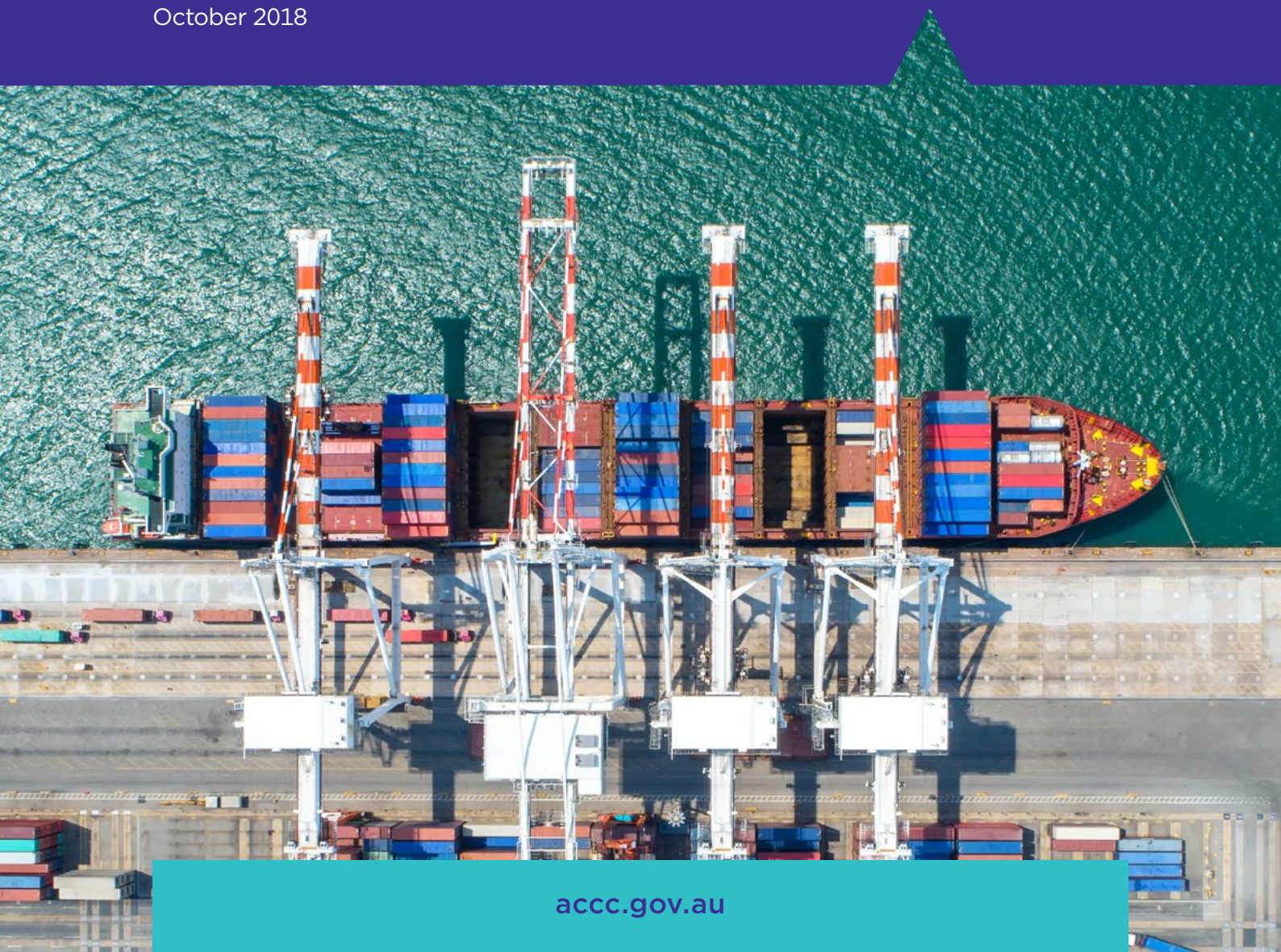




Container stevedoring monitoring report

2017–18

October 2018



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Glossary and abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
Berth	A ship's allotted space in a stevedore's container terminal
BITRE	Bureau of Infrastructure, Transport and Regional Economics
Cargo owner	Importers and exporters
CCA	<i>Competition and Consumer Act 2010</i>
CPI	Consumer Price Index
Crane intensity	Crane intensity is the total number of allocated crane hours divided by the elapsed time from labour first boarding the ship to labour last leaving the ship. Crane intensity is an input to calculating 'ship rate'.
Crane rate	Crane rate is an indicator of capital productivity and reflects the intensity to which quayside cranes are worked. It is measured by dividing the total number of containers (TEUs) handled by the crane by the 'elapsed crane time'.
DP World	DP World Australia Ltd operates container terminals in Brisbane, Fremantle, Sydney and Melbourne.
EBITA	Earnings before interest, taxation, and amortisation
Elapsed crane time	Elapsed crane time is the crane time allocated by the stevedores. It is computed as the total allocated crane hours less operational and non-operational delays. Elapsed crane time is an input to calculating the 'crane rate'.
Elapsed labour rate	Elapsed labour rate is an indicator of labour productivity. The elapsed labour rate is computed as the 'number of containers handled' divided by the 'elapsed labour time'.
Elapsed labour time	Elapsed labour time is the elapsed time between labour first boarding the ship and labour last leaving the ship, less any time the labour has not worked, including non-operational delays. Elapsed labour time is an input to calculating 'elapsed labour rate'.
Empty container park	Companies whose business is to store empty containers. They may also provide ancillary services such as container cleaning, repairs and repositioning.
Flinders Adelaide	Flinders Adelaide Container Terminal Pty Ltd, fully-owned by the South Australian port operator, is the sole container stevedore at Port Adelaide.
Hutchison	Hutchison Ports Australia, a member of Hutchison Port Holdings Group. Hutchison operates terminals in Brisbane and Sydney.
Infrastructure charge	Charges imposed by stevedores on land transport operators when collecting or delivering laden (i.e. not empty) containers
Land transport operators	Truck or rail operators under contract with cargo owners to transport container goods from the stevedores' container terminals to the cargo owner and vice versa
Landside productivity	Indicators measuring the efficiency of landside operators in handling the freight task
Monitored port	Ports which under Part VIIA of the CCA are subject to price, cost and profit monitoring by the ACCC; covers the international container ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne, and Sydney.
Operating profit	Measured by earnings (revenue less cost) before interest, taxation and amortisation
Patrick	Patrick Terminals operates container terminals in Brisbane, Fremantle, Sydney and Melbourne.
Profit margins	In this report, this is the ratio of EBITA and total revenue.
Quayside productivity	Indicators measuring the efficiency of stevedores in transferring containers on and off ships
Real terms	A value expressed in the money of a particular base time period (e.g. 2012-13 dollars). Values in real terms remove the impact of inflation and provide a better comparison of values over time.
Ship rate	The ship rate is an indicator of labour and capital productivity while the ship is being serviced by stevedores. It is calculated by multiplying the net crane rate by crane intensity.

Shipping lines	Under contract to cargo owners, these are companies that transport containerised cargo using specialist ships from one port to another. Shipping lines are the primary customers of stevedores.
Stevedores	Firms under contract with shipping lines and port authorities to operate specialist equipment that lift containerised cargo on and off ships in Australia's monitored container ports
Tangible assets	The physical infrastructure used by stevedores to provide container stevedoring services e.g. cranes, straddle carriers or automated stacking cranes
TEU	Twenty foot equivalent unit. TEU is the standard unit of measurement for shipping containers. One TEU is equivalent to one 20 foot shipping container. One 40 foot shipping container is equivalent to two TEUs.
VBS	Vehicle Booking System is used to manage the landside flow of containers in and out of Australia's major container ports
VICT	Victoria International Container Terminal Ltd, wholly owned by International Container Terminal Services Inc. VICT operates a container terminal in Melbourne.

Executive summary

Twenty years of annual ACCC monitoring of the stevedoring industry

The container stevedoring industry has changed significantly since the government directed the ACCC to commence monitoring twenty years ago.

The changes to the industry over this time have been largely positive. Productivity has increased significantly, with the net crane rate up by 45 per cent and the elapsed labour and net ship rates more than doubling. The combination of greater economies of scale and higher efficiency has enabled stevedores to substantially reduce their unit costs. This has flowed through to shipping lines with charges per lift falling substantially since 1998–99. New entrants have also significantly increased the competitive tension between stevedores leading to lower prices to shipping lines.

Despite these improvements, challenges remain for the industry. In recent years improvements in productivity have stagnated, infrastructure charges have added costs to the supply chain, and DP World and Patrick continue to account for the vast majority of container volumes.

Strong growth in container volumes have pushed up total revenues, although competition further reduced prices to shipping lines

Container stevedores reported exceptionally strong growth in container volumes in 2017–18. The total number of container lifts at monitored ports increased by 8.1 per cent to 5.1 million, while in TEU terms it increased by 11.6 per cent to 8.0 million. Melbourne, Fremantle and Sydney in particular recorded very strong growth.

Growing container volumes helped to grow total industry revenue by 6.8 per cent in 2017–18. This was despite stevedores reporting lower average quayside revenue per lift (a proxy for the average price paid by shipping lines). Quayside revenue per lift fell 8.5 per cent to \$195.6, driven by increased competition among stevedores for shipping line contracts, particularly at the three east coast ports which now each have three stevedores.

Quayside revenue per lift has fallen by more than 20 per cent in the five years since Hutchison entered the industry. In contrast, the average amount of landside and other revenue has increased by 37.7 per cent to \$63.3 per lift in the same period.

Profitability fell sharply in 2017–18

As a combined industry, stevedore profitability fell sharply in 2017–18. All stevedores reported a reduction in profits, with total profits across the industry declining from \$183 million in 2016–17 to \$60 million in 2017–18. Operating profit margin declined from 14.7 per cent to 4.5 per cent. This is measured as earnings before interest, taxation and amortisation (EBITA) as a percentage of revenue. Return on tangible assets fell from 7.2 per cent to 2.1 per cent in 2017–18.

Industry aggregate figures such as these mask very different performances between established stevedores and the new entrants. The aggregate figures in 2017–18 were also pulled down by the inclusion of VICT data for the first time. However, profitability was also impacted by both a reduction in tariffs charged to shipping lines and an increase in operating costs.

The industry reported much higher property costs due in part to significant increases in DP World's rental costs at the Port of Melbourne and the addition of VICT to the monitoring program. This continues a trend of increasing property costs over the past decade.

Infrastructure charges likely hurt cargo owners and transport operators

Infrastructure charges became a more significant feature of the industry in 2017–18 and continued to attract strong criticism from transport operators and cargo owners. These fees are charged by stevedores to trucks and trains for collecting or delivering laden containers at their terminals.

From 1 July 2018, an infrastructure charge has been applied by every stevedore at every monitored container terminal in Australia. The rapid escalation in these charges over the last two years has been led by DP World, with other stevedores generally being quick to follow. The increase in charges has been most notable in Melbourne, where DP World's charge will have increased from \$3.45 per container in April 2017 to \$85.30 from 1 January 2019.

The stevedores have put forward a number of factors justifying their moves to levy these charges. Most significant of these pressures is the impact of falling prices being charged to shipping lines as a result of both competition between stevedores and consolidation within the shipping line industry. Stevedores have also pointed to increases in operating costs such as rents, council rates and land taxes, as well as the need to invest in infrastructure such as that required to handle the increasing size of ships visiting Australian ports.

It is not unreasonable for stevedores to seek to recover some costs from landside transport operators. Like shipping lines, these operators directly benefit from investment in the container terminal facilities. However, the likely impact of these charges on supply chain costs, not just for the land transport operators, but also for importers and exporters who may ultimately be paying for the infrastructure charge through their land transport costs, is worthy of consideration by policy makers. Of relevance is the ability of the various parts of the supply chain to make alternative choices.

In the supply chain, the shipping line chooses the stevedore that they will use and land transport operators must go to the stevedore to which they are directed. Thus land transport operators have no ability to choose a stevedore that has lower infrastructure charges. Cargo owners have a choice of which shipping line and land transport operator to use but not the stevedore that the shipping line will use. The cargo owner therefore may also be limited in being able to move their business away from high infrastructure charges to the extent that these charges are passed on by the land transport operators.

The use of infrastructure charges means that stevedores can earn a growing proportion of their revenues in a market in which their market power is stronger relative to the more competitive market in which they provide services to shipping lines. Given this, there is an incentive for stevedores to increase infrastructure charges. Without constraint, they may be able to set the charges at levels greater than required to recover costs and earn an adequate rate of return. The outcome may be that land transport operators bear the additional costs if they cannot pass them on, or where they do, that importers and exporters will pay higher charges to ship their goods than otherwise. It may be only the shipping lines that benefit from the additional competition between stevedores at the east coast ports.

The ACCC notes the concern expressed by various industry participants and governments about the rise in infrastructure charges. However, the ACCC does not have the power to determine stevedores' charges. It has also previously considered that the stevedores' use of the charges did not represent a breach of the *Competition and Consumer Act 2010*. The use of the charges did not appear to substantially lessen competition in a market.

The economic regulation of stevedores and ports rests with state governments. While we are concerned with the potential impact of the infrastructure charges, the scope of the ACCC's stevedoring monitoring role does not provide a basis for conclusive findings on whether they should be regulated. This reflects the limited scope of the ACCC's monitoring role and the information available to it. We are also aware that the stevedores' profitability to date has continued to fall despite the increases to the infrastructure charges.

Whilst the ACCC will continue to monitor developments in infrastructure charges in future monitoring reports, the recent significant increases in infrastructure charges may require a more detailed examination by state governments and if warranted, a regulatory response. Such a review by state governments would be assisted by further information than that obtained by the ACCC under the stevedoring monitoring regime, such as whether cargo owners are benefitting (through lower 'terminal handling charges') from the reduction in quayside charges to shipping lines.

Performance against productivity measures was mixed

Quayside productivity of the stevedores was mixed in 2017-18. The ship rate, which measures the number of containers transferred to or from ships using the combined input of labour and cranes, increased by 2.3 per cent to 56.9 containers per hour.

The net crane rate is an indicator of capital productivity and measures the number of containers handled per crane hour while cranes are in operation. The net crane rate fell by 2.3 per cent to 28.5 containers per hour.

Labour productivity increased slightly in 2017-18. The elapsed labour rate increased by 1.3 per cent to 47 containers per hour.

Industrial relations remain an ongoing challenge for the industry. All five stevedores were impacted by industrial action during 2017-18. This included the blockade which closed the new VICT terminal in Melbourne for 19 days over November and December 2017. The blockade was deemed unlawful by the Supreme Court of Victoria.

Truck turnaround times improved slightly

Truck turnaround times are a measure of landside productivity and reflect the time that stevedores take to load or unload containers on trucks at their terminals. National truck turnaround times have improved over the past seven years, from 33.9 minutes in 2011-12 to a record low of 29.6 minutes in 2017-18. This figure improved by 0.2 minutes in the last year.

Average truck processing times improved by 3.9 minutes in Melbourne, but deteriorated by 1 minute in Sydney.

DP World and Flinders Adelaide committed to substantial investments in new infrastructure

Stevedores had very different approaches to investment in 2017-18. DP World began rolling out its extensive capital expenditure program worth \$256 million during the year. Most significantly, DP World procured nine new ship-to-shore cranes worth around \$14 million each. These cranes are a mixture of replacement and additional cranes for DP World's terminals, and will better enable it to handle larger ships that are increasingly being deployed on Australian trade lanes. DP World also invested significantly in yard equipment such as straddle carriers, rubber tyred gantry cranes, forklifts and reachstackers.

Flinders Adelaide committed to and commenced several large-scale projects that are also tailored towards enabling the terminal to service larger ships.

In contrast, other stevedores did not report significant investment levels during the year.

Container stevedoring monitoring report

2017-18



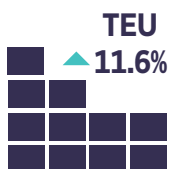
Industry changed significantly over 20 years. Productivity is much higher now, but there has been little improvement in recent years.



East coast quayside competition is stronger than ever with three operators. Quayside competition is reducing stevedoring prices to shipping lines.



Stevedores are using infrastructure charges on trucks and trains as a response to falling prices for shipping lines. The impact of the charges on transport operators and cargo owners is worthy of consideration by government.



Industry benefited from strong growth in demand for container stevedoring services. All ports recorded growth; Melbourne, Fremantle and Sydney recorded very strong growth.



Some stevedores investing heavily to accommodate increasingly larger shipping vessels.



Profits fell sharply due to lower stevedoring rates, higher costs (particularly property) and entry of a new stevedore.

Key industry results 2017-18

Revenues, costs and profits

Total revenue

\$1328 m

▲ 6.8%

Revenue per lift

\$258.9

▼ 1.2%

Cost per lift

\$247.2

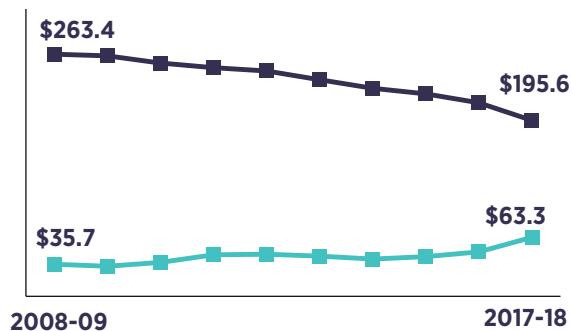
▲ 10.7%

Profit margin*

4.5%

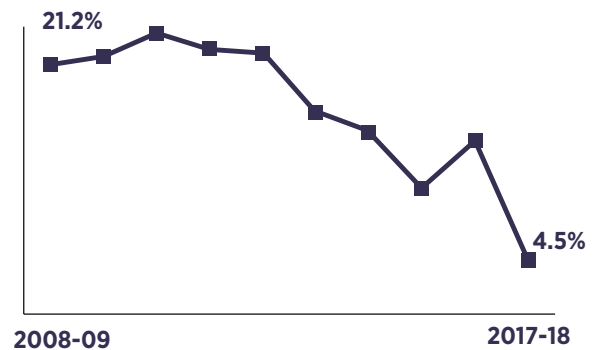
▼ 10.2 pp

Per lift revenue

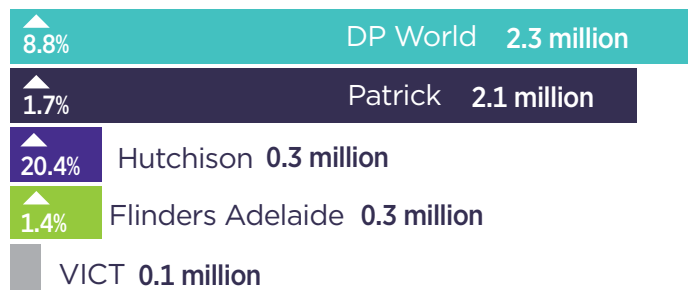


■ Quayside ■ Landside and other

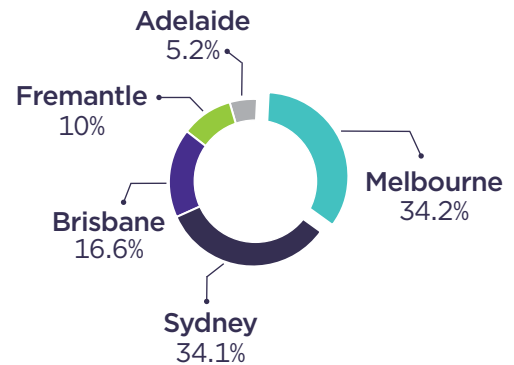
Profit margin*



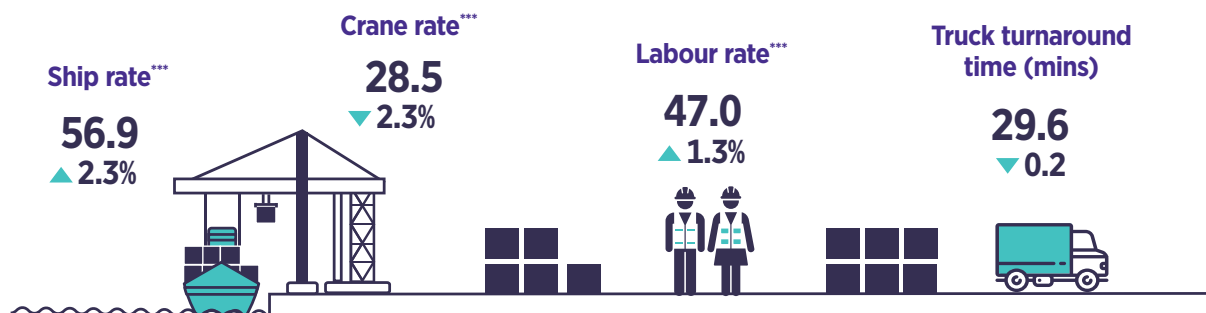
Lifts per stevedore**



TEU per port**



Container terminal productivity



* Earnings before interest, tax and amortisation (EBITA) as a percentage of total revenue

** Includes international container terminal volumes only

*** Containers per hour

1. Introduction

Many billions of dollars of goods are transported through Australian container ports every year on their journey to Australian households and workplaces. Imported goods are often key inputs for Australian businesses. In the other direction, Australian products set off on ships every day for export markets in places such as Asia, Europe and North America.

This means that the efficiency of the port supply chain has a direct bearing on the cost of imported goods in Australia and the competitiveness of our exports. Container stevedores, which facilitate the transfer of containers between ships and trucks and trains, play an important role in this supply chain.

This is the 20th container stevedoring monitoring report by the Australian Competition and Consumer Commission (ACCC). The ACCC is required by the Australian Government to monitor prices, costs and profits of container stevedores at international container ports in Adelaide, Brisbane, Burnie¹, Fremantle, Melbourne and Sydney. These reports provide information to governments and the community about the operating performance of the container stevedores, as well as the level of competition, investment and productivity in the industry.

We acknowledge the cooperation of the following organisations in the production of this report:

- container stevedores Patrick, DP World, Flinders Adelaide, Hutchison and VICT
- the Bureau of Infrastructure, Transport and Regional Economics (BITRE)
- the many industry associations, shipping lines, land transport operators, ports and cargo owners who met with us during consultations or otherwise provided information.

