping containers. The collapsible containers will allow shipping lines to fit three collapsible twenty-foot containers into each standard container slot (Flower 2001).
aggregated to show annual figures.

Figure 2 Imports, Actual and Econometric Model Predictions (Tonnes)
Source ABS International Cargo Statistics and BTRE estimates

Figure 3 Export and Import of Containers, Actual and ARIMA Model Predictions
Source DOTARS unpublished statistics and BTRE estimates Derivation of container quantities As raised elsewhere in this paper, the econometric modelling generated cargo forecasts in mass tonnes. However, the focus of this paper is not so much on cargo throughput per se, but rather on the number of containers, and separating double-handled containers from actual imports and exports. The number of containers handled and ship sizes are the prime determinants of port infrastructure investment. The econometric modelling forecasts in mass tonnes have been converted to numbers of containers, both fully loaded and empty, to assist ports to assess their future needs. Limitations on the length of this paper prevent a full discussion of the methods used for the conversion. Readers may refer to a forthcoming BTRE Working Paper 50 on container forecasting.

Some may question the need to separate trans-shipment containers from the total number of containers, since what drives investments in ports is the volume of containers passing through them. While generally this is the case, it is also important to determine the future volume of actual expected container imports and exports, that is,

excluding double handling and local traffic. For example, the federal government's stevedoring levy scheme applies levies to import and export containers excluding trans-shipment containers. With the expected increase in the use of larger ships, it is inevitable that the proportion of trans-shipment containers will increase. At the extreme, forecasts that do not separate out trans-shipment containers could indicate high growth rates when all that is being measured is increased double handling. This may not be the most important issue for individual ports, but double handling is an important policy issue. It is also necessary to project the growth in the use of forty-foot containers. Increasing mass tonne imports and exports may not necessarily translate into increasing number of containers, particularly if larger containers are used. If the increasing use of larger containers does affect volumes substantially, then it may also affect the direction of port infrastructure investment, and those policy instruments that are based on containers.

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APPENDIX TWO

Main Features 01 Apr 2000 to 31 Mar 2001 (Reissue)

9220.0 Freight Movements, Australia, SummaryEMBARGO: 11:30 AM (CANBERRA TIME) 06/09/2002

INTRODUCTION

Freight is moved in Australia across vast distances, because of the size of the country and the disperse locations of its agricultural, mining, production and population centres.

The Freight Movements Survey was designed to provide statistics about the size and characteristics of the transport task, including freight flows between geographic areas. This statistical information will assist in the development of transport policies and the efficient allocation of related resources. FREIGHT MOVEMENTS Tonne-kilometres is one key measure that can be used to capture the freight transport task, representing mass moved over distance. The calculation of tonne-kilometres is detailed in the Glossary. In the 12 months ended 31 March 2001, the transport network in Australia, comprising the modes of road (articulated vehicles only), rail, sea and air accounted for an estimated 320,108 million tonne-kilometres and handled 1,171 million tonnes of freight. Mode of transport The road, rail and sea networks shared similar proportions of total tonne-kilometres travelled, with rail accounting for the highest proportion at 42% (134,108 million), followed by sea (30%) and road (28%) (graph S1). By contrast, air accounted for less than 1% of the freight task. When combined, freight moved by road and rail accounted for 96% of the total tonnage moved (614 and 509 million tonnes respectively). Due to the long average hauls for domestic shipping, sea freight accounted for a much higher proportion of total tonne-kilometres travelled than for total tonnage moved. Method of transport Methods by which freight was carried were classified as solid bulk, liquid bulk, containerised and other. Refer to the Glossary for more detail. Almost two thirds (63%) of the total tonne-kilometres travelled in Australia (201,591 million) was classified as solid bulk freight, with a further 9% (27,931 million) classified as liquid bulk freight. Of the remainder, 8% was classified as containerised and 20% as other (graph S2). Similarly, of the total tonnes moved in Australia, the most common form of freight was solid bulk (68% of total tonnes). Solid bulk constituted 82% of the total tonne-kilometres (109,309 million) travelled by rail freight and 76% of the total tonne-kilometres travelled by sea freight. In contrast, 62% of all tonne-kilometres travelled on road, and all freight on the air network was reported as being moved in ways other than in bulk or in containerised form. STATE/TERRITORY OF ORIGIN Of the total tonne-kilometres travelled in Australia, 33% (105,446 million) originated in Western Australia (WA) (graph S3). Factors contributing to this high percentage were movements of heavy commodities, such as iron ore from WA mine sites, and long trip distances. Freight originating in Queensland (Qld) accounted for 29% of the total tonne-kilometres travelled (93,416 million). This was due mainly to large shipments of commodities, such as coal and livestock, over long distances from the central and western areas of the state. More than three quarters (79%) of the total tonnes moved originated from Qld, WA and New South Wales (NSW) combined. Whilst there was a reasonably even distribution of tonnes moved from these three states, tonne-kilometres travelled varied, with freight originating from NSW representing only 17% (52,943 million) of the total tonne-kilometres travelled. The large number of short trips made in NSW accounted for the lower tonne-kilometres travelled in that state. Mode of transport