Three important terms that are regularly used throughout the report are:

- cargo owners — importers and exporters, also referred to as shippers
- quayside — activities directly related to the movement of containers on and off ships, and therefore the interaction between stevedores and shipping lines
- landside — activities related to the storing of containers at the terminal and the transfer of containers to and from truck and rail operators.

All prices and price movements in this report are in real terms unless otherwise specified.

1.1 Container stevedoring in Australia

Container stevedores are responsible for lifting containerised cargo on and off container ships at ports. They use ship-to-shore cranes for this purpose. Equipment such as straddle carriers, rubber-tired gantries, and automatic stacking cranes may be used to facilitate the transfer of containers from the quay to the yard stack and to land transport operators and vice versa.

Quayside services liner shipping companies

Container stevedores compete for contracts to supply container handling services to liner shipping companies. The contracts require stevedores to provide berthing facilities in accordance with a specified sailing schedule. The contracts also require the provision of sufficient cranes, labour and other equipment, and at times for the stevedore to agree to certain key productivity standards. Once a ship has berthed, stevedores provide services such as the discharging and loading of containers on ships. Typically, the length of stevedore contracts with shipping lines ranges from around two to five years.

There is increasing competition in the supply of quayside services among the container stevedores. This is due to the recent entry of new container stevedores Hutchison and VICT on the east coast of Australia as well as significant consolidation among liner shipping companies. However, while there is

¹ Burnie does not currently have an international container terminal, however it did have one that was monitored by the ACCC until its closure in 2011.

increasing competition between stevedores at Australia's major ports, there is marginal competition between stevedores and ports operating in different states. This is because large distances separating Australia's major ports mean that it is unlikely to be financially viable (due to additional land transport charges) for most cargo owners to use any container port other than the one which they are closest to.

Landside services to land transport operators

Cargo owners contract with land transport operators to deliver their containers to and from ports. Land transport of containers to and from Australia's ports is facilitated primarily by trucks on road, while a smaller share is handled by rail.

Each stevedore is the sole provider of landside access to its respective terminal. They provide services such as receiving and delivering containers, yard services, storage, and other ancillary services to land transport operators. Stevedores use platforms such as the Vehicle Booking System (VBS)² to allocate time slots for trucks to collect their cargo at the terminal. Rail operators are offered access via rail windows.

Stevedores have in place standard agreements with truck operators for access to their VBS. These agreements allow truck operators to access stevedore VBS platforms and book timeslots but they are unable to negotiate their own individual terms of access (including pricing).

The container freight supply chain

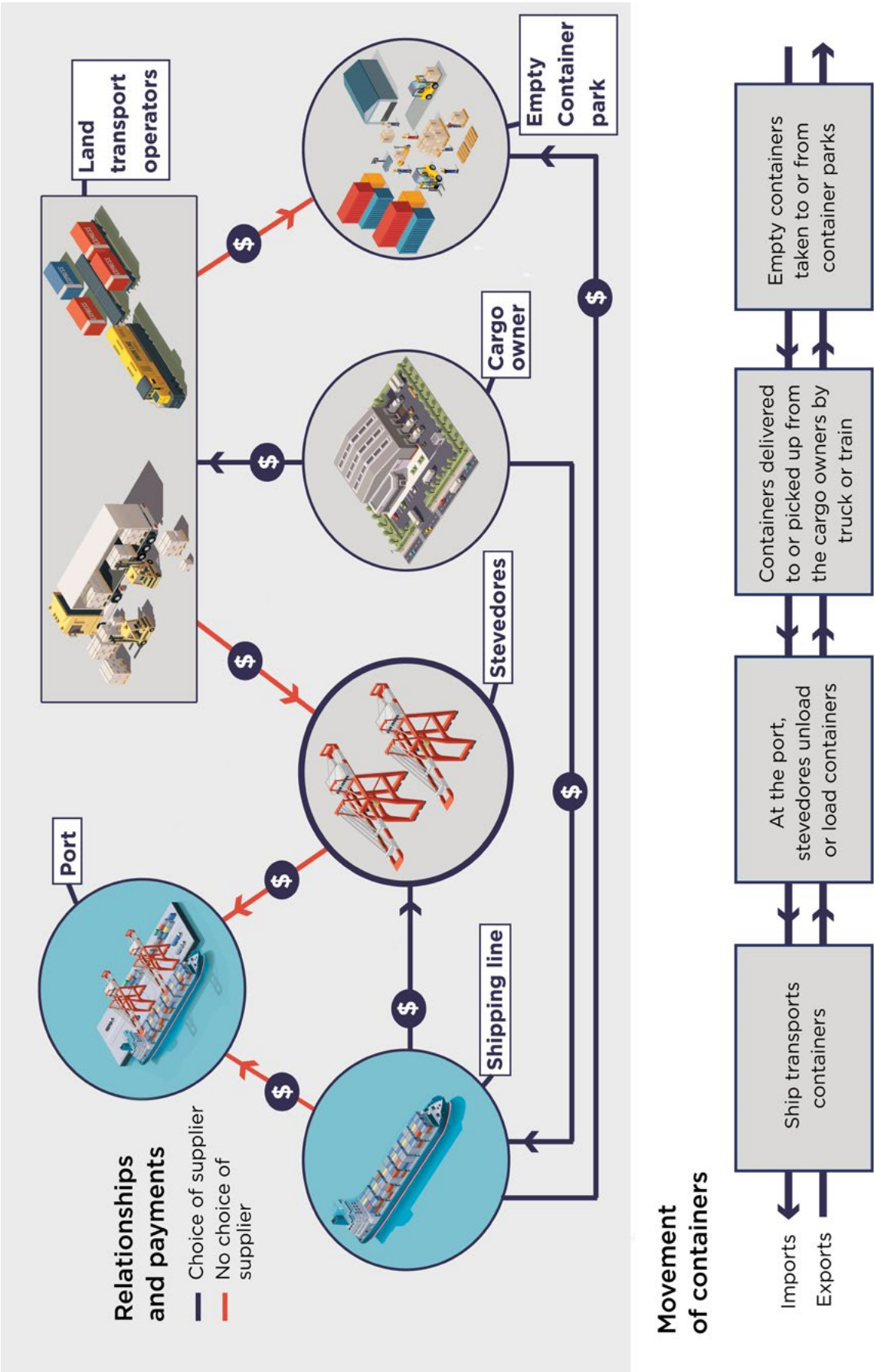
Container stevedores provide a crucial input in facilitating the transport of containerised freight from its origin to its destination. The stevedores are part of a broader freight supply chain with many participants, each of which can influence or be influenced by the performance of the stevedores. These include shipping lines, port authorities, cargo owners (importers and exporters), road and rail transport operators, related infrastructure operators such as intermodal terminals or empty container parks, as well as governments.

The containerised supply chain begins with a cargo owner selecting a shipping line to transport goods from the origin to the destination port. Shipping lines in turn transport the container by sea. Upon the ship's arrival at the port, stevedores load or unload the containers. The transport operator (either rail or trucking by road) is selected by the cargo owner and is responsible for picking up or delivering containers at terminals.

The main aspects of the container supply chain are illustrated in figure 1.1. The top half of the diagram shows the interaction between the many parties involved in the supply chain. Blue lines indicate that there is some degree of choice in the supplier of the service, while red lines indicate that the acquirer of the service does not have a choice. This lack of choice may be because there is only one supplier available (e.g. the port) or that the choice of supplier is made by another party along the supply chain. The bottom half of the diagram looks at the physical flow of containerised goods (whether imported or exported) along the supply chain.

² Hutchison employs a similar platform but calls it the 'Truck Appointment System'.

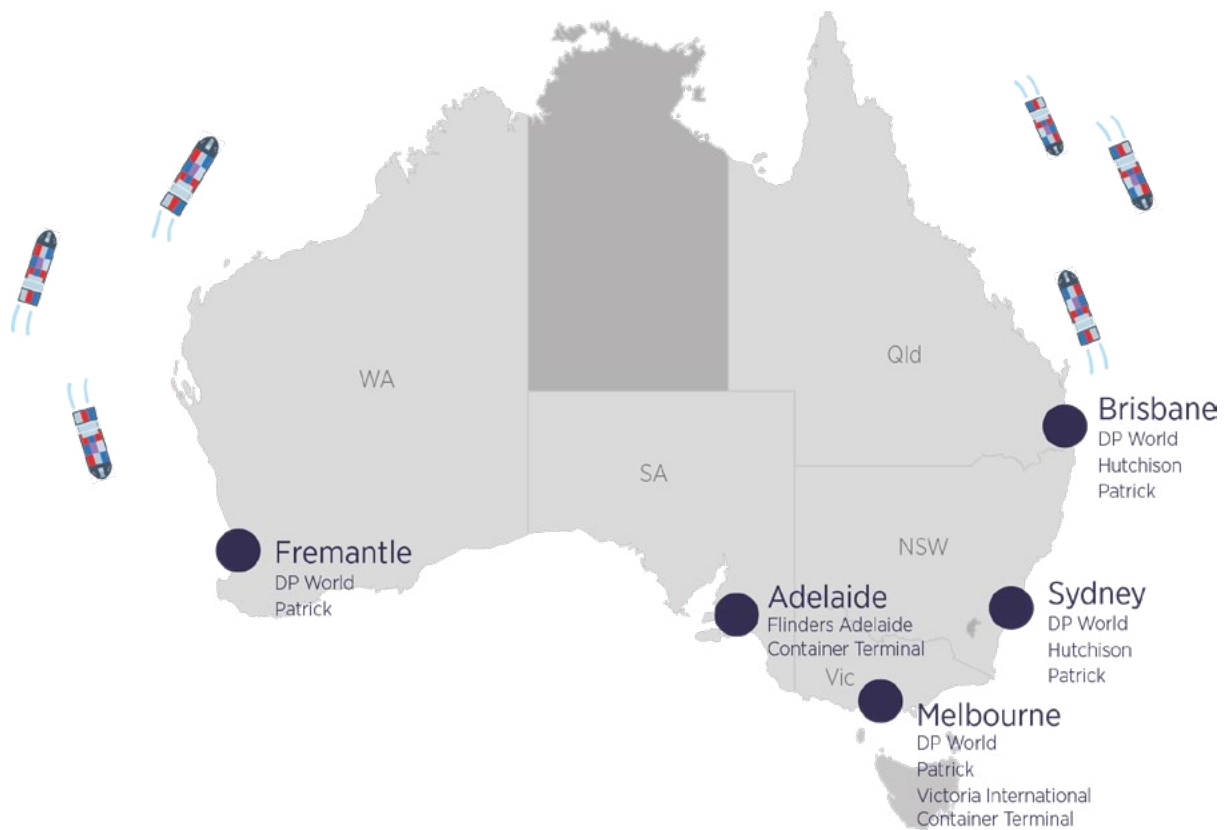
Figure 1.1: Containerised supply chain



The container stevedores

There are now five container stevedores operating in Australia that are subject to the ACCC's monitoring program. Figure 1.2 specifies the stevedores in operation at each of Australia's monitored container ports.

Figure 1.2: Container stevedores in Australia's monitored ports



1.2 The ACCC's container stevedoring monitoring program

Part VIIA of the *Competition and Consumer Act 2010* (CCA) provides for the Australian Government to direct the ACCC to monitor prices, costs and profits in a particular industry and report its findings to the relevant Minister. In fulfilling this role, the ACCC must have particular regard to the following matters:

- the need to maintain investment and employment, including the influence of profitability on investment and employment
- the need to discourage a person who is in a position to substantially influence a market for goods or services from taking advantage of that power in setting prices
- the need to discourage cost increases arising from increases in wages and changes in conditions of employment inconsistent with principles established by relevant industrial tribunals.

In 1998, there was a protracted labour dispute between Patrick Terminals and the Maritime Union of Australia (MUA). To monitor the prices, costs and profits and provide a report to the Minister within a specified period after every financial year.³

³ On 20 January 1999, the Federal Treasurer directed the ACCC under s.27A of the *Prices Surveillance Act 1983* (PSA) to monitor prices, costs and profits of container terminal operators companies at the ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney. The PSA has since been repealed and the price surveillance provisions are now contained in Part VIIA of the CCA. The direction under the former s. 27A of the PSA is now deemed a direction under s. 95ZE of the CCA.

Given the environment at the time the direction was made, the initial purpose of the monitoring regime was to assess the impact of the reforms and to monitor the potential for wage-driven cost increases. Since then, the ACCC's reports have focussed more on the degree of competition between the stevedores, investment, and developments in productivity. The program also explores policy issues affecting the broader supply chain.

Relevant sections of Part VIIA are reproduced in Appendix B. The Ministerial direction setting out the ACCC's price monitoring framework is included in Appendix C.

Usefulness and limitations of the price monitoring framework

The ACCC does not consider a price monitoring framework without a credible threat of regulation to be an effective constraint on market power. However, in the case of container stevedoring, monitoring alone can be useful to:

- inform governments' freight policy and planning
- facilitate better decision making by industry participants by disseminating information that would otherwise be difficult or costly to collect
- scrutinise industry developments that may be a source of widespread concern or uncertainty.

1.3 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2 provides an overview of developments and policy issues in the Australian container stevedoring industry.
- Chapter 3 examines changes in quayside and landside productivity in container stevedoring.
- Chapter 4 analyses the financial performance of the container stevedoring industry as a whole.
- Chapter 5 provides a comparative analysis of the performance of the five individual container stevedores subject to the monitoring program.
- Appendix A outlines more information about the ACCC's monitoring methodology for container stevedoring.
- Appendix B reproduces relevant sections of Part VIIA of the CCA.
- Appendix C outlines the Ministerial direction for the ACCC's container stevedoring monitoring role.

2. Industry overview and broader supply chain development

This chapter considers the structure of the Australian container stevedoring industry and explores the state of competition between terminal operators. It also discusses significant developments in the stevedoring industry and broader freight supply chain.

Key issues explored include:

- changes in the industry over the 20 years of ACCC's monitoring
- the current state of competition in the container stevedoring industry
- the reasons behind the stevedores' infrastructure charges and their impact on other participants in the supply chain
- investments made by stevedores in 2017-18
- developments in liner shipping
- other broad developments and reform initiatives that may affect the container stevedoring industry in the future.

2.1 Twenty years of monitoring the container stevedoring industry

The Australian container stevedoring industry has changed significantly over the 20 years since the ACCC began its monitoring. These changes have been positive, with higher productivity leading to much lower charges. However, industrial relations remain an ongoing challenge for the industry.

The Australian container stevedoring industry is very different from 20 years ago

This is the 20th monitoring report that the ACCC has released on the stevedoring industry. The government directed the ACCC to commence monitoring as part of a set of waterfront industry reforms.

In 1998, the Productivity Commission carried out a productivity benchmarking study of the waterfront.⁴ Compared with other countries, the study found that Australian container stevedoring charges were higher, ship loading and unloading were slower, and services were less reliable. Labour and capital productivity was also found to be lower than at overseas terminals.

The benchmarking study helped inform a waterfront reform package based on specified performance objectives. These objectives included ending certain staffing and restrictive work practices, raising the crane rate, improving reliability and reducing industrial disputes. The objectives also included reducing the amount of workplace injuries, assisting to reduce costs in the supply chain, making effective use of technology, and promoting training programs.

The stevedoring industry has changed significantly over the last 20 years (see table 2.1). The industry now handles 8.0 million TEU per year, five times the volume in 1998-99.

Productivity has increased significantly in terms of both the net crane rate and the elapsed labour rate. The combination of greater economies of scale and higher efficiency has also led to significant falls in

⁴ Productivity Commission, *International benchmarking of the waterfront*, 1998.

both unit costs and unit revenues. Profitability has also fallen, whether it is measured by EBITA profit margin or return on assets.

Table 2.1: Changes in the stevedoring industry between 1998–99 and 2017–18

	1998–99	2017–18	Change
Container volumes (TEU)	1.6 million	8.0 million	▲ 400%
Stevedores at monitored ports	3	5	▲ 2
Net crane rate (containers per hour)	19.6	28.5	▲ 45.4%
Elapsed labour rate (containers per hour)	22.4	47.0	▲ 109.8%
Net ship rate (containers per hour)	27.1	56.9	▲ 110%
Revenues per TEU (index)	100	55	▼ 45%
Costs per TEU (index)	100	60	▼ 40%
Operating profit margin (EBITA/revenue)	12.1%	4.5%	▼ 7.6pp
Return on assets (EBITA/average tangible assets)	10.6%	2.1%	▼ 8.5pp

This period has seen the number of stevedores operating across the monitored international container ports increase from three to five. Significantly, competition has increased at the three largest ports in Melbourne, Sydney and Brisbane. All three ports now have three competitors following market entry in recent years. Australian stevedores have also sought to increase the level of automation at their terminals. VICT's Melbourne terminal has extensive automation, while other terminals around the country are also partially automated.

Stevedores and other stakeholders report that industrial relations issues continue to pose a challenge

Despite the improvements that have been made in relation to productivity, the industrial relations climate still poses a challenge for Australian stevedores. This may be having an impact on the ability of Australia's ports to be internationally competitive.

The ACCC meets with stevedores and other stakeholders each year as part of its monitoring role. Despite recognising the important role that unions play in representing workers on the waterfront, stakeholders consider that union influence acts as a significant barrier to further efficiency gains. This influence over workers' pay and work practices can impact on a stevedore's costs, the amount of time for a ship to be unloaded and loaded at port, and the reliability of the service offered by a stevedore.

Stakeholders consider that industrial relations are a key reason why Australian ports do not appear to be as productive as those in other countries such as New Zealand. There is also a general concern among stakeholders that the recent merger between the MUA and the Construction, Forestry, Mining and Energy Union will lead to more protracted waterfront disputes.

All five container stevedores were impacted by industrial action during 2017–18. Some of these disputes have run for multiple days and involved terminals ceasing operations for the duration of the dispute.

One of the most prominent issues that occurred during 2017–18 was a picket that closed the VICT terminal at Webb Dock in Melbourne. It related to a disagreement over whether a particular worker had the appropriate accreditation to work at the site. The picket lasted for 19 days in November and December 2017. In an injunction against individuals involved, the Supreme Court of Victoria found that the blockade was unlawful. However, the blockade continued after the injunction was handed down. VICT is pursuing the MUA and the CFMEU with VICT arguing that company damages could be up to \$100 million due to 'loss of business growth'.⁵

⁵ Australian Financial Review, *MUA facing lawsuit of '\$100m picket' at Port of Melbourne*, 2018.

2.2 Strongest growth in container volumes in over a decade

Container stevedores reported exceptionally strong growth in container volumes in 2017–18. The total number of container lifts⁶ at monitored Australian ports increased from around 4.7 million to 5.1 million, while in TEU terms it increased from around 7.2 million to 8.0 million.

The increase in container lifts of 8.1 per cent was the highest recorded in the past decade, with the next highest being 5.7 per cent in 2010–11. On a TEU basis the 11.6 per cent increase was also the highest in the past decade, with 2010–11 being the next highest at 6.1 per cent. Uplift in container volumes was mainly due to strong growth in domestic demand for imports fuelled by population and economic growth as well as growth in refrigerated and empty container exports.

TEUs grew at all of Australia's monitored ports in 2017–18. Melbourne experienced the largest growth (14.2 per cent), followed by Fremantle (12.2 per cent), Sydney (11.3 per cent), Brisbane (9.6 per cent) and Adelaide (2.9 per cent).

In 2017–18, Melbourne was marginally Australia's largest international container stevedoring port after it handled 34.2 per cent of total international container trade. Port Botany followed closely with 34.1 per cent. Trends in container stevedoring throughput are explored in further detail in section 3.1.

2.3 Small gains by new entrants but their competitive position is largely unchanged

As for any other sector of the economy, the pressure for stevedores to reduce prices, identify productivity improvements and respond to the needs of their customers will depend to a large degree on the level of competition they face. If a business fails to do these things in a competitive market, they will risk losing customers to their rivals.

The capital intensive nature of stevedoring and its high economies of scale means that there cannot be many suppliers at any particular city. There is only one container port in Melbourne, Sydney, Brisbane, Fremantle and Adelaide, and there is limited berth space at each of these ports.

The need to invest in significant infrastructure such as ship-to-shore cranes, and the economies of scale inherent in such investment, also means that it would be inefficient to have many stevedores operating out of the one port.

An efficient port supply chain involves a balancing of these two factors: not too many stevedores that it leads to inefficient operations, but enough so that the competitive pressure between them will see operators pass efficiencies on to customers in the form of lower prices.

Throughout the 20-year history of the ACCC's monitoring program, two firms, currently known as Patrick and DP World, have dominated the supply of container stevedoring services. In 2013 Hutchison entered the Australian market and now operates terminals in Sydney and Brisbane, while VICT entered in early 2017 and operates a terminal at Melbourne's Webb Dock.

DP World and Patrick continued to dominate the national share of container stevedoring lifts in 2017–18, however their combined share continued to decrease. The two firms accounted for an 85.9 per cent share of Australian container stevedoring, the lowest ever recorded in the ACCC's monitoring program, and down from 88.2 per cent in 2016–17. This decline was due to a fall in Patrick's share from 44.1 per cent in 2016–17 to 41.5 per cent in 2017–18. DP World's share remained largely unchanged at 44.4 per cent in 2017–18, and it remained Australia's largest container stevedore.

Hutchison increased its share from 5.7 per cent to 6.4 per cent in 2017–18, while VICT recorded a share of 2.1 per cent in its first full year in operation.

⁶ Containers lifted refer specifically to containerised cargo lifted by stevedores on and off ships using specialist equipment at designated international container terminal facilities.

This increase in competition resulting from the entry of Hutchison and VICT has caused Patrick and DP World to lower their prices in response, which has made it more difficult for the new entrants to win new contracts. However, in 2017–18 Hutchison and VICT made some small gains in terms of contracts, as Hutchison was awarded the Brisbane call of the A1X contract, while VICT was awarded the Melbourne call.

While VICT is currently a small player in Melbourne and will likely remain so in the near term, its strategic location at Webb Dock has it well placed to take advantage of the move towards larger ships. In August and September 2018, VICT serviced OOCL Seoul and COSCO Thailand, the two largest container ships to ever visit Melbourne. Its ability to service large ships will be a key point of difference in its pursuit of winning market share from the two large players.

Hutchison's increase in volumes in 2017–18 is reflective of the full-year contribution of the A3S contract it won in the previous financial year. However, it has not seen a material improvement in its competitive position in 2017–18.

Flinders Adelaide is in a unique position as the sole stevedore in a vertically integrated relationship with the landlord port, Flinders Ports. In 2017–18 Flinders Adelaide's share of national container stevedoring lifts was relatively steady at 5.7 per cent. As the only operator in Adelaide, Flinders Adelaide's share of Australian stevedoring services is closely linked to the relative strength of the South Australian economy relative to the national economy. Flinders Adelaide has noted that the very high variation in their container movements per year (and financial performance by extension) is because of the high variability in volumes in South Australia.

2.4 Quayside revenue per lift continued to fall

Due to the significant growth in container volumes, stevedores' total revenue increased by 6.8 per cent in real terms in 2017–18. However, despite the increase in volumes, there was continued downward pressure on quayside revenue per lift, a proxy for prices charged to shipping lines. Quayside revenue decreased on a per lift basis by 8.5 per cent to \$195.6. This continues the downward trend in quayside revenue per lift, which has decreased by more than 20 per cent in the five years since the entry of Hutchison. The increasing competition between stevedores and the improved bargaining position of shipping lines in recent years have been major contributing factors to the fall in quayside revenue per lift.

However, landside and other revenue has risen in 2017–18, driven by significant increases in revenue from infrastructure charges, which are further discussed in section 2.5. In 2017–18, stevedores recorded revenue of around \$100 million from the charges, which helped increase revenue per lift from landside and other sources by around 30.7 per cent.

The downward pressure on quayside revenue is expected to continue into the future. While consolidations in liner shipping were not as significant in 2017–18 as in previous years, their impact will continue to be felt for years to come, as contracts between stevedores and shipping lines will expire and be re-negotiated with lower rates.

2.5 Stevedores' infrastructure charges continue to be a concern for the industry

Infrastructure charges are fees charged by stevedores to truck and train companies (or collectively 'land transport operators') for collecting or delivering laden containers at their terminals. The introduction of these charges, and/or the significant increase in the charges, have attracted significant criticism from transport operators, unions, importers and exporters, as well as interest from federal and state governments.

This section looks at the factors put forward by stevedores as justification for the use of infrastructure charges and the recent increase in those charges. Whilst there may be some justification for the use of infrastructure charges, the nature of the container freight supply chain is such that this pricing strategy may ultimately reduce competitive pressure on overall stevedoring charges. Stevedores have the

incentive and ability to earn a growing proportion of their revenues from those segments of the supply chain where they have stronger market power, relative to the more competitive market of services to shipping lines. It is quite possible that, left unconstrained, the infrastructure charges may continue to increase significantly over time, including to a point where they may exceed what is necessary for the stevedores to recover their costs and earn an adequate rate of return. Australia's importers and exporters would then face higher charges to ship their goods than otherwise, and not significantly benefit from the additional competition between stevedores at the east coast ports.

Evolution of the infrastructure charges

Patrick was the first stevedore to adopt an infrastructure charge after it implemented a charge of \$17.75 in its Brisbane terminal in late 2010. At the time Patrick indicated that the charge passes on 'increased infrastructure costs, principally lease costs... that it has absorbed for a number of years but (is) no longer in a position to do so'.⁷ DP World shortly followed its competitor and implemented its own charge in Brisbane.

While Patrick and DP World have since increased their Brisbane infrastructure charges, the charges have not been a major source of revenue for the stevedores. It is not until recent years that the stevedores at Australia's monitored ports progressively began introducing new charges at other ports besides Brisbane and significantly increasing existing ones in an effort to increase revenue.

From 1 July 2018, an infrastructure charge will be applied by every stevedore at every monitored container terminal in Australia. The rapid escalation in these charges over the last two years has been led by DP World, but Patrick in particular has been quick to follow. The increase in charges has been most notable in Melbourne, where DP World's charge will have increased from \$3.45 per container in April 2017 to \$85.30 from 1 January 2019.

Table 2.2: Recent and upcoming increases in infrastructure charges by stevedore and port

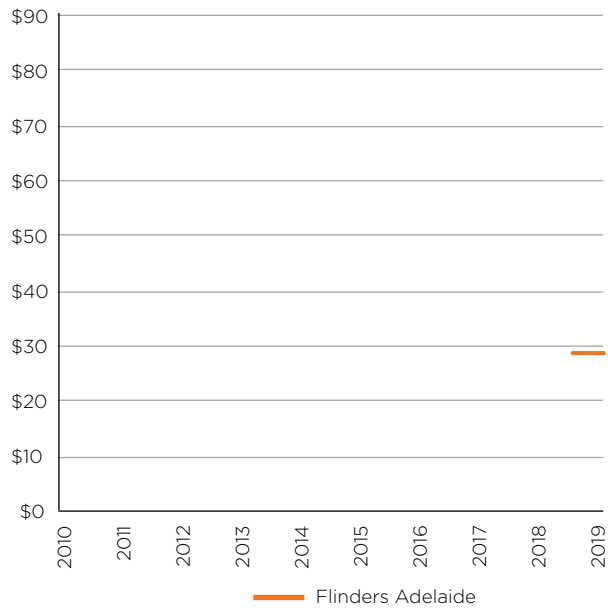
	DP World			Patrick		Hutchison		VICT	Flinders Adelaide
	2016-17	2017-18	2018-19*	2016-17	2017-18	2016-17	2017-18	2017-18	2018-19*
Adelaide									\$28.50
Brisbane	\$32.74	\$38.75 +18.4%	\$65.15 +68.1%	\$32.55	\$38.25 +17.5%	\$32.00	\$32.60 +1.9%		
Fremantle	\$8.22	\$8.22 +0.0%	\$8.22 +0.0%	\$4.76	\$7.50 +57.6%				
Melbourne	\$32.50	\$49.20 +51.4%	\$85.30 +73.4%	\$32.00	\$47.50 +48.4%			\$48.00	
Sydney	\$21.16	\$37.65 +77.9%	\$63.80 +69.5%	\$25.45	\$41.10 +61.5%	-	\$10.45		

Note: prices are exclusive of GST. * DP World announced that new infrastructure charges will apply from 1 January 2019. Flinders Adelaide first applied its infrastructure charge from 1 July 2018.

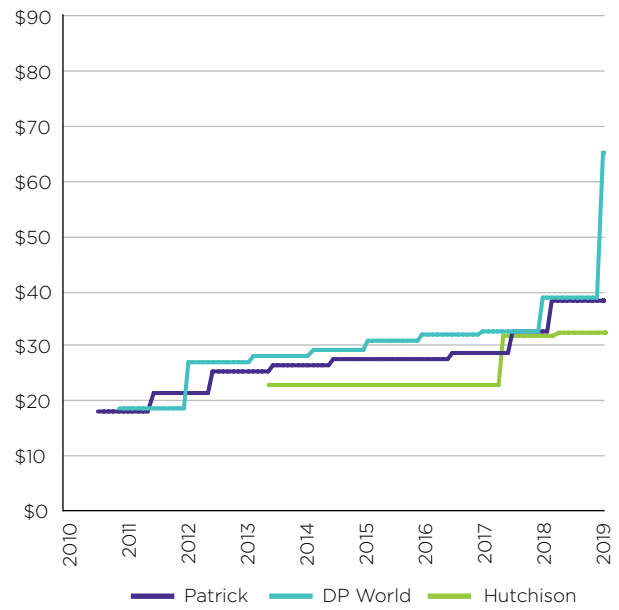
⁷ M Hollamby, *Patrick Brisbane Autostrad Terminal – Infrastructure surcharge*, 2010.

Figure 2.3: Increases in infrastructure charges since 2010

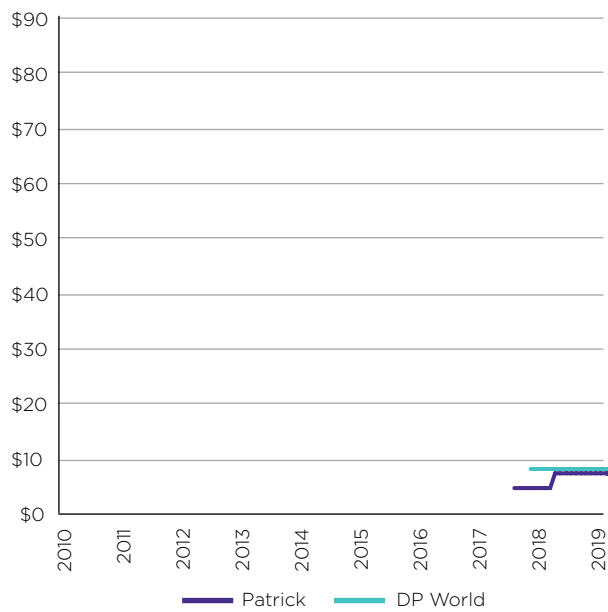
Adelaide



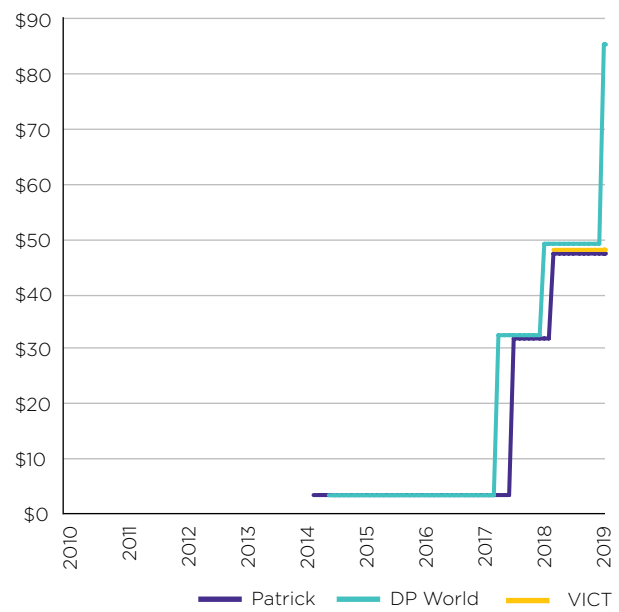
Brisbane



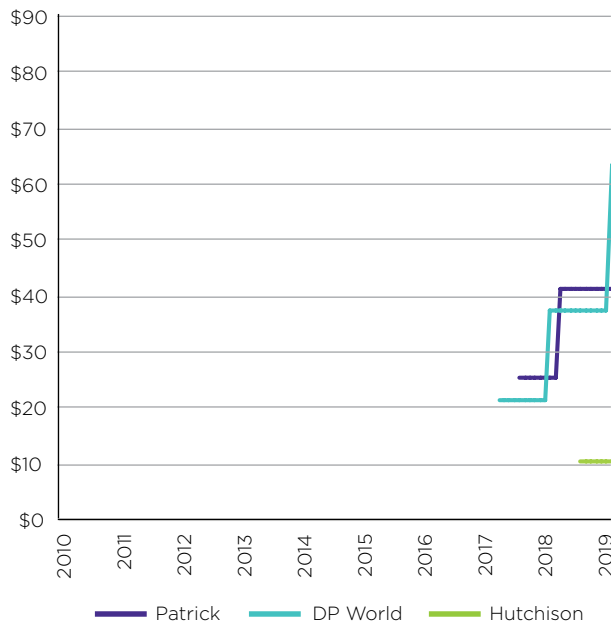
Fremantle



Melbourne



Sydney



Source: nominal prices published by stevedores.

Note: prices are exclusive of GST. Charts assume that other stevedores (apart from DP World) do not increase infrastructure charges until 1 January 2019.

In 2017-18, the industry generated a total of \$100 million in revenue from the infrastructure charges. The majority of the revenue was generated by DP World and Patrick at the east coast terminals, in particular Melbourne and Sydney. Revenue from the charges increased significantly compared with 2016-17 when only around \$25 million was earned from the charges. Revenue from the infrastructure charges comprised 7.6 per cent of total industry revenue in 2017-18, a significant increase from around 2 per cent in the previous year.

If the stevedores do not announce any further increases to the charges, it is estimated that the industry may collect around \$180 million in revenue from the infrastructure charges in 2018-19.

Stevedores' rationale for the imposition of infrastructure charges

Following recent significant increases in the infrastructure charges, the ACCC sought and received detailed information from the stevedores on their rationale for the price changes. The stevedores pointed to a number of pressures on their business including:

- sustained and significant increases in their property-related costs
- the need to recover past and/or future investments in quayside and landside terminal facilities
- falling prices being charged to shipping lines because of both greater competition between stevedores and a stronger bargaining position of shipping lines as a result of consolidation.

Increases in property-related costs

Patrick, DP World, Hutchison, and Flinders Adelaide all said that the charges are being implemented partly to recover significant increases in operating costs that are outside of their control.

Stevedores said that they needed to pass on significant increases in property costs. In particular, they referred to rapid increases in terminal rents charged by port owners, as well as increases in council rates and land taxes.

Flinders Adelaide's infrastructure charge will pass on costs associated with increases in terminal lease fees from 1 July 2018. This is because Flinders Ports, Flinders Adelaide's parent company, has revalued the land and landside assets upon which their terminal operates. Flinders Ports said that its

reevaluation of terminal assets was reflective of the terminal's investments and the increased value of port activities nationwide.

Data from the ACCC's monitoring program indicates that property costs have increased at a rapid rate over a number of years (see chapters 4 and 5 for more information). In particular, total property costs per lift for Patrick are now 74.0 per cent higher than 2008–09 levels, while DP World's property costs per lift have increased by around 38.2 per cent. Over the period, the ACCC understands that there have been increases in land taxes and council rates⁸ as well as increases in rents charged by some landlord ports. In the past decade, stevedore rents have been increased by the Port of Brisbane and the Port of Melbourne, and, to a lesser extent, Fremantle Ports. NSW Ports inherited stevedore rental structures that were agreed to before privatisation.⁹

Recovery of investment in terminal facilities

Stevedores also said that they needed to recover significant existing and/or planned capital investment in quayside and landside facilities.

In 2017–18 some stevedores made significant investments in projects, facilities and equipment that improve quayside and landside service offerings. Of particular note are DP World and Flinders Adelaide which both committed to substantial new investments that will be funded through the infrastructure charge. A substantial portion of these stevedores' new investments have been made to ensure that these stevedores can provide efficient and competitive services to increasingly larger shipping vessels that are being deployed by shipping lines on Australian trade lanes.

Stevedores also said that the infrastructure charges seek to rebalance the recovery costs of significant past investments in landside services such as truck facilities, yard equipment and rail infrastructure. They noted that operating and capital costs associated with landside facilities have traditionally been wholly-subsidised by quayside tariffs. Given that landside operators benefit from efficiencies from these investments, it is not unreasonable for stevedores to seek to recover some costs from land transport operators. However, it is not clear what an appropriate level of contribution would be.

Erosion in quayside prices and revenues and reductions in overall returns

Prices of quayside stevedoring services, which constitute the majority of stevedores' overall revenues, have been falling. This trend reflects a reduction in stevedores' pricing power over shipping lines caused by the increased competition in stevedoring and consolidation among shipping lines.

Stevedores noted that the entrance of Hutchison in Brisbane and Sydney and of VICT in Melbourne has introduced significant surplus capacity in those markets that may linger over the medium term. This has triggered an erosion of quayside stevedoring charges to shipping lines and reduced asset utilisation rates since containers are being spread across more capital.

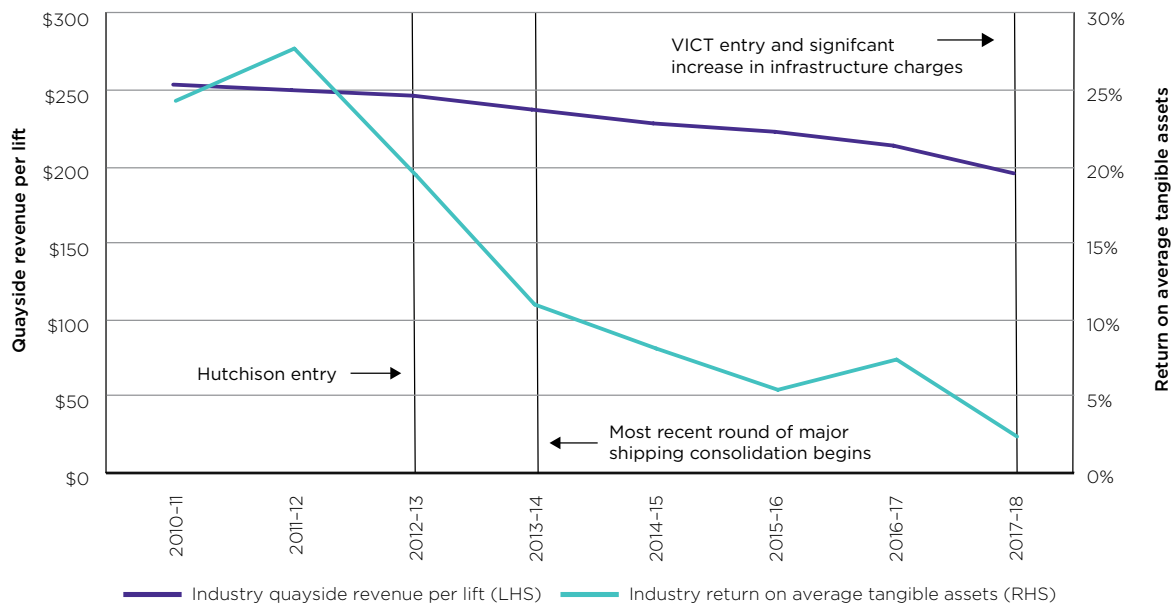
Recent consolidation among liner shipping companies has also increased the bargaining power of shipping lines. This bargaining power has primarily been enhanced through the bigger size of the contracts on offer for stevedores. The ACCC also understands that as newly merged entities negotiate their new contracts, it is common for all shipping lines within the group to receive what had previously been the lowest rate amongst them. This means that stevedores are losing some of their higher margin contracts with smaller shipping lines.

As discussed in chapter 4, data provided to the ACCC for monitoring purposes shows that quayside prices, quayside revenues and return on tangible assets have been falling over a number of years. Figure 2.4 outlines developments in quayside pricing and return on assets delineated by demand-side and supply-side changes referenced by stevedores. It is clear that the erosion of quayside prices has accelerated since 2012–13.

8 A recent example is Randwick City Council on 1 July 2018 announcing significant increases in council rates paid for by port users, which includes DP World's container stevedoring operations at Brotherson Dock. B James, *Botany Port tax will hurt residents: CEO*, The Daily Telegraph, 2018.

9 The ACCC understands that container stevedoring leases at Port Botany are described as 'performance leases' since they provide incentives for increased productivity. The leases do not provide for market reviews and the land rent is determined by a fixed formula agreed between stevedores and what was Sydney Ports Corporation in 2009. NSW Ports, *NSW Ports statement re Port Botany stevedore rents*, Media Release, 2017.

Figure 2.4: Impact of supply-side and demand-side changes on quayside prices and return on tangible assets between 2010–11 and 2017–18



Source: ACCC analysis of stevedores' revenues and return on assets. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017–18.

The industry's returns on assets have no doubt been pulled down by the inclusion of Hutchison and then VICT's asset bases, the falling profitability also reflects both a reduction in tariffs charged to shipping line and an increase in operating costs.

Stevedores face little competitive pressure to constrain infrastructure charges

The stevedores face significantly less competitive pressure to constrain infrastructure charges than they do with their charges to shipping lines.

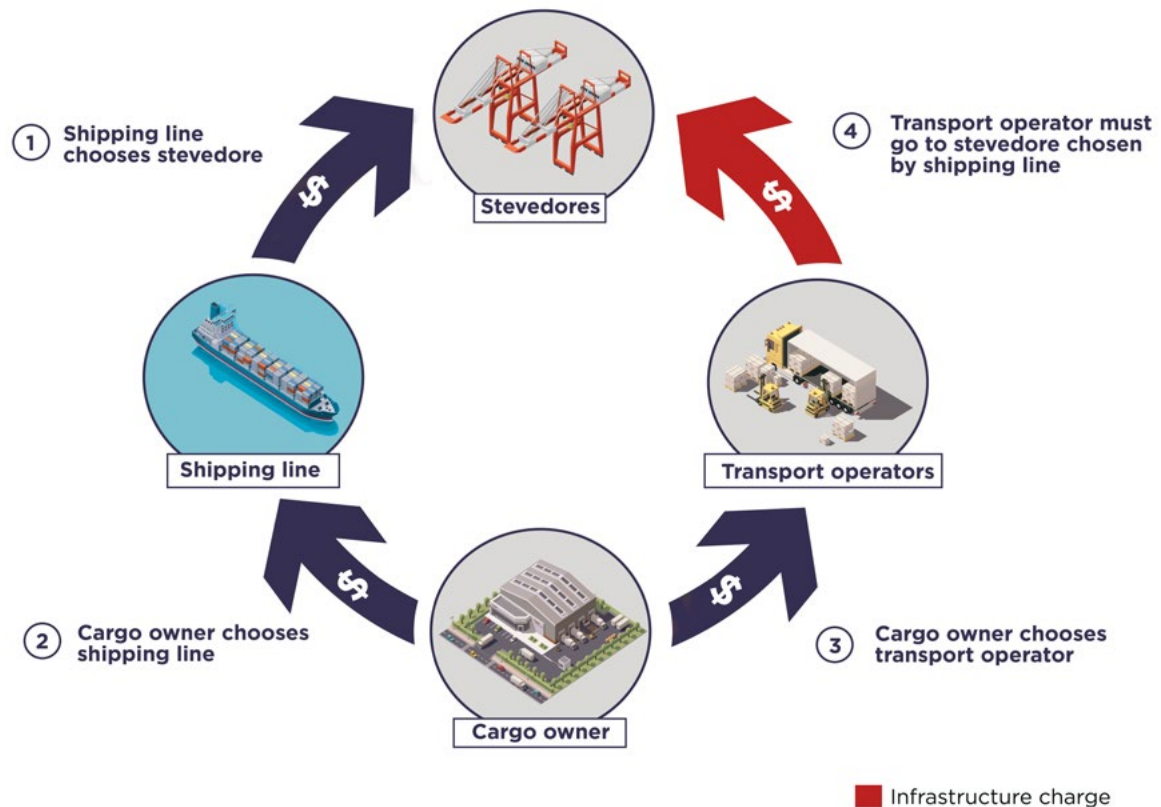
Depending on the port, stevedores may face competition from up to two alternative suppliers in relation to providing stevedoring services to shipping lines. A shipping line may therefore choose to take their business elsewhere if a stevedore charges too much for quayside services.