Freight originating in NSW accounted for 30% of the total tonne-kilometres travelled by road (26,440 million) (graph S4). Rail and sea freight originating in WA represented 45% and 35%, respectively, of the total tonne-kilometres travelled by those modes. For air, freight originating in NSW and Victoria (Vic.) combined, accounted for over half of all tonne-kilometres travelled on the air network. Intrastate movements Of the total tonne-kilometres travelled, 59% (187,978 million) were for movements where the origin and the destination of the freight was within the same state/territory (i.e. intrastate). For all states and territories except NSW, Qld and WA, less than one third of the tonne-kilometres travelled were for intrastate movements (graph S5). In contrast to total tonne-kilometres travelled, 92% of total tonnes carried were intrastate. In all states and territories, except the Australian Capital Territory (ACT), at least 79% of movements were within the same state or territory. Due principally to its location within NSW and its size, only 50% of ACT movements were intrastate. A high proportion (86%) of tonne-kilometres travelled on the rail network were for the movement of freight intrastate. Nearly all (98%) of the total tonnage of rail freight moved was for intrastate movements (graph S6). The movement of bulk commodities (e.g. coal) from the location of the resources to seaports or processing centres was a factor contributing to the high percentages of intrastate rail freight movements. Similar to rail, a high percentage (92%) of the total tonnes moved by road was within the same state/territory. However, in contrast to rail, only 52% of the total tonne-kilometres travelled by road was for freight that was moved intrastate. A minority of freight movements by sea were intrastate in nature (28% of the total tonne-kilometres travelled and 36% of the total tonnes carried). Only 6% of the total tonne-kilometres travelled and 10% of the total tonnes carried on the air network were for the movement of freight intrastate. Interstate movements Of the total tonne-kilometres travelled, 132,129 million (41%) were for interstate freight movements. For each state and territory (except NSW, Qld and WA), more than two thirds of the total tonne-kilometres travelled were for freight moving interstate (graph S7). For each state and territory of origin (except the ACT), less than one quarter of total tonnes carried were for interstate freight movements. Due to the nature of sea and air transport, the percentages of interstate tonne-kilometres travelled by air (94%) and sea (72%) were much higher than those travelled by rail and road (graph S8). STATE/TERRITORY OF DESTINATION Of the total tonne-kilometres travelled, more than three quarters (80%) were for freight destined for Qld, NSW or WA. Likewise, the same three states were the destination for 79% of the total tonnes moved. The high percentages of the total tonne-kilometres travelled by road in the eastern states reflected the heavy use of the road network on Australia's eastern seaboard. Freight destined for NSW accounted for 29% of the total tonne-kilometres by road, Qld 22% and Vic. 21% (graph S9). Nearly half (47%) of all tonne-kilometres travelled on the rail freight network was for freight destined for WA. Also, rail freight destined for WA accounted for more than three quarters (79%) of the total tonne-kilometres travelled by all modes, for that state. Percentages of the total tonne-kilometres travelled over the sea network were high for freight transported to ports located within NSW (38%, or 36,912 million tonne-kilometres) and Qld (33%). Sea freight destined for Tasmania (Tas.) accounted for over three quarters (78%) of all tonne-kilometres for freight moved to that state. As a destination for freight, WA accounted for 25% of the total tonne-kilometres travelled by air. Due to the long trip distances involved, however, WA accounted for only 11% of the total tonnes carried by air. The highest percentages of total tonnes carried by air were for freight destined for NSW and Qld (24% each), and Vic. (22%).