In contrast, and as explored below in turn, land transport operators and cargo owners do not directly choose the stevedore. This means that land transport operators, and cargo owners to a lesser extent, cannot practically respond to higher infrastructure charges by taking their business elsewhere.

The infrastructure charges therefore mean that stevedores will be earning a greater proportion of their revenues in a market in which they have strong market power, rather than the more competitive market in which they provide services to shipping lines. As a result, stevedores do not face the same competitive pressure to constrain infrastructure charges like they do for quayside charges. This could see the charges increasing significantly over time, including to a point where they may exceed what is necessary for the stevedores to recover costs and earn an adequate rate of return.

Figure 2.5 illustrates which parties choose their suppliers of services and how the infrastructure charges cascade through the supply chain.

Figure 2.5: Supply chain relationships



The inability of land transport operators to avoid high infrastructure charges

Land transport operators initially pay the infrastructure charges as they pick up or deliver cargo owners' consignment at container terminals. This party does not get to choose the stevedore at which they collect or deliver containers and therefore cannot avoid paying the infrastructure charge set by the stevedore to which they are directed.

The trucking industry, which accounts for the majority of the landside freight task in Australia's ports, is highly fragmented with many players. Industry participants have said that because of this fragmentation, truck operators do not have the ability to bargain effectively with stevedores on service levels or the quantum of the infrastructure charges.

Since land transport operators are unable to shift their business or bargain with stevedores, it follows that they are subject to strong market power from the stevedores. This view on stevedores' market power over land transport operators is supported by previous observations made by the ACCC¹⁰, the NSW Independent Pricing and Regulatory Tribunal¹¹ and by the Victorian Essential Services Commission.¹²

While transport operators are unable to switch their business, information available to the ACCC suggests that land transport operators have largely been passing on the charges to cargo owners.

10 Australian Competition and Consumer Commission, *Container stevedoring monitoring report no. 10*, Canberra, 2010.

11 Independent Pricing and Regulatory Tribunal, *Review of the Interface Between the Land Transport Industries and the Stevedores at Port Botany*, Sydney, 2008.

12 Essential Services Commission, *Review of Port Planning: Final Report*, Melbourne, 2007.

Cargo owners would also face challenges in attempting to avoid high infrastructure charges

It appears that transport operators are typically passing on the infrastructure charge through to cargo owners. Cargo owners also have limited practical ability to move their business away from high infrastructure charges.

In the supply chain, the cargo owner chooses its preferred shipping service for delivering its goods. It is therefore conceptually possible for a cargo owner to choose a shipping service that uses a stevedore with a lower infrastructure charge. If this were to occur, stevedores may be reluctant to increase the infrastructure charges out of fear that cargo owners will move their business to shipping lines that use their competitors' container terminals.

In practice, however, there are many limitations to this. Container shipping services are not homogenous; different shipping services offer different ports of call, vessel capacities, sailing frequencies, service schedules and different transit times. Shipping services can also be further differentiated by their degree of reliability and quality of service.¹³ In determining whether they can direct their cargo to a different stevedore, in addition to cost, cargo owners have to consider whether the shipping service using their preferred stevedore is suitable to their needs. While choices of different shipping services exist for cargo owners, it may well be that due to commercial or practical realities they can only use or at least have a very strong preference for one particular shipping service and, by extension, stevedore. The ACCC has heard from various large cargo owners participating in highly competitive export markets who have said that they are unable to direct their cargo through stevedores charging lower infrastructure charges because the shipping services calling at those stevedores do not give them the speed to market and short transit times they need for their cargo.

There are also cargo owners, such as large enterprises, which enter into long-term contracts with shipping lines and thus may have constraints in readily being able to switch to different shipping lines in response to infrastructure charge increases.

Furthermore, while many shipping lines are present on Australian trade routes, many also operate in consortium-style arrangements.¹⁴ This effectively restricts cargo owners' choice of stevedore since many of the shipping services on offer use the same ships and, by extension, use the same stevedore.

At least until DP World increases its charges considerably on 1 January 2019, levels of infrastructure charges set by stevedores at most ports are currently very similar. This then reduces any benefit to be gained by cargo owners in switching shipping lines solely to secure the cheapest infrastructure charges. This is particularly the case in the current environment in which stevedores are frequently changing their infrastructure charges.

It is conceptually possible that shipping lines could seek to move their business away from stevedores with high infrastructure charges in order to attract cargo owners feeling their effects. However, we do not consider that this would occur to a material degree. This is because:

- the strategy would be unlikely to stimulate a significant amount of new business given the above limitations to cargo owners choosing shipping lines solely because of the infrastructure charges imposed by the shipping line's chosen stevedore
- shipping line contracts with stevedores typically last between two and five years, making it difficult for shipping lines to move their business between stevedores in response to infrastructure charges that have been changing frequently

¹³ The ACCC understands that cargo owners may also be sensitive to shipping line service metrics such as the accuracy of bill of lading, quality of equipment used such as containers, IT support and event tracing. Accuracy and reliability of shipping services can impact cargo owners' inventory holding costs, product on-shelf availability and sales.

¹⁴ Rather than providing a shipping service on their own, many shipping lines operating on Australian trade routes enter into consortiums with other shipping lines to achieve cost efficiency. Various shipping lines may come together and each agree to commit to provide a certain number of vessels into a service (vessel sharing agreement), with each line being allocated a certain number of container slots on the ship. These lines may then then share or swap container slot allocations on the service with other shipping lines wishing to partake in the shipping service (slot chartering).

- a stated reason for the infrastructure charges is to restructure revenues away from shipping lines, therefore it seems reasonable to conclude that the stevedore with the highest infrastructure charge will be better able to offer the lowest quayside charges in order to attract shipping lines.

The limitations on the ability for cargo owners to avoid the infrastructure charges, and the improbability that shipping lines would specifically seek to contract with stevedores with low infrastructure charges, means there is little incentive for stevedores to constrain infrastructure charges as a way of attracting business.

Direct impact of the infrastructure charges on other industry participants

The charges have varying impacts on different industry participants.

Shipping lines are clearly benefitting from lower quayside stevedoring charges that have been enabled by the infrastructure charges. Shipping lines would also benefit from significant quayside investments by some stevedores that make the deployment of larger and more cost efficient vessels more viable.

Land transport operators are unable to avoid directly paying the infrastructure charges to the stevedores. In addition to the charge itself, transport operators have said that they face additional costs associated with holding the debt during the period between paying the invoice from the stevedore and waiting for customers to settle accounts. These additional costs are likely to impact smaller transport operators more than the larger firms. The ACCC understands that transport operators are largely passing on the charge to their customers, with many including a mark-up in order to recover some or all of their additional costs associated with the charge. The ACCC is aware of smaller operators including mark-ups almost as high as 100 per cent in some cases, while some large operators are including low to no margins in passing on the charge. However, the scale of criticism from transport operators conveyed to both the ACCC and made in public suggest that many are not able to fully recoup all the costs associated with the charges.

Cargo owners are at the end of the supply chain and, as established previously, may have constraints in being able to avoid high infrastructure charges. The ACCC's monitoring program does not allow sufficient visibility over how various supply chain charges ultimately cascade to cargo owners. Reportedly, while infrastructure charges are being passed on by land transport operators, cargo owners have also not received the benefits of lower quayside stevedoring costs by way of reductions in terminal handling charges¹⁵ by shipping lines. Cargo owners such as Visy, Bega, Kmart, Kingspan Insulation and agricultural businesses have made public comments on the material cost impact of the infrastructure charges on their business and the competitiveness of their products. The ACCC also received further confidential complaints from other cargo owners (including very large operators) on the negative impact the charge has on their business. Realistically, some cargo owners will be better able to absorb the infrastructure charge or reflect increased supply chain costs in the prices of their products. The charge is likely to have a more substantial impact on smaller businesses with less economies of scale or those businesses whose products are subject to the full rigours of international competition.

Policy considerations

While we consider that there may be some justification in the response by stevedores to falling quayside revenue and increasing costs, the likely adverse impact of infrastructure charges on supply chain costs for importers and exporters is worthy of close consideration by policy makers. The potential for infrastructure charges to rise both in absolute terms and as a proportion of total revenue is significant and of concern as cargo owners may end up effectively paying a high amount for stevedoring services if infrastructure charges were to rise in an unconstrained way.

The ACCC does not have the power to determine stevedores' charges. In 2017, the ACCC considered that the infrastructure charges did not represent a breach of the *Competition and Consumer Act 2010*.

¹⁵ Terminal handling charges (THCs) are ancillary charges collected by shipping lines from cargo owners to recover the cost of paying the stevedores for the loading or unloading of containers and other port-related costs incurred at the port of origin or destination. We understand that there is no consistent manner in which shipping lines calculate THCs and we have observed very large variances in THCs charged by different shipping lines calling at similar ports and similar stevedores. THCs are separate to shipping lines' 'freight rates' which are highly variable and are largely a function of supply and demand and bunker (fuel) costs.

The use of the charges did not appear to substantially lessen competition in a market, nor did it meet the high threshold to potentially be considered unconscionable conduct. Nor do the use of infrastructure charges in and of themselves raise concerns under provisions of the Australian Consumer Law, although some contractual terms relating to the stevedores' interaction with land transport operators are currently under assessment (see section 2.6).

The ACCC would be concerned if there were any indications of anti-competitive behaviour relating to the charges, for example, if stevedores were to favour their own vertically-affiliated businesses by waiving or reducing the infrastructure charges. Where such conduct has the purpose, effect, or likely effect of substantially lessening competition, the ACCC can take enforcement action under section 46 of the Act.

The ACCC notes the concern expressed by various industry participants and governments about the rise in infrastructure charges. However, in the absence of breaches of the Act, the ACCC is limited in its ability to address these concerns other than through continued scrutiny through the monitoring report.

The ACCC has not formed a view on the appropriateness of the current infrastructure charges. The ACCC's monitoring program provides useful information regarding the stevedore's financial positions, but it does not permit us to make a conclusive view regarding the full impact of the charges on the broader supply chain.

The economic regulation of stevedores and ports more generally rests with state governments. Some states already have legislative powers in relation to prices for port-related services. For example, the ACCC understands that the NSW Minister for Roads, Maritime and Freight already has the power to regulate the stevedores' infrastructure charges under the *Ports and Maritime Administration Regulation 2012 (NSW)*. The Victorian Government's newly established body, Freight Victoria, has also recently been tasked to investigate options for the future role of government in regulating access and pricing to and from Victoria's ports.

The recent significant increases in infrastructure charges may require a more detailed examination by state governments and if warranted, a regulatory response. Such a review by state governments would be assisted by further information than that obtained by the ACCC under the stevedoring monitoring regime, such as whether cargo owners are benefitting (through lower 'terminal handling charges') from the reduction in quayside charges to shipping lines.

If, after more fully understanding the flow-on effects of the infrastructure charges, the state governments consider that they are having a large detrimental effect on their state's supply chains and the broader state economy, state governments might consider taking regulatory action. Government action could take the form of increased oversight of infrastructure charges by requiring stevedores to seek approval from regulators before implementation of price increases. Alternatively, governments could set limits on the rate at which the charges could be increased, or disallow the pricing strategy altogether. If it were to become clear that such action was necessary, then governments should signal this and/or act before stevedores become more reliant on the charges.

2.6 Unfair contract terms in the container stevedoring industry

In 2016 new provisions were introduced to the Australian Consumer Law (ACL) to protect small businesses from unfair contract terms.

The law applies to standard form contracts entered into or renewed on or after 12 November 2016, where:

- it is for the supply of goods or services or the sale or grant of an interest in land
- at least one of the parties is a small business (employs less than 20 people, including casual employees employed on a regular and systematic basis)
- the upfront price payable under the contract is no more than \$300 000 or \$1 million if the contract is for more than 12 months.

Section 24 of the ACL provides that a term is unfair if it:

- causes a significant imbalance in the parties' rights and obligations under the contract
- is not reasonably necessary to protect the legitimate interests of the party advantaged by the term, and
- causes detriment (financial or otherwise) to a small business if it were to be applied or relied upon.

The transparency of a term and the contract as a whole are also relevant considerations in determining whether a term is unfair.

The ACCC can bring potentially unfair contract terms before a court, for the court to determine whether the term is unfair. If a court determines that a term is unfair then that term will be void and the small business will no longer be required to comply with it. The rest of the contract will continue to bind the parties to the extent it is capable of operating without the unfair term.

In 2018 the ACCC became concerned that contracts offered by container stevedores to land transport operators may contain potentially unfair contract terms within the meaning of the ACL. The ACCC is currently assessing these issues.

The Federal Government has committed to a review of the unfair contract term law before the end of the year. The ACCC will be making the case for a significant strengthening of the law.¹⁶ Two key limitations of the current law are that:

- unfair contract terms are not illegal; they can only be declared void by a court and
- the ACCC cannot seek civil pecuniary penalties when a contract is declared unfair and void by the court.

2.7 Stevedore investments in 2017-18

DP World and Flinders Adelaide committed to substantial new investments in the year. A significant amount of these new investments are directed towards enabling these stevedores to more efficiently service the increasingly larger ships being deployed on Australian trade lanes.

DP World

DP World has committed to around \$256 million¹⁷ worth of new investments in its terminal facilities in 2017-18 and attributed funding of these new investments from the infrastructure charges.

DP World has ordered nine new ship-to-shore cranes, each worth around \$14 million,¹⁸ to better service the growth in vessel sizes used by shipping lines and maintain competitiveness. These new quay cranes are a mixture of replacement and additional cranes for DP World's terminals.

In addition, DP World invested significantly in refreshing existing yard equipment that are used to facilitate efficient services in both quayside and landside areas. DP World received 20 replacement straddle carriers at its Melbourne terminal around March 2018, with more slated to arrive in the next financial year. DP World also received four new replacement Rubber-Tyred Gantry cranes at its Sydney terminal, with more also scheduled to arrive in the next financial year.

DP World also ordered and received 38 new forklifts and reachstackers. These will assist in improving productivity in handling empty, out of gauge, or special cargo and generally improve its terminals' ability to handle peak periods. This investment will also assist in handling the increased number of empty containers being directly returned to its terminals as part of its product offering to shipping lines.¹⁹

¹⁶ For further information, see Rod Sims, 'Major changes needed to get rid of unfair contract terms', speech to the Council of Small Business Organisations Australia's National Small Business Summit.

¹⁷ Farrier Swier, *Expert report on charging issues for container stevedoring*, 2018.

¹⁸ DP World Australia, *New cranes arrive in Melbourne*, 2018

¹⁹ The practice of directly returning empty containers to stevedores' terminals, its stated efficiency and impacts on the supply chain, is discussed in section 2.8 of the report.

DP World is now implementing a Weigh-in-Motion and Gate Optical Character Recognition in its Melbourne terminal to streamline entry conditions, reduce truck turnaround times, and assist truck operators in their compliance with Chain of Responsibility regulations.²⁰

DP World is progressing works to integrate its Melbourne and Sydney container terminals with respective adjacent sites to improve efficiency and deliver wider service offerings to its customers.

In Melbourne, DP World worked with the Port of Melbourne to close Coode Road West²¹, which has historically separated its stevedoring terminal from its adjacent intermodal terminal. This initiative is expected to reduce truck turnaround times, increase freight on rail and alleviate congestion in West Swanson Dock.

In Sydney, DP World is integrating its stevedoring terminal with its Botany Intermodal business. The integration will facilitate increased terminal capacity, increase freight on rail, as well as significantly widen the breadth of DP World's landside service offering to include repair and upgrade of containers, washing, out-of-gauge handling, etc. DP World is also conducting initiatives to better utilise existing space at its Brisbane terminal.

DP World expects its capital expenditure levels to remain relatively high in 2018-19 as it continues to execute residual parts of its investment program.

Patrick

Patrick's capital expenditure for the period was not substantial, especially relative to investment levels in previous years.

Capital expenditure in the period was spent on pavement repairs in its Sydney, Brisbane and Fremantle terminals while there have been quay crane replacements in Melbourne and Fremantle. Patrick has also been replacing its straddle carrier and forklift fleets in Melbourne, Fremantle and Sydney. There has also been expenditure towards improving automated truck handling in its Brisbane and Sydney terminals.

Patrick made further progress on planning for the development of an automated rail terminal in Sydney to improve the stevedoring terminal's rail handling capacity and efficiency.

Patrick plans to replace two quay cranes in Melbourne, and one quay crane each in Fremantle and Brisbane in the next financial year. Patrick is working to replace its Terminal Operating System and undertake civil initiatives for its Fremantle and Sydney terminals.

Patrick expects an uplift in capital expenditure levels in 2018-19 as it executes these initiatives.

Hutchison

Hutchison's capital expenditure for the period was also not substantial. However, a significant portion of its 2017-18 capital expenditure was spent towards expanding quayside container handling capacity and improving productivity and safety. Hutchison also made minor investments towards replacing existing landside assets and making improvements to terminal IT infrastructure.

Hutchison expects to maintain capital expenditure levels in 2018-19, but with a greater allocation towards landside infrastructure.

20 National Heavy Vehicle Regulator, *About Chain of Responsibility*, <https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/about>.

21 Port of Melbourne, *Coode Road West closure – factsheet*, 2018.

Flinders Adelaide

Flinders Adelaide's capital expenditure in the 2017-18 year has not been substantial. However during the year it committed to and commenced several large-scale projects tailored towards enabling the terminal to service the changing needs of its customers and expand general capacity levels. Currently Flinders Adelaide is able to service ships with a maximum beam of 43 metres, meaning it has significant constraints in being able to service vessels of around 7000 - 8000 TEU.²² The South Australian Government has green-lighted a Flinders Ports project involving significant capital expenditure to dredge the port channels and alleviate the terminal's physical constraints.²³

The terminal is also re-developing and improving the capacity of an adjacent intermodal facility by installing 600 metres of rail track and expanding hardstands. Flinders Adelaide has installed two Weigh-in-Motion bridges and made innovations to its terminal operating system to assist landside customers' compliance with Chain of Responsibility regulations.²⁴

Flinders Adelaide's capital expenditure levels will be substantial in 2018-19 as it begins executing its quayside and landside expansion projects.

VICT

VICT has not made substantial capital expenditure in the 2017-18 year, following already significant start-up expenditure in recent years. Instead, VICT focussed on refining the operations of landside equipment and software during the year.

VICT does not envisage significant capital expenditure in its Melbourne terminal in the near term since capacity levels are well above current demand and its equipment will not need replacing for a number of years.

2.8 Direct return of empty containers

During 2017-18, it became more common for shipping lines to require empty containers to be returned directly (or 'dehired') to container terminals instead of designated empty container parks (ECPs). This policy prompted criticism from some transport operators and cargo owners.

Shipping containers are managed by shipping lines. Shipping lines will direct an importer to the location where the empty container must be dehired once it has been unloaded. The importer will have to arrange this through their transport operator within a set time frame (typically seven days) from when the container is discharged by the stevedore. If importers fail to dehire containers at the specified location and within the set time allotted, they may be liable to detention fees from shipping lines.

Customarily, shipping lines have either directed emptied import containers to local exporters for reuse (known as 'triangulation') or for temporary storage at an affiliated ECP. From the ECP, the container may either be redirected to a local exporter or, more commonly, transported to a container terminal where the empty container will be loaded on to a ship. The empty container may then be sent to overseas destinations where it can be subsequently filled with cargo.

While the practice has been around for some time, recently more shipping lines have begun instructing local importers to return empty containers directly to the container terminal. The ACCC understands that many major liner shipping companies have now adopted this policy. Some lines such as CMA-CGM Group²⁵ are being flexible in allowing cargo owners, and by extension their transport operators, choice whether to dehire at the ECP or direct to terminals, while some lines such as Maersk²⁶ have adopted a strict policy of dehiring specific empty containers direct to terminals.

22 I Ackerman, *Adelaide dredging plan causes fracas*, The Daily Cargo News, 2018.

23 This is discussed in greater detail in section 2.12 of the report.

24 National Heavy Vehicle Regulator, *About Chain of Responsibility*, <https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/about>.

25 ANL, *DRE Surcharge—Recent Issues with Direct Return of Empty Containers*, 2018.

26 Maersk Line, *Return of import containers to Australian shipping terminals*, 2017.

For shipping lines, directly returning empty containers to container terminals is cost efficient; shipping lines can save costs by reducing the container handling that would otherwise have been necessary (and paid for) had containers been de hired at ECPs. By directly de hiring at container terminals, shipping lines would also save costs from having to coordinate the activities of multiple supply chain actors (e.g. stevedores, a fleet of truck operators and ECPs) for the bulk evacuation of empty containers. By storing more empty containers at stevedore facilities, shipping lines are also able to have unplanned evacuations of empty containers using surplus capacities on their ships.

However, stakeholders have stated that while this practice is cost-efficient for shipping lines, it externalises costs to other parts of the supply chain, in particular transport operators. This occurs because the cargo owner's transport operator will need to book a slot with the stevedore (through the VBS/TAS systems) to return the container to the terminal. Slots at stevedore terminals are in much higher demand compared to slots at ECPs and available slots may not always be operationally suitable to transport operators. Indeed, if there is a significant gap between when the transport operator collects the empty container from the cargo owner and the de hire slot at the terminal, the transport operator may have to store or 'stage' the container at their depot until such time that the de hire slot at the stevedore becomes available. According to transport operators, staging results in them incurring significant administrative and handling costs.

According to transport operators, high road congestion at some ports, in particular to and from Swanson Dock, increases risk of incurring detention fees from shipping lines (which would likely be passed on to importers). Furthermore, the necessary rigidity of slot allocations at stevedore terminals means that there is increased risk of incurring stevedore penalties in case of late arrivals or 'no shows'. Some transport operators have said that fleet utilisation may also be adversely impacted since truck turnaround times at container terminals are also materially higher than at ECPs.

However, despite criticism from transport operators and cargo owners, stevedores and shipping lines maintained that the direct de hire practice is cost efficient for the industry. Some stevedores acknowledged congestion issues at some terminals and have responded accordingly. In particular, DP World has invested in new empty container handling equipment and created a dedicated de hire facility at its West Swanson Intermodal facility. The ACCC understands that some shipping lines have reduced the number of empty de hires at stevedore terminals in Sydney during the year citing congestion issues. However, several transport operators have announced fees that will be levied on cargo owners when an empty container is to be de hired directly to stevedore terminals. These fees appear to be around \$100 per container.

2.9 Port of Fremantle leases for stevedores

On 4 May 2018, Fremantle Ports announced it was going to market for the re-leasing of its two container shipping terminals on North Quay.²⁷ These terminals have been operated by DP World and Patrick since 1996, with their leases set to expire in June 2019.

The Western Australian government intends to grant new seven year leases with options to extend for two further seven year periods, depending on the outcome of the Westport: Port and Environs Strategy.²⁸

A new management agreement for the operation of the North Quay Rail Terminal will also be put in place through a parallel Request for Proposals process.

The Western Australian Government stated that 'The approach being taken provides a level of certainty for industry and flexibility to allow the Government to implement future Westport recommendations.'²⁹ The Government has committed to maintaining Port of Fremantle as an operational port in public ownership.

²⁷ R Saffioti, *Securing new leases for Fremantle Ports' container terminals*, Media Release, 2018.

²⁸ Department of Transport, *Westport: Port and Environs Strategy*, <https://www.transport.wa.gov.au/projects/westport-port-and-environs-strategy.asp>.

²⁹ Saffioti, 2018.

2.10 Port of Newcastle container terminal development

The Port of Newcastle has developed the concept for a container terminal development at its Mayfield site. The site has the capacity for a 2 million TEU per annum container terminal and a shipping channel that can accommodate vessels up to 10 000 TEU.

As has been widely reported in the media, the ACCC has concerns about arrangements made when the NSW government privatised Port Botany, Port Kembla and the Port of Newcastle that may limit or prevent the development of a container terminal at the Port of Newcastle. With the Port of Newcastle now looking to proceed with developing a container terminal, the ACCC is currently investigating whether these arrangements may breach the *Competition and Consumer Act 2010*.

2.11 Possible container terminal development at Port of Burnie

In August 2018, Tasmanian Minister for Infrastructure Jeremy Rockliff announced a \$200m investment in the Tasmanian ports of Bell Bay, Burnie, Devonport and Hobart. Approximately \$80m of that will be allocated to Burnie, including a proposed international container terminal and a project to dredge the berth to provide for larger vessels.³⁰

DP World is party to a two year exclusive agreement with TasPorts to develop a container terminal at Burnie, which expires in November 2018. DP World has indicated that it would seek an extension of this agreement if required.³¹

Burnie formerly had an international container terminal that was monitored by the ACCC until 2011. As Burnie is covered by the ACCC's monitoring direction, any future container terminal that operates there would once again be monitored by the ACCC.

2.12 Developments in liner shipping

Liner shipping in Australia continues to undergo significant change. Despite a slowdown in consolidations and a partial recovery in freight rates, the industry is still struggling with issues arising from overcapacity. As ships continue to increase in size, larger ships are now visiting Australia despite size constraints at some ports. The industry will also continue to undergo important changes with a coastal shipping reform bill before the Australian Senate, and possible reforms to Part X of the CCA on the horizon.

³⁰ S Ford, *Tasmania's \$200 million ports infrastructure boost*, The Advocate, 2018.

³¹ S Ford, *DP World might seek extension on Burnie terminal deal*, The Advocate, 2018.

Consolidation of shipping lines in recent years

Following several years of consolidations, the global shipping industry stabilised somewhat in 2017–18, with a relative slowdown in merger activity, and a partial recovery in freight rates.

2016–17 had seen the announcements of some major consolidations in global shipping, including the merger of the container shipping arms of NYK Line, MOL, and K-Line, and Danish shipping line Maersk's acquisition of Germany's Hamburg Süd. 2016–17 also saw regulatory approval for three major shipping alliances.

In comparison, 2017–18 saw less consolidations, with the most significant announcement being COSCO's takeover of Hong Kong's Orient Overseas International (OOCL), which received the required regulatory approvals in June 2018.³² One shipping line noted that while the past year has been quieter in terms of consolidations, there was still potential for more activity in future years.

The consolidations over recent years have so far only had a relatively small impact on the number of visits to Australia. According to BITRE data, the number of ships visiting the five major ports in Australia has remained relatively steady.

Freight rates also showed some signs of stabilising in 2017–18. The Shanghai Containerised Freight Index (SCFI) represents the cost of shipping containers from the Port of Shanghai to 15 major international ports, and broadly tracks movements in the freight rates that cargo owners pay.³³ The SCFI has decreased significantly in recent years, from a high of around 1500 in 2012 to a low of around 400 in 2016. In 2017–18, the SCFI recovered from a low of around 650 in April 2018 to be at around 820 at the end of June 2018.

During the ACCC's industry consultations, one shipping line described a 'vicious circle of container shipping', whereby declining freight rates in recent years provided an incentive to invest in larger ships, which led to an increase in vessel capacity ordered, leading to overcapacity which in turn led to a further decline in freight rates.

Indeed, overcapacity continues to be an issue of concern for the shipping industry and has not shown any signs of abating. This was further exacerbated by the announcement in April 2018 that Hyundai Merchant Marine (HMM) plans to order 20 mega container ships, consisting of 12 ships with a capacity of 20 000 TEU and eight ships with a 14 000 TEU capacity. Following the completion of its merger with COSCO, OOCL also recently embarked on a plan to improve scale by adding around 300 000 TEU in capacity.

Government support for shipping lines also came under criticism by some in the industry during the ACCC's industry consultations. Examples of this include the Korean government's support of HMM, as well as the Chinese government's support of COSCO and OOCL. The belief is that this ongoing support by governments has caused distortions in the market that has upset the competitive dynamic in the industry at the expense of shipping lines that do not receive government support.

³² M Hand, *Cosco takeover of OOCL cleared for completion*, Seatrade Maritime News.

³³ W Richter, *Shipping costs are another bad sign for the Chinese economy*, Business Insider, 2015.

Larger ships

Larger ships continued to be deployed in Australia in 2017–18, with the largest container ship to ever visit Australia, the 10 308 TEU Susan Maersk, docking at the Port of Brisbane in October 2017.³⁴ However, visits by large ships in 2017–18 were sporadic and confined to ports that can handle them, such as Brisbane and Sydney.

Not all of the monitored stevedores operate on terminals that have the physical characteristics required to effectively service larger ships. In particular, the size of ships calling at Patrick or DP World at Melbourne's Swanson Dock are limited by the height of the West Gate Bridge and the width and depth of the Yarra River shipping channel. Similarly, Flinders Adelaide is constrained in being able to service ships with beams larger than 43 metres due to the physical limitations of the Outer Harbour shipping channel.

However, port authorities are embarking on projects to enable larger ships to call at their associated stevedore. In June 2018 it was reported that larger ship sizes would soon be visiting Melbourne as the Victorian Ports Corporation approved a series of berthing trials for ships in the 8000–8900 TEU range, after COSCO, OOCL and ANL outlined plans to upsize their joint Asia-Australia service (A3C).³⁵

The trials began in August 2018 at VICT, starting with the OOCL Seoul (around 8000 TEU) followed by the COSCO Thailand (around 8500 TEU), the two largest container ships to ever visit Melbourne.³⁶ VICT is located at Melbourne's Webb Dock and is theoretically capable of handling ships that are substantially larger.

Meanwhile, simulation and studies to increase vessel sizes at Melbourne's Swanson Dock continue. the Port of Melbourne is a key bottleneck for shipping lines being able to increase ship sizes. Lifting the size constraint in Melbourne may usher a cascade of larger ship sizes elsewhere in the east coast of Australia, as the majority of container services call at the three east coast ports of Brisbane, Sydney and Melbourne to make the route economical.

Australian stevedores are adjusting to the reality of larger ships visiting Australian ports more frequently. DP World noted that vessel sizes continued to increase, with the average vessel size serviced by DP World increasing from 6500 TEU in 2016–17 to 7000 in 2017–18. With 8500 TEU vessels scheduled to call in 2018–19, DP World has had to retire older cranes before the end of their useful life, and has invested in nine new quay cranes that are capable of servicing these larger vessels. As Patrick, Hutchison, VICT and Flinders Adelaide have already invested in cranes able to service vessels this size, all of Australia's stevedores are now well placed to handle vessel sizes up to around 10 000 TEU.

As discussed previously, Flinders Ports received approval from the South Australian Government to begin a dredging project that will widen the channel at Outer Harbour.³⁷ The container terminal has so far only been able to accommodate a limited number of Post-Panamax ships and with stringent operating conditions, which causes significant operational disruption. The proposed plan involves widening the Outer Harbour Channel by approximately 40 metres and will allow the terminal to service regular visits from Post-Panamax vessels without restrictions.³⁸ The dredging project is expected to commence within two years and conclude within four years.³⁹

A move to larger ships is also happening across the world, and vessels visiting Australia are still relatively small on a world scale. According to the International Transport Forum, in 2020 the average vessel travelling between Europe and Asia will be around 16 700 TEU.⁴⁰ Stevedores worldwide are also

34 A Carey, *A bridge too far: warning bigger ships won't be able to reach Port of Melbourne*, The Age, 2017, Port Strategy, Melbourne ready for big box ships, Port Strategy, 2018.

35 G Marle, *Melbourne set to benefit as box carriers increase vessel capacity on ex-Asia routes*, The Load Star, 2018.

36 D Sexton, *Melbourne welcomes largest ship*, The Daily Cargo News, 2018.

37 ABC News, *Port River dredging to go ahead despite environmental concerns*, ABC News, 2018.

38 Flinders Ports, Outer Harbour Channel Widening Project, <https://www.flindersports.com.au/outer-harbor-channel-widening-project>.

39 S Knoll, *Port expansion to grow SA's economy, exports and jobs*, Media release, 2018.

40 Port Technology, *Average Containership Sizes on Global Routes*, Port Technology, 2015.

having to adjust to this, and as ships become larger, investments in new, larger cranes inevitably follow. However, this does not always translate to higher capacity at terminals.⁴¹

Coastal shipping reform

Coastal shipping is the movement of goods by ship within a country. In Australia, coastal shipping currently plays a very small role as the vast majority of domestic containers are transported by road, or to a lesser degree rail.

The Coastal Trading (Revitalising Australian Shipping) Act 2012 (the Coastal Trading Act) was intended to balance the interests of the Australian shipping industry and users of shipping services by regulating Australian and foreign ships engaged in coastal trade through a licensing system.

In September 2017, after 18 months of consultation, the Government introduced the Coastal Trading (Revitalising Australian Shipping) Amendment Bill 2017. The Bill contains amendments to the Coastal Trading Act that are intended to make coastal shipping a more viable transport mode that may benefit the manufacturing, mining, agricultural and energy sectors. The Bill removes the requirement to consult with Australian flagged licence holders even when no Australian vessel is available for a voyage. In addition, the Bill permits companies to apply for a temporary licence to conduct a single voyage, which will allow companies to undertake a voyage at short notice. The Bill also aims to reduce licence reporting and processing times.

The Bill is currently before the Senate. To date, no debate has been scheduled.

Possible reforms to Part X and the way shipping lines can coordinate behaviour

Part X of the *Competition and Consumer Act 2010* (CCA) provides certain exemptions from competition law for coordination by shipping lines for cargo travelling to or from Australia. This is in contrast to all other industries which are subject to the full operation of the competition provisions in the CCA, and can only obtain exemptions through a transparent and reviewable public interest process set out in Part VII of the CCA.

The 2015 Harper Competition Policy Review recommended that Part X of the CCA be repealed, and that a class exemption issued by the ACCC be available for liner shipping agreements that meet minimum pro-competitive features. The Government response to the Competition Policy Review stated that the Government 'remains open' to this recommendation.

The ACCC considers that Part X is out-dated and unnecessary. Current administrative arrangements and the unique status afforded by Part X to international liner shipping result in a lack of transparency. Consulting on and developing a class exemption for shipping would provide the opportunity for the ACCC to assess the public benefits and detriments from the cooperative agreements between shipping lines. This process would also provide further evidence to policy makers and give them greater comfort in making a decision about whether to repeal Part X.

In 2017, amendments to the CCA provided the ACCC with the ability to issue class exemptions. The ACCC can issue a class exemption for specified conduct that may otherwise carry a risk of breaching competition laws, but is not harmful to competition, and/or is likely to result in overall public benefits. In effect, a class exemption, provides a 'safe harbour', allowing businesses to engage in the conduct specified without breaching the competition law. It removes the need for businesses to lodge individual applications with the ACCC to seek approval to engage in the specified conduct. Once an exemption is in place, businesses will be able to self-assess whether their proposed conduct falls within the terms of the class exemption.

The ACCC has had preliminary and informal discussions with some industry stakeholders in order to gain a greater understanding of Part X's role in the shipping industry. It intends to commence more in-depth work on a class exemption in 2019.

41 J Rodrigue, *The post-panamax syndrome: the challenges of the port of Cartagena*, PortEconomics, 2017.

2.13 The National Freight and Supply Chain Inquiry

In March 2017, the Australian Government announced an inquiry into the National Freight and Supply Chain Priorities. The inquiry sought to improve freight and supply chain efficiency and capacity and to reduce the costs of transporting goods through Australia's major national container ports, airports and intermodal terminals. The inquiry will inform the development of a long term (20 year) National Freight and Supply Chain Strategy through the COAG Transport and Infrastructure Council. The Strategy is currently being developed by the Commonwealth, state, territory and local governments for implementation in 2019.

Stakeholder views on the Proposed National Freight and Supply Chain Strategy

A total of 127 submissions were made to the inquiry. These submissions covered a wide variety of issues relevant to the containerised freight supply chain.

Several stakeholders, including the Export Council of Australia, Container Transport Alliance Australia, Australian Trucking Association, Freight Trade Alliance and the Australian Peak Shippers Association, raised the issue of stevedore infrastructure charges. Some stakeholders believe that infrastructure charges represent a market failure and have a damaging effect on the containerised freight supply chain. A number of stakeholders believe they should be regulated by an appropriate regulator.

Urban encroachment was also raised extensively. Urban encroachment is where residential development is being located increasingly closer to port facilities and transport networks. When this occurs, new residents may encounter amenity issues and lobby state and local governments to restrict or prohibit activity at the ports or along transport networks.

Coastal shipping is another issue that has been raised by stakeholders. Some stakeholders supported reforms that would allow more domestic freight to be carried on ocean vessels, arguing that this would help reduce freight costs. Others said that any reforms to coastal shipping rules must ensure that other modes of transporting freight such as road or rail must be able to compete on a level playing field.

Some stakeholders have argued that government planning policy does not adequately protect freight precincts and corridors, and that any future strategy should include measures to protect freight precincts and corridors from encroachment.

Recommendations of the Inquiry into National Freight and Supply Chain Priorities

On 18 May 2018, the Hon Michael McCormack MP, Deputy Prime Minister and Minister for Infrastructure and Transport, released the inquiry report. The inquiry recommended 54 priorities for action. The inquiry's recommendations included the following:

- Air and water transport corridors and buffer/transition zones should be preserved and protected, as well as land for future freight use in growth areas.
- All tiers of government should integrate appropriate land use planning protections for existing freight related activities.
- Governments should provide additional funding to ensure efficient rail freight connections to major ports and rail freight paths through metropolitan networks, including port rail projects.
- Governments should reduce regulatory barriers to facilitate increased coastal shipping that supports the efficient movement and operation of domestic freight.

2.14 Biosecurity Imports Levy

As part of its May 2018 budget, the Federal Government announced the implementation of the Biosecurity Imports Levy.

According to the Department of Agriculture and Water Resources (DAWR), the levy will contribute to onshore surveillance, diagnostic, data analytics, research and adoption of new technology to help detect, identify and respond to exotic pests and diseases earlier and ensure people and goods can move into Australia safely and more efficiently.⁴²

While DAWR is still exploring how best to implement the levy, the levy is planned to begin on 1 July 2019 and at this stage it is intended to be:

- imposed on all containerised and non-containerised cargo imported to Australia by sea, with the exception of military equipment
- imposed on stevedores
- set at \$10.02 per incoming twenty-foot equivalent sea container and \$1 per tonne for non-containerised cargo.

DAWR predicts that the levy will raise \$325 million over the three financial years from 2019-20, at an average of \$108 million per year over that three year period.

The industry has been critical of the levy, with the Australian Logistics Council, Australasian Railway Association, Ports Australia and Shipping Australia issuing a joint statement challenging the levy.⁴³ The statement criticised the lack of consultation in implementing the levy and the proposal's lack of detail around how the levy was calculated, and expressed concern about the proportion of the levy's proceeds that may be used for purposes unrelated to biosecurity. In addition, the industry is concerned that the levy will lead to a further increase in supply chain costs.

⁴² Department of Agriculture and Water Resources, *Biosecurity Imports Levy*, 2018, <http://www.agriculture.gov.au/about/reporting/budget/import-levy>.

⁴³ C Ray, *Row over levy to keep out invaders*, The Australian, 2018.

3. Stevedoring throughput and productivity

This chapter presents information on the volume of containers handled by stevedores in each of the monitored ports, as well as the size of the landside freight task. It also looks at how efficiently the stevedores handled both of these tasks.

In 2017-18, total throughput at Australian container ports increased by 11.6 per cent to a record 8.0 million TEUs. Melbourne was as Australia's largest stevedoring port, while the industry continued its increasing use of 40 foot containers. Significant growth in national throughput was spread disproportionately among the stevedores, with only DP World and Hutchison experiencing significant growth, while growth by other stevedores was materially less. VICT handled 0.1 million lifts in its first full year of operations in Melbourne. DP World and Patrick once again accounted for a dominant share of national container lifts, however their combined share continued to decrease.

Overall crane rates levels fell slightly over the past year, while labour and ship rates rose. Landside productivity improved with both truck turnaround times and truck utilisation rates improving.

The ACCC aggregates throughput information provided by container stevedores DP World, Flinders Adelaide, Hutchison, VICT, and Patrick. Data on the industry's productivity was generously provided by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) ahead of its Waterline 63 publication.

3.1 Throughput

Containerised throughput at monitored ports

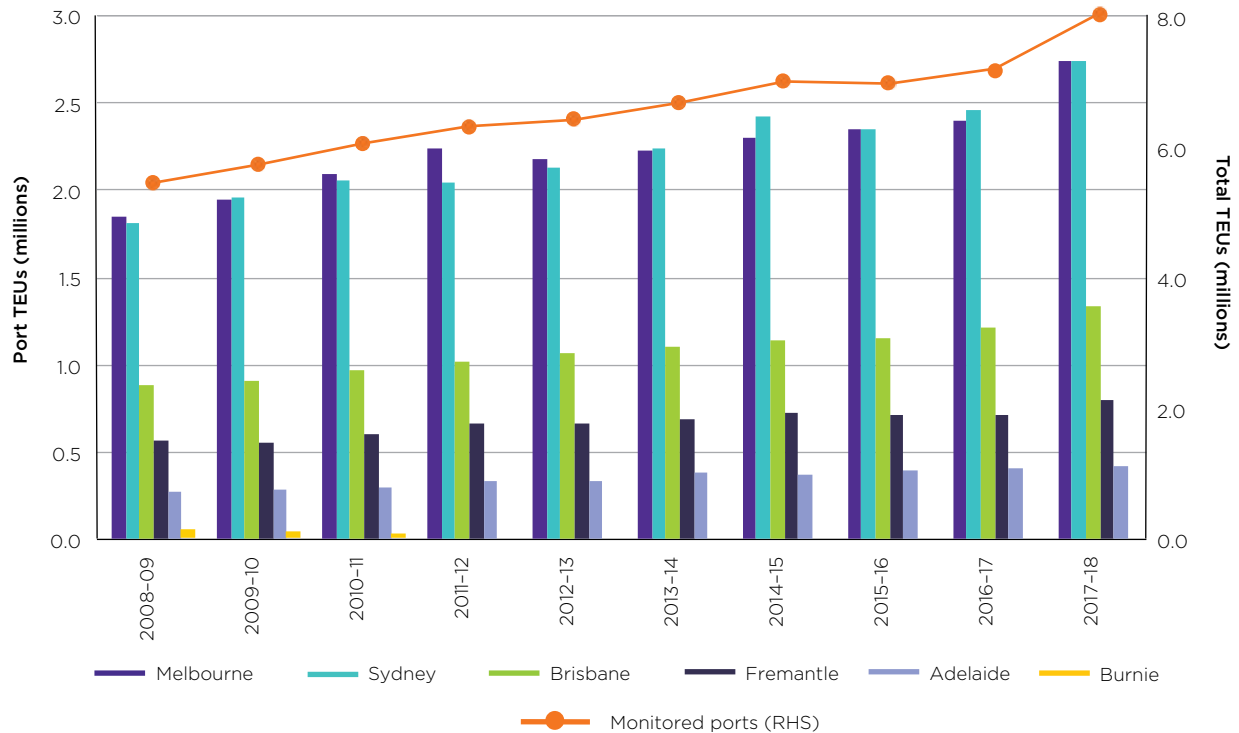
In 2017-18, the total number of 'TEUs handled'⁴⁴ at monitored Australian ports increased by 11.6 per cent to 8.0 million TEUs (see figure 3.1).

TEUs handled at all monitored container ports grew in 2017-18. The largest increase was in Melbourne, rising by 14.2 per cent following strong growth in Victoria's imports. This was driven by an increase in the imports of timber, furniture, metal manufactures, ceramic goods, aluminium and plastic ware.⁴⁵ TEUs also increased significantly in Fremantle (12.2 per cent) and Sydney (11.3 per cent), while volumes increased by a lesser amount in Brisbane (9.6 per cent) and Adelaide (2.9 per cent).

⁴⁴ 'TEUs handled' refer specifically to containerised cargo lifted by stevedores on and off ships using specialist equipment at international container terminal facilities. This excludes a small amount of containers handled at general cargo facilities.

⁴⁵ D Sexton, *Melbourne reports record trade year*, The Daily Cargo News, 2018.

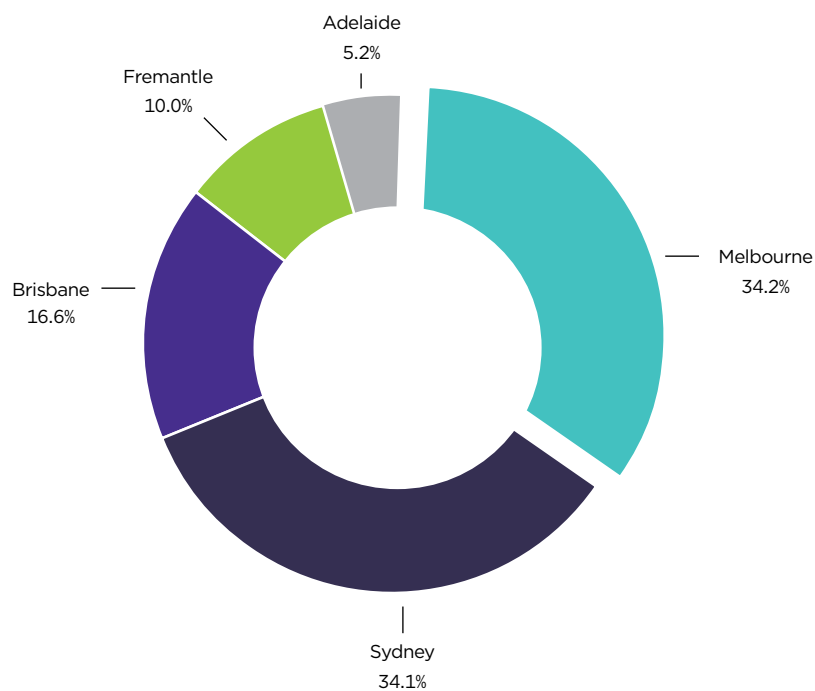
Figure 3.1: Container stevedoring throughput trends at monitored ports: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' throughput data.

Figure 3.2 shows that Melbourne was marginally Australia's largest container stevedoring port in 2017-18 after the port handled 34.2 per cent of total international container trade. All of the monitored ports posted record high container volumes. During the year, Melbourne handled 2.74 million TEUs, closely followed by Sydney with 2.73 million TEUs, while Brisbane handled 1.3 million TEUs, Fremantle 0.8 million TEUs and Adelaide 0.4 million TEUs.

Figure 3.2: Share of TEUs handled by monitored port, 2017-18



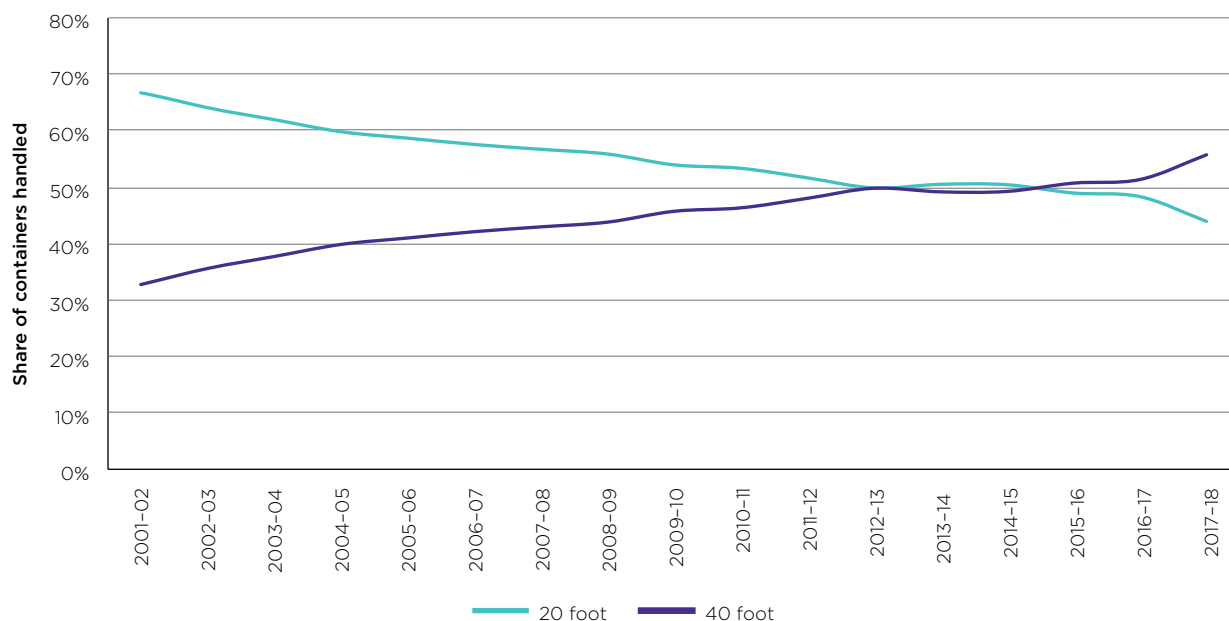
Source: ACCC analysis of stevedores' throughput data.

Increasing use of 40 foot containers

The industry is increasingly using 40 foot containers instead of 20 foot containers. Figure 3.3 shows that the share of 40 foot containers grew to 55.9 per cent in 2017-18 compared with a 44.1 per cent share for 20 foot containers. The share of 40 foot containers overtook 20 foot containers in 2015-16.

While there is some degree of substitutability between the two different-sized containers, cargo owners tend to use 20 foot containers to transport heavy export commodities, while 40 foot containers are favoured to import light or voluminous commodities. Modelling by BITRE suggests that the growth in 40 foot containers will likely continue in the coming years due to a larger expected growth in imports compared to exports.⁴⁶

Figure 3.3: Full containers by container type: 2001-02 to 2017-18



Source: ACCC analysis of stevedores' throughput data.

The growing use of 40 foot containers can impose challenges to Australian supply chains. These containers are twice the length of 20 foot containers and therefore, if arterial road networks are not upgraded or managed appropriately, they can cause a degree of congestion. Enabling increased utilisation of larger trucks, such as Super-B Doubles and A-Doubles, and facilitating increased utilisation of rail to transport containers may be required to handle the changing landside freight task.

Empty containers

Australia's containerised trade is imbalanced in terms of loaded import and export containers with the dominant direction being loaded imports. This trend generates a need to reposition a large number of empty containers to overseas markets such as Asia and New Zealand where they are needed.

Reflecting the growing imbalance among imports and exports, empty containers' share of total stevedoring throughput has grown from 19.1 per cent (1.2 million TEUs) in 2011-12 to 23.5 per cent (1.9 million TEU) in 2017-18.

Lifts per stevedore

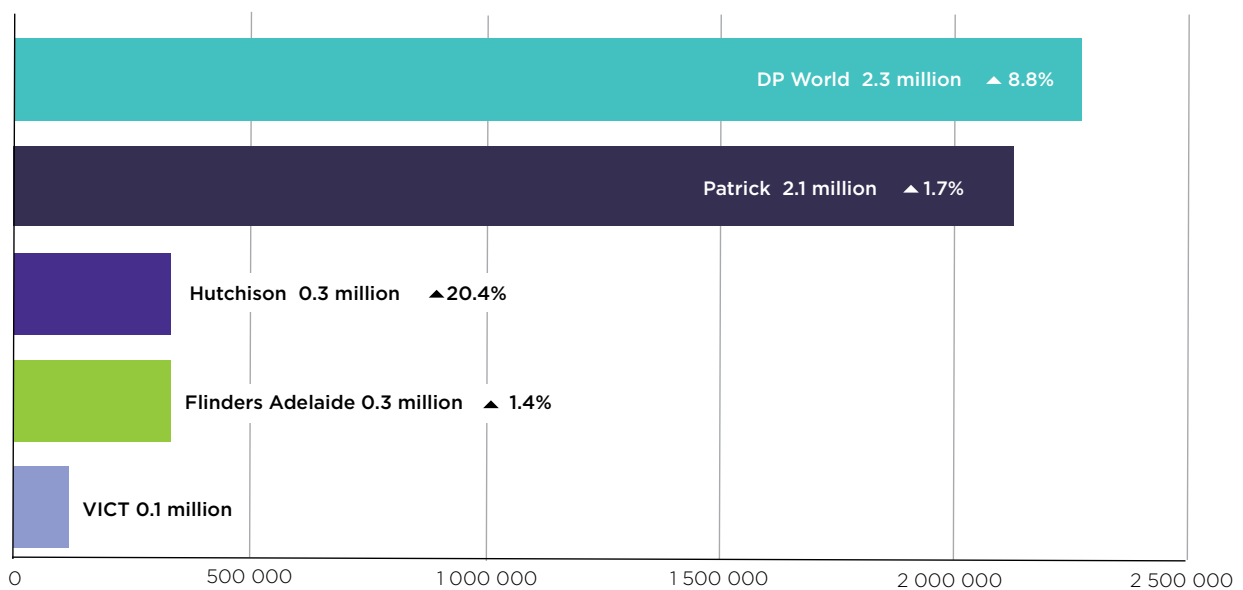
There were five stevedores operating in Australia's monitored container ports for all of 2017-18: DP World, Flinders Adelaide, Hutchison, VICT and Patrick. This is the first year that VICT's data is included in the report.

⁴⁶ BITRE, *Container and ship movements through Australian ports*, 2006, https://bitre.gov.au/publications/2006/files/wp_065.pdf

National container lifts increased by 8.1 per cent to 5.1 million during the year. However, benefits from the very strong throughput growth nationally were not shared evenly among the stevedores. Ultimately, this is because different stevedores have varying levels of exposure to trade growth in different shipping lanes by association with the shipping lines they have contracts with.

As figure 3.4 illustrates, DP World maintained its status as Australia's largest container stevedore in 2017–18 after its national lifts increased by 8.8 per cent to 2.3 million, while the increase reported by its major competitor Patrick was materially less. Hutchison experienced the most significant growth in lifts, which increased by 20.4 per cent to 0.3 million, which is reflective of the full-year impact of its service contract wins part-way through 2016–17. Flinders Adelaide's lifts increased by 1.4 per cent to 0.3 million, while VICT handled 0.1 million lifts in its first full-year of operation at its Webb Dock terminal.

Figure 3.4: Lifts per stevedore: 2017–18



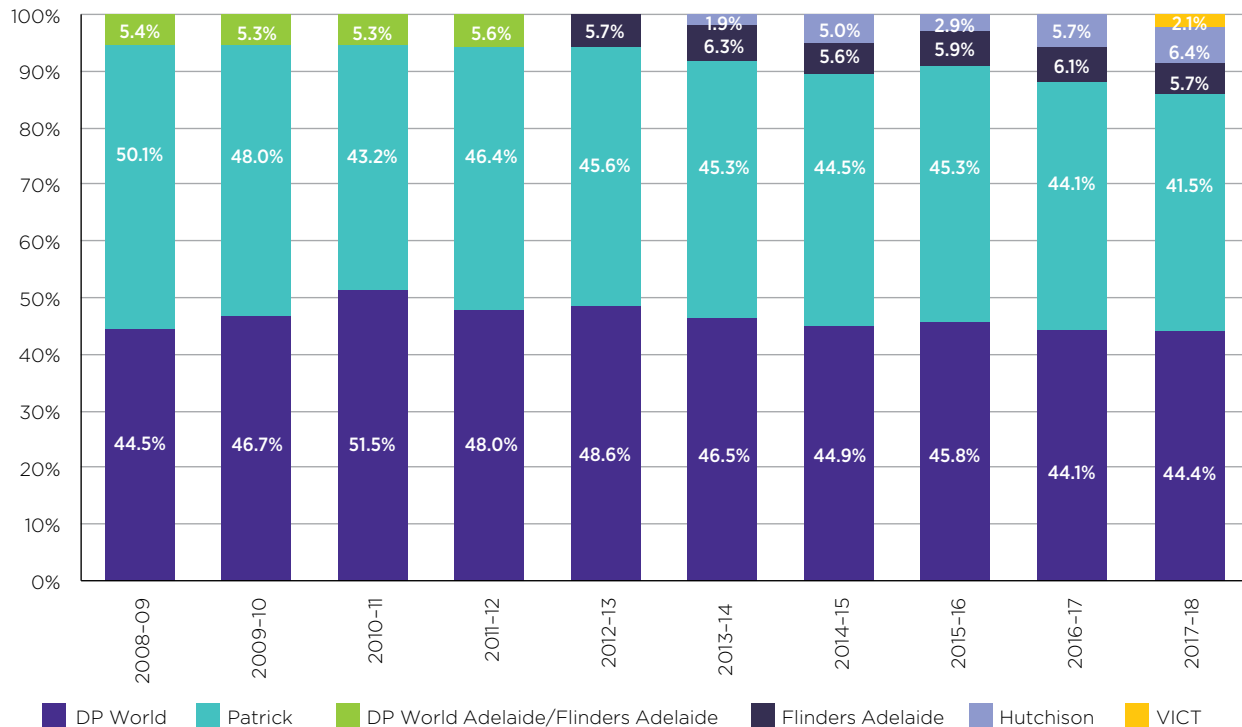
Source: ACCC analysis of stevedores' throughput data.

Figure 3.5 illustrates that Patrick and DP World have been dominant providers of container services in Australia's monitored ports. In the past ten years, Patrick's peak 'share of national container lifts'⁴⁷ was 50.1 per cent in 2008–09 while DP World's peak share was 51.5 per cent in 2010–11. Patrick and DP World's dominance in the supply of national stevedoring services is owed in large part to the geographic scale of their operations (each operate in all container ports except for Adelaide), their incumbency and long history of operating in Australian container ports, varying levels of entrenched loyalty among liner shipping customers and significant quayside and landside investments.

However, Patrick and DP World's shares of national lifts are beginning to be impacted by increased competition at the east coast ports. Indeed, Patrick and DP World's combined 2017–18 share of 85.9 per cent, while still high, was the lowest ever recorded in the ACCC's monitoring program. This trend may well accelerate in the future with Hutchison and VICT winning new shipping contracts in 2017–18.

⁴⁷ Stevedores' 'shares of national container lifts' do not represent their respective market shares. Calculations of market shares would need to take into account the product and geographic dimensions of the markets in which the stevedores operate.

Figure 3.5: Share of containers lifted by stevedore: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' throughput data.

3.2 Productivity

Changes in productivity are an important indicator of industry performance, as well as the quality of service provided to customers. For stevedores, productivity indicators partly reflect the quality of management and investment decisions made by the stevedores to offer a more efficient service. They also reflect the productivity of labour in the use of equipment and servicing ships.

Quayside productivity

BITRE's [Waterline](#) publication reports on trends in quayside productivity in stevedoring operations in the monitored container ports: Adelaide, Brisbane, Burnie, Fremantle, Melbourne, and Sydney.

The three key indicators of quayside productivity are outlined below. The measures show that Australia's quayside productivity was mixed:

- Net crane rate—This is an indicator of capital productivity and reflects the number of containers handled per crane hour while quay cranes are in operation.⁴⁸ In 2017-18, the net crane rate decreased by 2.3 per cent to 28.5 containers per hour.
- Elapsed labour rate—This is an indicator of labour productivity and measures the number of containers handled for the period of time between labour first boarding a container ship to labour last leaving the ship, less any time when labour was not working due to delays.⁴⁹ In 2017-18, the elapsed labour rate increased by 1.3 per cent to 47 containers per hour.

⁴⁸ The net crane rate is measured by dividing the total number of containers handled by the elapsed crane time. The elapsed crane time is the crane time allocated by the stevedores. It is computed as the total allocated crane hours less operational and non-operational delays. See: BITRE, *Waterline* 60, 2017.

⁴⁹ BITRE, *Waterline* 60, 2017.

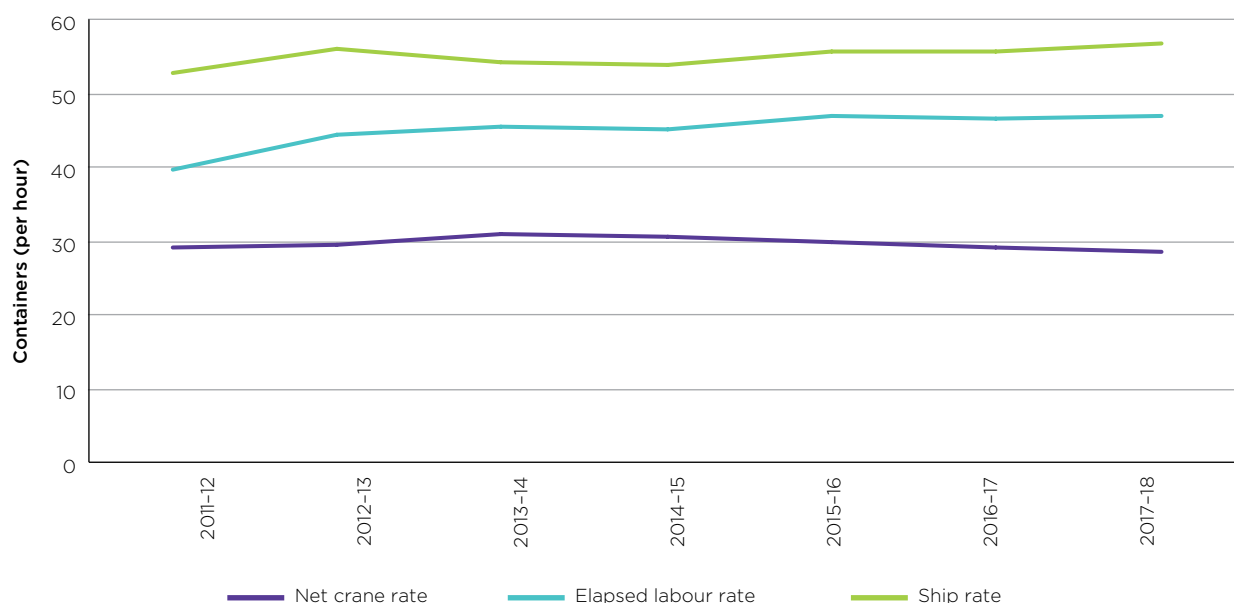
- Ship rate—This reflects the overall productivity of terminal operations while the ship is being worked by measuring the average number of containers transferred to and from ships by cranes and labour in an hour.⁵⁰ In 2017-18, the ship rate increased by 2.3 per cent to 56.9 containers per hour.

These indicators measure the productivity of cranes and labour that are allocated to servicing ships. They therefore do not measure amounts of spare capacity or the amount of labour and capital that is available but not actively working a ship.

While productivity levels have remained stable in 2017-18, quayside productivity has significantly improved since the ACCC's monitoring program began in 1998-99 and remains close to record-high levels.

However, Australian quayside productivity levels do not compare favourably with other highly industrialised economies where significantly higher performance benchmarks were being achieved a decade ago.⁵¹ This finding is consistent with views raised by numerous stevedores and shipping lines. Indeed, comparing Australian national quayside productivity with New Zealand has revealed that local productivity levels are much lower.⁵² Quayside productivity trends are shown in figure 3.6 below.

Figure 3.6: Quayside productivity indicators, Australia: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

Crane productivity, a measure of capital productivity, has trended down from 2011-12, with large gains in smaller ports such as Fremantle and Adelaide being more than offset by falling net crane rates in larger ports such as Sydney and Brisbane. Net crane rates peaked at 30.8 containers per crane hour in 2013-14, but has since receded to 28.5 by 2017-18. While net crane rates have long remained above the Government's 1998 benchmark of 25 container movements per hour, strong improvements in capital productivity achieved immediately after the waterfront reforms of the late 1990s have not continued. Furthermore, stakeholders note that Australian crane productivity levels are much lower than 35 to 40 container moves per crane hour achieved in other overseas ports.

Australian crane productivity levels may improve in future as recent industry entrants Hutchison and VICT establish their operations. Shipping lines view crane rates as a key measure of service quality

50 The ship rate is calculated by multiplying the net crane rate by crane intensity. Crane intensity is defined as the total number of allocated crane hours divided by the elapsed time from labour first boarding the ship to labour last leaving the ship. See: BITRE, Waterline 60, 2017.

51 New Zealand Ministry of Transport, *Container productivity at New Zealand ports*, 2011.

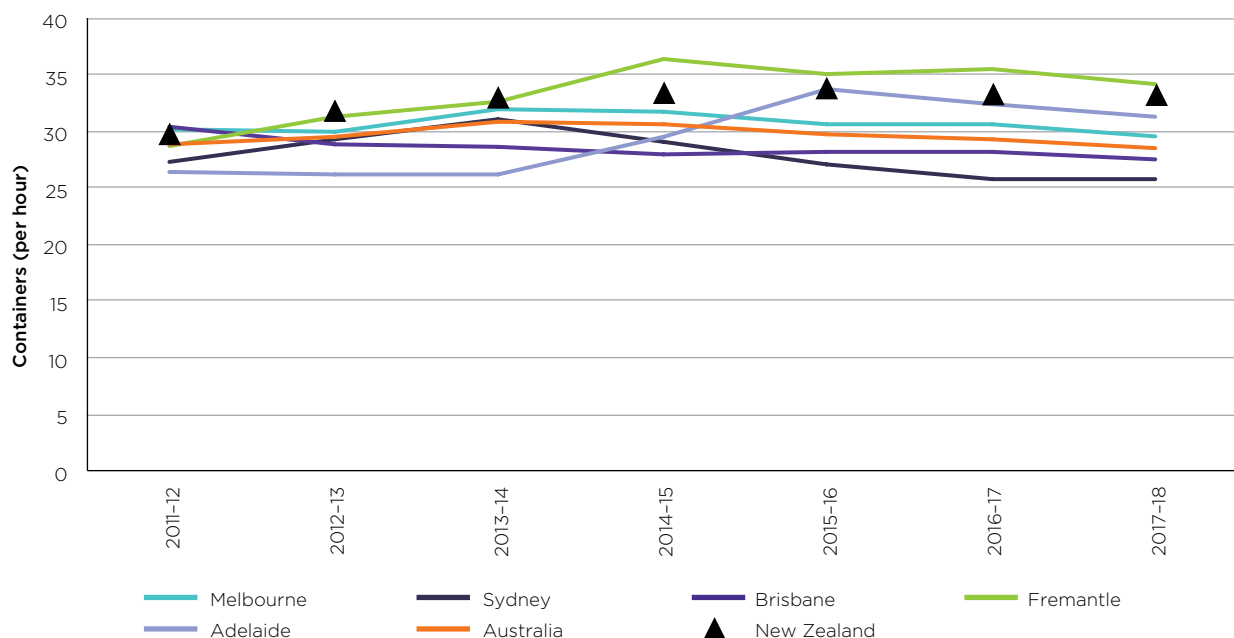
52 New Zealand Ministry of Transport, *Container handling: Quarterly container handling statistics*, 2017. The New Zealand Ministry of Transport and BITRE employ similar methodologies in calculating quayside productivity.

provided by stevedores. As such, shipping lines may be able to leverage increased competition in stevedoring to extract higher crane productivity during contract negotiations.

Crane productivity may also increase in line with the growth in container vessel sizes being deployed on Australian trade lanes. This is because larger, newer and better equipped ships tend to be easier to load and unload. Furthermore, larger ships, depending on the way cargo is stowed, can be readily worked by more than one crane.⁵³ Larger ships may also enable higher exchanges during port calls; there is a minimum efficient scale in deploying container cranes and higher exchanges may enable stevedores to justify using more than one crane to work a ship. However, larger ships also increase the average hoist distance which may mean that less container movements may be realised. Furthermore, if cranes are having to move long distances to service different rows due to the way cargo has been stowed, crane rates may also be negatively impacted.

Figure 3.7 shows the trend in crane productivity (expressed as annualised containers per hour) at each of the monitored ports. In 2017-18 Fremantle had the highest productivity at 34.1 containers per hour, however it was lower than in 2016-17. Melbourne, Brisbane and Adelaide also reported reductions in net crane rates in 2017-18. Crane productivity in Sydney did not improve from the previous year's level at 25.8 containers per hour.

Figure 3.7: Net crane rates at each container port: 2011-12 to 2017-18



Source: BITRE, *Waterline* (from forthcoming publication no 63) and New Zealand Freight Information Gathering System 2018.

Labour productivity levels have been steadily increasing since the ACCC's monitoring program began in 1998-99. Overall labour productivity improved (by 5.8 per cent) in the past six years, although it declined slightly (by 1.3 per cent) in 2017-18.

Figure 3.8 shows the trend in labour productivity (expressed as annualised containers per hour) at each of the container ports. Melbourne's labour force remained significantly more productive than other ports in 2017-18 with 54.4 container movements per hour. Brisbane continued in its position of being the least productive port with 41.7 container movements per hour since 2014-15, however Brisbane's labour productivity almost caught up to be level with Adelaide's in 2017-18.

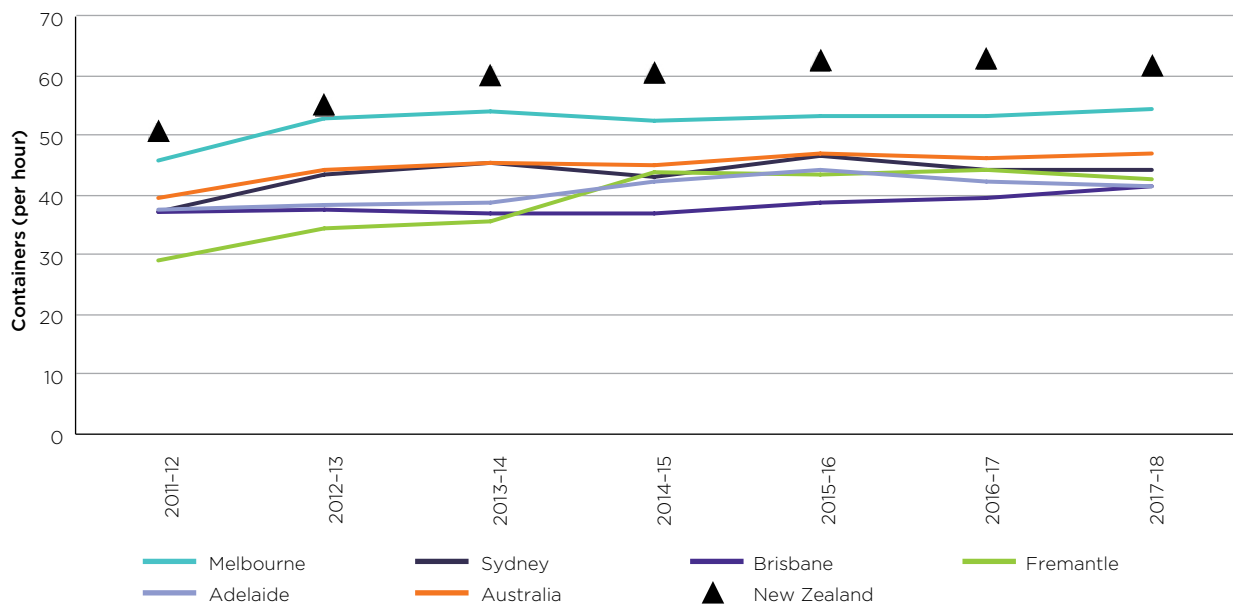
New Zealand ports have consistently recorded higher labour productivity rates compared to the monitored Australian ports.

The impact of non-operational delays such as industrial stoppages, closed-port holidays, no labour being allocated to ships and delays from handling non-conventional cargo (such as breakbulk) are

⁵³ Productivity Commission, *International Benchmarking of Container Stevedoring*, 2003.

excluded from BITRE's measures of labour productivity. Elapsed labour rate therefore is a measure of labour productivity while it is working. It does not accurately reflect the productivity of labour in turning a ship around.

Figure 3.8: Elapsed labour rate at each container port: 2011-12 to 2017-18

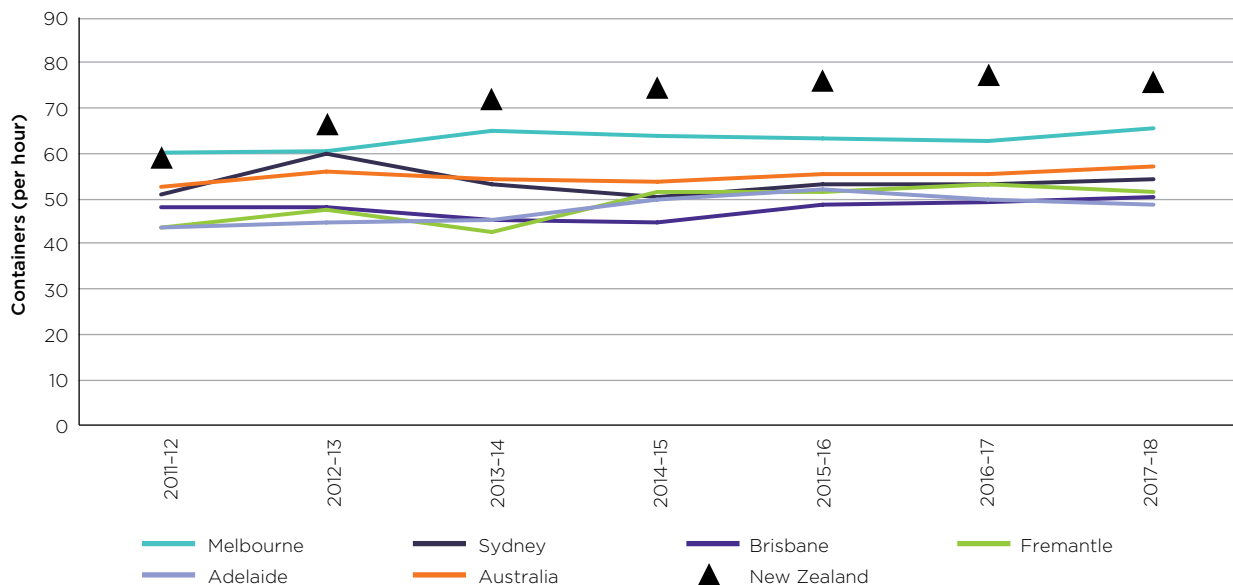


Source: BITRE, Waterline (from forthcoming publication no 63) and New Zealand Freight Information Gathering System 2018.

Ship rates have improved significantly since the ACCC commenced monitoring in 1998-99. This measure is influenced by the crane intensity (which is a measure of the number of cranes stevedores allocate to service a ship) as well as the efficiency of individual cranes and overall terminal operations.

Figure 3.9 illustrates the trend in ship rates (expressed as annualised containers per hour) at each of the container ports. Over the past seven years, Melbourne has consistently recorded the highest productivity among the monitored ports at 65.7 container moves per berth hour. Ship rates in Australian ports are currently well below those achieved in New Zealand ports.

Figure 3.9: Net ship rate at each container port: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63) and New Zealand Freight Information Gathering System 2018.

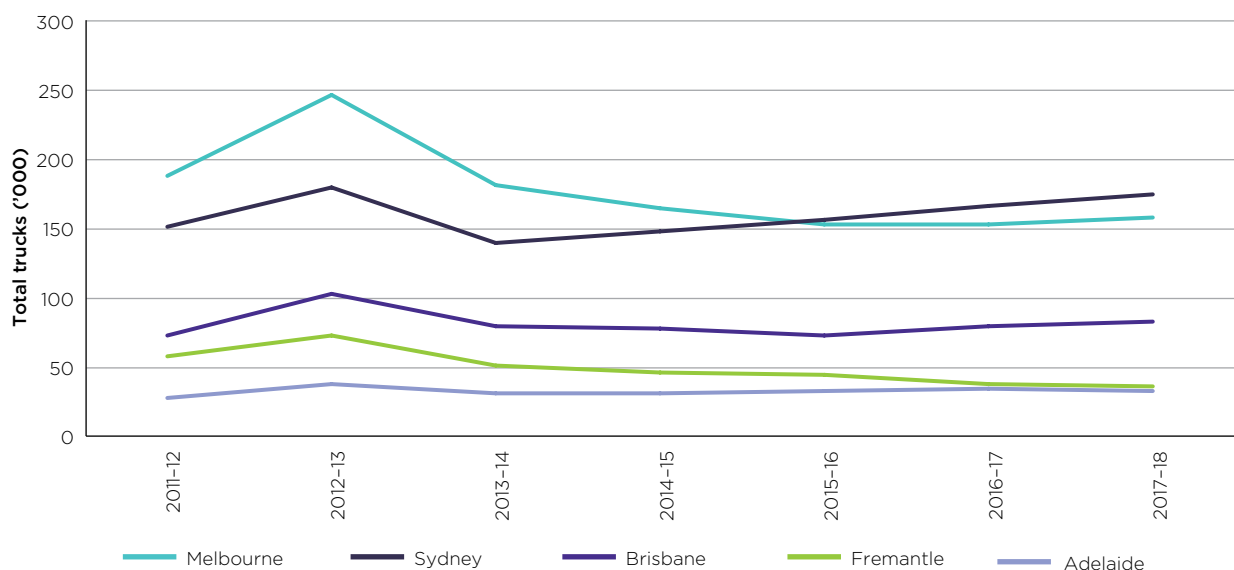
Landside freight task and productivity

BITRE publishes a range of landside performance indicators. These relate to the number of containers transported by truck or rail, general performance, and the time of the week in which trucks moved the freight.

The size of the landside freight task is predominantly a function of the number of containers being handled. Consequently, the size of the landside freight task is greatest in Sydney and Melbourne, Australia's two largest container ports (see figure 3.10).

For all the ports, containers remain predominantly transported via trucks on roads. Sydney continues to have the highest number of trucks at their container terminals. The difference in the number of trucks visiting Sydney versus Melbourne can be explained by the trucks that visit Melbourne's terminals are able to carry larger loads.

Figure 3.10: Number of trucks at each container terminal: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

Figure 3.11 below shows the proportion of containers carried via rail nationally and at each monitored port. The number of containers transported by rail across all Australian container ports is considered low at 11.4 per cent in 2017-18. Fremantle currently has the highest share of containers carried by rail of 17.9 per cent. This result is likely due to the increase in the Western Australian Government's container rail subsidy from \$30 per TEU to \$50 per TEU.⁵⁴

In 2017-18, Adelaide also had a high percentage of containers being transported by rail at 17.1 per cent relative to other monitored ports. Brisbane's usage of rail continues to be the lowest among the monitored ports at 3.0 per cent.

The relatively low volumes of containers transported by rail in the monitored ports is due to the high cost of rail operations relative to road transport, especially over short distances, and issues on the reliability of service provision.⁵⁵ However, most port authorities recognise the importance of expanding the number of containers being transported by rail. Moving more containers by rail eases congestion in arterial roads servicing ports and relieves noise and air pollution in urban areas near ports.⁵⁶ NSW Ports has an objective to move 3 million TEU annually by rail to and from Port Botany in the long term.⁵⁷

⁵⁴ R Saffioti, *Subsidy increased to increase freight on rail*, Media Release, 2017.

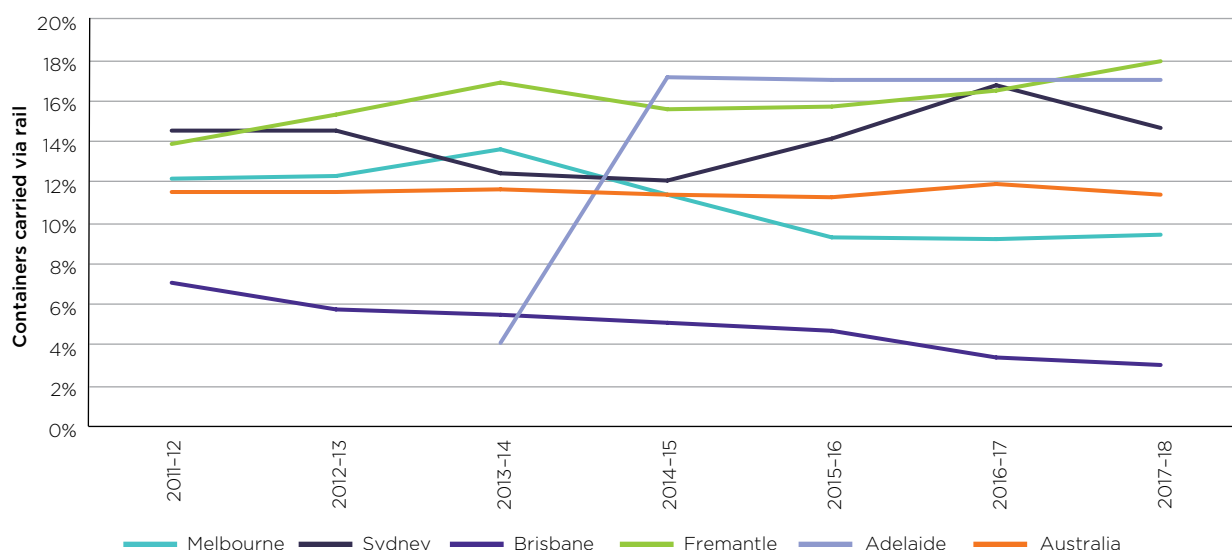
⁵⁵ BITRE, *Why short-haul intermodal rail services succeed*, 2016.

⁵⁶ Ibid.

⁵⁷ NSW Ports, *NSW Ports welcomes confirmation of funding of the Port Botany Freight Line duplication*, 2018.

Recent investment by the Commonwealth Government worth around \$400 million⁵⁸ to duplicate 2.9 kilometres of freight line in Sydney is expected to improve certainty and reliability of rail freight operations to and from Port Botany. Similarly, the Victorian Government's recently released freight plan looks to establish port rail shuttles and supports the Port of Melbourne's plan to develop on-dock rail terminals for Swanson Dock.

Figure 3.11: Freight on rail: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

Truck turnaround time

Truck turnaround time (TTT) is an indicator of landside productivity and reflects the length of time stevedores take to load or unload containers on trucks at their terminals. TTT therefore is a common measure of service quality provided by stevedores to road transport operators.

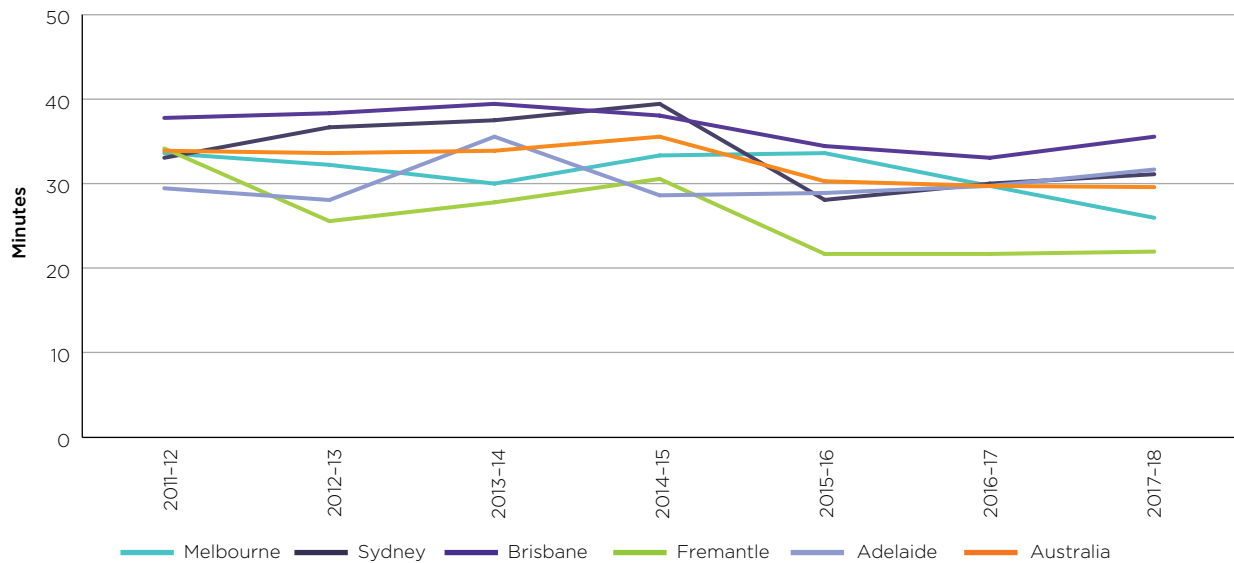
TTT is driven by the performance of the terminal yard equipment such as straddle carriers, rubber-tyred gantries and rail-mounted gantries. TTT is also affected by trends on containers per truck, together with the efficiency of terminal configurations. The distance that yard equipment has to travel between exchange grids can have an impact on the number of lifts it can make.

Furthermore, yard equipment is finite. Allocating more equipment to unloading of ships may mean that servicing of road trucks can be impacted, which can result in increased TTT, queuing and congestion at stevedore terminals. Alternatively, if a disproportionate amount of yard equipment is allocated to service land transport operators, quayside service quality may suffer.

Figure 3.12 illustrates the average TTT for each of the monitored container ports. Average TTT at the monitored ports has trended downwards over the past seven years, improving from 33.9 minutes in 2011-12 to a record low of 29.6 minutes in 2017-18. Average TTT slightly improved over the past year, decreasing by 0.2 minutes. In 2017-18, Fremantle TTT continued to be the best of all container ports in terms of turnaround times while Brisbane has been taking the most time to process trucks. Average truck processing times improved by 3.9 minutes in Melbourne, but deteriorated by 1 minute in Sydney.

⁵⁸ Department of Infrastructure and Regional Development, *Port Botany Rail Line Duplication*, 2018.

Figure 3.12: Average truck turnaround times: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

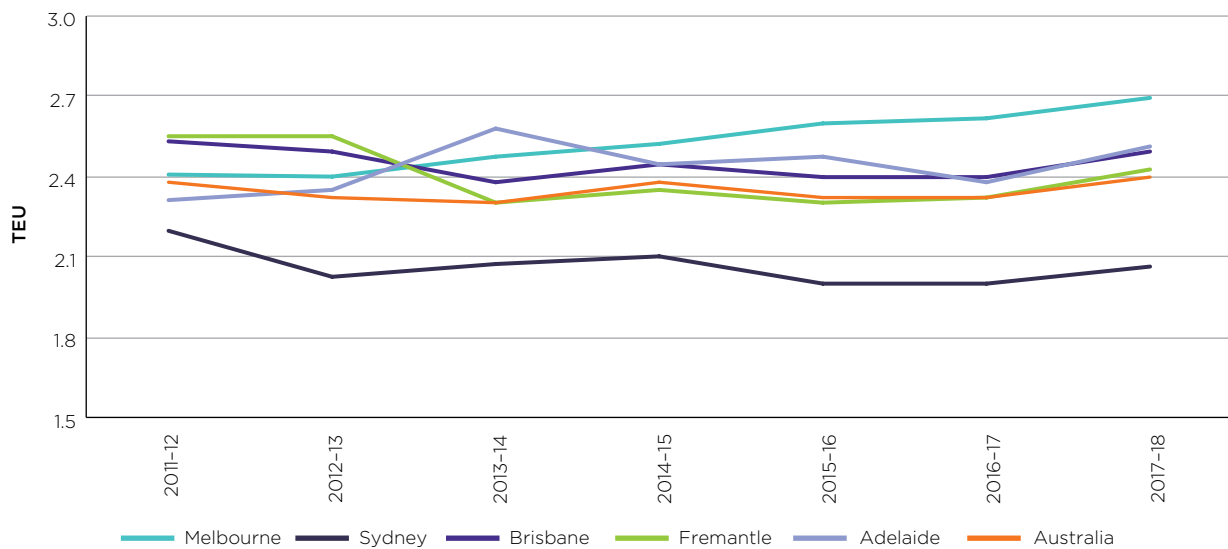
Truck utilisation on container terminals

While truck turnaround times are an important measure, seeking to improve landside productivity levels by minimising TTT alone could be problematic. Indeed, DP World has noted that finding landside productivity efficiencies from TTT alone could encourage more single truck deliveries, thereby increasing the number of trucks on the road. Increasing average truck loads, while potentially leading to poorer TTT, would have the benefit of improving landside congestion on container terminals by reducing the number of trucks.

However, as shown in figure 3.13 below, the trend in the average TEUs loaded on trucks in Australian container ports has been mixed in the past seven years. Over that period, Sydney, Brisbane, and Fremantle's truck utilisation rates have deteriorated, while Melbourne and Adelaide's have improved. However, in 2017-18, truck utilisation increased at all ports.

These trends have meant that truck utilisation at Australia's ports has increased slightly in the past seven years. Melbourne had the highest average TEU per truck in 2017-18, with around 2.7 TEU per truck, while Sydney had the lowest with around 2.1 TEU per truck.

Figure 3.13: Average TEU per truck: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

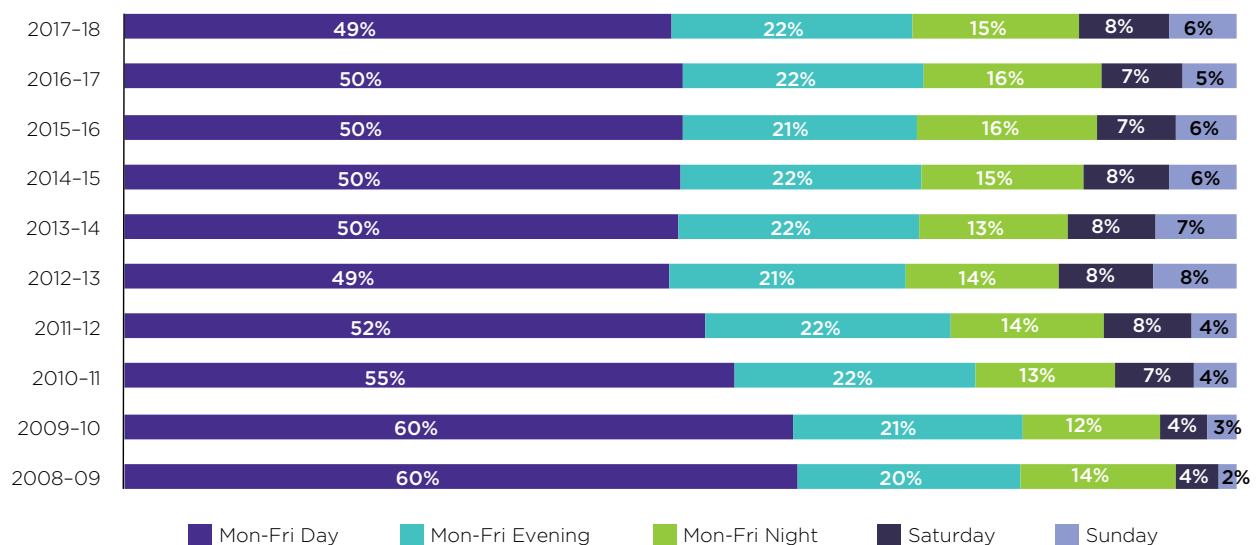
Managing demand for access to container terminals

It is increasingly important for stevedores and transport companies to operate outside of standard business hours. This is in order to manage landside congestion at the ports and to avoid delays associated with using the roads and rail networks at peak periods.

Figure 3.14 shows that despite most container terminals offering around the clock operations, daytime weekday access is the most used. In 2017-18, 49 per cent of VBS activity was recorded during Monday to Friday between 6 am and 6 pm. This figure has been around the 50 per cent mark for the past six years. This is likely to have implications for those ports which are located in highly urbanised areas and where existing road networks cater for passenger and freight demands.

Evening and night-time slots on Monday to Friday are the next most popular times for container movements by truck. A reason for the low non-peak use may be a mismatch between the hours of operation of stevedores and businesses in other parts of the supply chain (such as empty container parks, depots, and warehouses). There may also be additional costs to businesses for operating out of hours.

Figure 3.14: Adjusted vehicle booking system usage, Australia: 2011-12 to 2017-18



Source: BITRE, Waterline (from forthcoming publication no 63).

4. Industry financials

This section looks at revenues, costs, profits and returns in the container stevedoring industry as a whole. Information presented in this chapter was supplied by the five stevedoring companies operating in the monitored ports during 2017-18: Patrick, DP World, Hutchison, Flinders Adelaide and VICT.

The ACCC's monitoring shows that the consolidation among shipping lines and increased competition among stevedores have resulted in less revenue being earned by stevedores from quayside services. However, increases in revenue earned from infrastructure charges have contributed to an overall increase in total revenue. Broad increases in operating costs among existing stevedores, as well as the inclusion of VICT to the monitoring program, have negated revenue increases and resulted in sharp falls in industry profitability.

Figures presented in this chapter consolidate individual information supplied by the stevedores. As such, the figures mask the large variation in the operational performance outcomes among incumbent stevedores and new entrants.

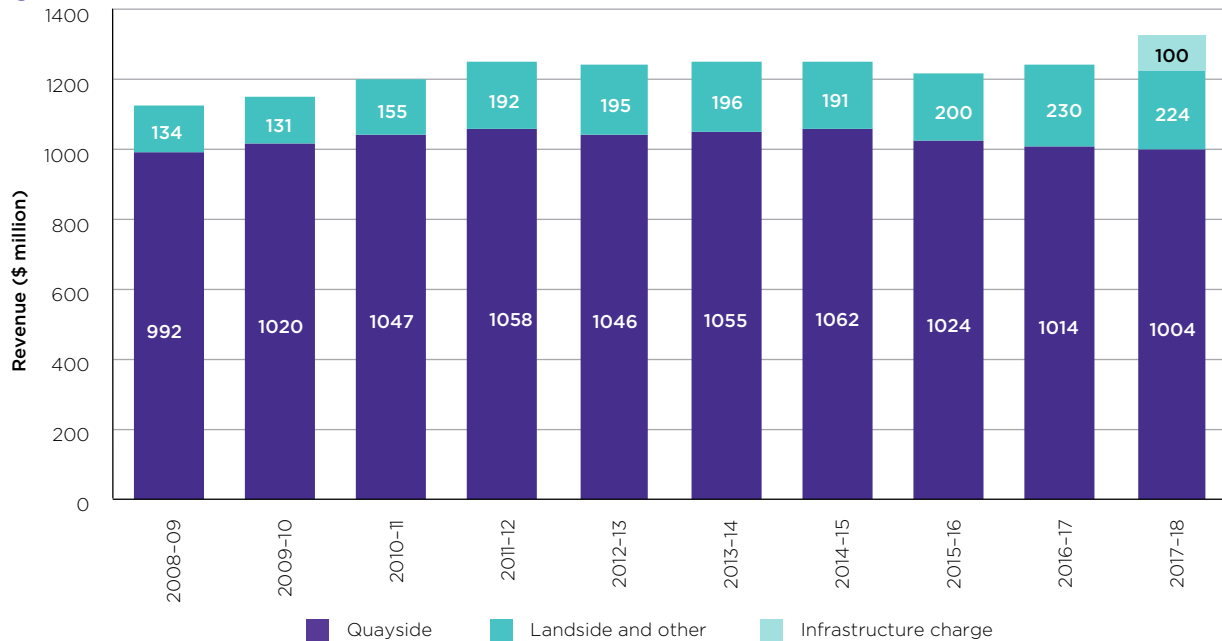
4.1 Revenues

Total revenue

Total revenue accounts for all revenue that stevedores earn across their suite of services, from 'quayside' services to shipping lines as well as from 'landside and other' services.

In 2017-18, total revenue earned by the container stevedoring industry increased by 6.8 per cent in real terms to \$1328 million. Figure 4.1 outlines trends in stevedores' total revenue over the past decade. The column for 2017-18 includes a separate component for infrastructure charges, while in the previous seven years from 2010-11 (when the charges were first introduced) infrastructure charges revenue is included under landside and other revenue.

Figure 4.1: Total revenue: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' revenues. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

Note: Infrastructure charges have been collected by stevedores since 2010-11.

Quayside revenues

Quayside revenues⁵⁹ account for all revenue earned by stevedores in the facilitation of services such as the discharging and loading containerised cargo on ships. Quayside revenues are primarily earned from shipping lines (or a consortium of shipping lines) that stevedores have entered into long-term contracts with. However, revenue from other stevedores in the case of 'sub-contracting'⁶⁰ ships, which are usually immaterial, are also included in quayside revenues.

Despite the strong increase in demand for quayside container stevedoring services during the year, quayside revenue fell by 1.0 per cent in real terms to \$1004 million in 2017-18. Over the past ten years, while total container lifts increased by 37.6 per cent, total quayside revenues only increased marginally at 1.1 per cent.

Stevedores have pointed to changes in market supply and demand in recent years as having caused the lack of growth in quayside revenues. In particular, stevedores noted the significant increase in competition in the supply of quayside services following the recent entries of Hutchison and VICT on the east coast as well as reduced pricing power over liner shipping customers due to mergers and acquisitions in that industry.

Landside and other revenues

Landside and other revenue⁶¹ consists of revenue from the provision of services such as receipt and delivery of containers, yard handling services, storage, empty container repositioning, reefer monitoring, hazardous container handling and other ancillary services to land transport operators and, to a lesser extent, shipping lines.

Aggregated revenue from landside and other sources increased by 41.4 per cent to \$324 million in 2017-18. Much of this growth is attributable to significant increases in infrastructure charges as well as growth in VBS, storage and other undefined sources of revenue.

⁵⁹ Previous container stevedoring monitoring reports have referred to quayside revenue as 'stevedoring revenue'.

⁶⁰ Stevedores sometimes have to 'sub-contract' a shipping service that they have the contract of to another stevedore for defined periods, subject to the approval of the shipping line customer. This is usually because the stevedore does not have the capacity to service ship. Reasons may be due to terminal congestion, terminal maintenance, commissioning of new equipment or industrial disputes. The ACCC understands that average quayside lift fees are higher for sub-contracted ships.

⁶¹ Previous container stevedoring monitoring reports have referred to landside and other revenue as 'non-stevedoring revenue'.

A brief discussion of broad trends in major components of landside and other revenue over the past year is presented below.

- **Infrastructure charges**—Revenue from infrastructure charges has significantly increased during the year owing to new or substantial increases in existing charges at all ports. Stevedores collectively earned \$100 million from the infrastructure charges in 2017–18, which is around 7.6 per cent of total revenues. These charges are discussed further in section 2.5.
- **Vehicle Booking System**⁶²—VBS is a web based online slot booking system that facilitates various receipt and delivery processes of containers between stevedores and land transport operators. VBS revenue increased by 13.0 per cent in real terms in 2017–18 to \$40.7 million. The increase is attributable to strong growth in containers passing through stevedores' terminals during the year as well as various increases in VBS tariffs such as per slot booking fees, registration fees and other processing fees. Stevedores' rationale for increasing VBS tariffs were broadly similar to justifications for increased infrastructure charges.
- **Storage**—While containers handled by stevedores are subject to a 'Free Storage Period' of three working days, stevedores charge their customers for import containers that are not collected within this period. These charges are paid for predominantly by land transport operators and passed on to cargo owners, however some are paid for by shipping lines. Typical storage tariffs set by stevedores are high. The ACCC understands that high storage prices are designed to encourage cargo owners and land transport operators to minimise time spent by imported containers at terminals and ultimately facilitate better utilisation of limited terminal capacity. Real storage revenue rose 17.3 per cent to \$35.6 million in 2017–18. The increase is attributable to a general increase in storage tariffs and higher container dwell times at some terminals, in particular at Fisherman Island and Swanson Dock.
- **Container repositioning**—The imbalance between the number of imported containers entering Australia and local demand for containers for export use contributes to a surplus of empty containers that need to be repositioned to other markets where they are needed.

Revenue from container repositioning activities fell by 3.9 per cent in real terms to \$12.7 million in 2017–18 following a 99.5 per cent increase in the previous year. Revenue earning repositioning activities, in particular direct returns of empty containers to stevedore terminals, have been reduced at some terminals during the year due to congestion issues.

Revenue from landside and other sources has become an increasingly important source of income for the stevedores over the past decade. Indeed, while there has been weak growth in quayside revenues over the past ten years, aggregated revenue from landside and other sources has more than doubled at 141.5 per cent. Furthermore, in 2017–18, revenue from landside and other sources accounted for 24.2 per cent of total revenues, a significant increase from 2008–09 levels when it was only 11.9 per cent of total revenues.

Unit revenue

Information on actual prices charged by stevedores for all services is not collected as part of the monitoring program as a significant portion of this is commercially confidential. Instead, the ACCC uses unit total revenue measures to provide an indication of average service prices per unit of output. The ACCC uses two measures for average prices: revenue per lift and revenue per TEU.

Revenue per lift is a standard industry indicator of average prices charged per unit of container handled. Revenue per lift is calculated by dividing revenue by the total number of container lifts.

In 2017–18, stevedores posted a decrease in average revenue per lift of 1.2 per cent to \$258.9, the sixth consecutive decrease since 2011–12. Indeed, the average quayside revenue per lift fell by 8.5 per cent to \$195.6 during the year, while average landside and other revenue per lift increased by 30.7 per cent to \$63.3.

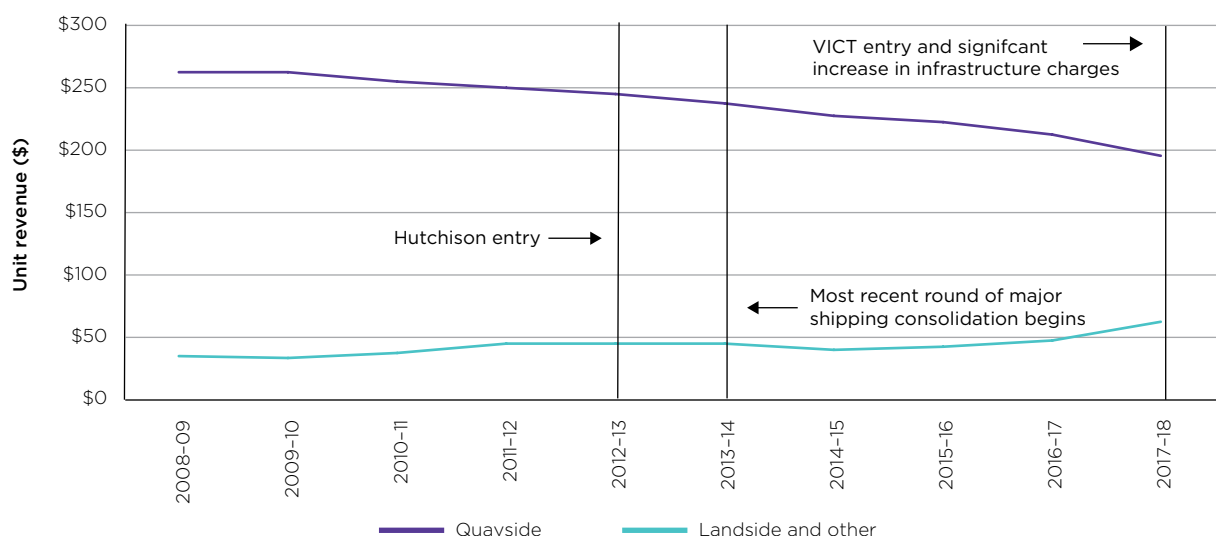
⁶² Hutchison employs a similar platform but calls it the 'Truck Appointment System'.

Quayside revenue per lift has fallen by more than 20 per cent in the five years since Hutchison entered the industry. In contrast, the amount of landside and other revenue increased by 37.7 per cent over the same period.

Over the decade, the average revenue per lift fell by 13.5 per cent in real terms and the average revenue per quayside lift fell by 25.7 per cent. Average landside and other revenue per lift increased by 77.2 per cent over the decade.

Figure 4.2 illustrates the trends in revenue on a per lift basis over the last ten years. The chart also delineates key industry events over the period which have contributed to the pricing levels and strategies adopted by stevedores today.

Figure 4.2: Trends in revenue per lift: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' revenues. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

Revenue per TEU is calculated by dividing revenue by the total number of TEUs handled. Per TEU revenue is thus a weighted average of revenue earned on all types of containers. We note that a relative increase in the use of 40 foot containers can have a downward effect on average measures of revenue expressed in terms of TEUs, as stevedores receive the same revenue from servicing a 40 foot container as they do from a 20 foot container.

In 2017-18, average revenue per TEU fell by 4.3 per cent in real terms to \$166.0, quayside revenue per TEU fell by 9.6 per cent to \$125.4 and landside and other revenue per TEU increased by 26.7 per cent to \$40.6.

Over the decade, average revenue per TEU fell by 20.1 per cent in real terms, quayside revenue per TEU fell by 31.5 per cent and landside and other revenue per TEU increased by 63.6 per cent.

4.2 Costs

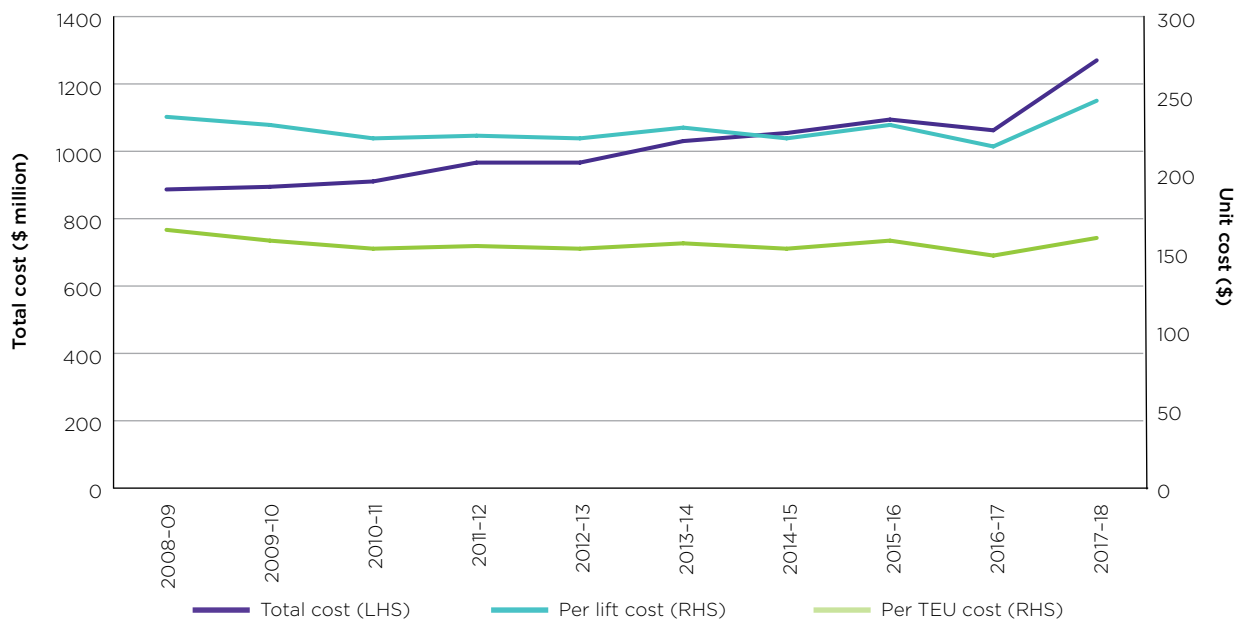
Total and per unit costs

Operating costs incurred by container stevedores are primarily from the employment of labour, equipment and other handling resources necessary for the loading and discharge operations on the quayside and subsequent receipt and delivery processes on its landside interface. Stevedores also incur corporate overhead costs from resources used to support its quayside and landside operations. Total costs generally increase over time in line with the increase in demand for container stevedoring services.

Figure 4.3 below illustrates that stevedores' real total costs have been trending upwards over the past 10 years. In 2017-18, total costs increased by 19.7 per cent in real terms to \$1268 million owing to

significant increases in overall labour, equipment, and particularly property-related costs during the year. On a per lift basis, total costs increased in real terms by 10.7 per cent to \$247.2, while on a per TEU basis, total costs increased by 7.2 per cent to \$158.5.

Figure 4.3: Trends in total and unit costs: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

It is worth noting the cost inflationary impact caused by the inclusion of VICT in 2017-18. Indeed, the supply of container stevedoring services is capital intensive. Various tangible assets used in the supply of this service have long expected economic lives which are uneconomical to operate on small scales.⁶³ The introduction of significant new capacity in Melbourne by VICT has diluted economies of scale by operators at that port as significant new fixed costs have been introduced without a corresponding increase in revenue. However, this dilutionary effect may lift if market demand grows to match the expansion in capacity.

Labour costs

Labour costs primarily involve the costs of hiring labour for the provision of quayside and landside container stevedoring services but also include costs from hiring maintenance staff and management and other support staff.

Total labour costs grew by 12.1 per cent in real terms in 2017-18 to \$653.2 million. Labour costs grew by 3.7 per cent in per lift terms and 0.5 per cent in per TEU terms during the year. The growth in total labour costs is far higher than the growth in labour costs on a per lift and per TEU basis due to the strong growth in lifts and TEU during 2017-18. Labour costs per lift are only marginally lower than they were ten years ago (lower by 2.6 per cent).

Stevedoring firms generally have some flexibility in rostering dockside staff, whose wages constitute the majority of labour costs, as required by changes in demand to their services. Indeed, the need to employ a significantly higher number of staff to service the large growth in demand for the stevedores' services was the primary influence for the growth in labour costs during the year. High quayside utilisation rates at some ports have also meant that more ships are being serviced during night time or on weekends when staff wages are generally higher. The increase in costs is also reflective of more generous wage conditions agreed to by stevedoring firms with staff and their representatives as part of previous enterprise bargaining negotiations.

⁶³ Asciano, *Submission to Queensland Transport Review of Current Port Competition and Regulation in Queensland*, 2007.

Equipment costs

Equipment costs relate to the costs of deploying physical assets necessary in facilitating quayside and landside services such as ship-to-shore cranes, straddle carriers, rubber-tyred gantries, automatic stacking cranes or forklifts. Costs associated with the maintenance and depreciation of these assets are also included. Naturally, equipment costs for capital intensive industries such as container stevedoring are significant.

Total equipment costs increased by 9.8 per cent in real terms to \$262.5 million in 2017-18.

The increase in equipment costs during the year is attributable to increased wear and tear to quayside and yard equipment caused by increased terminal activity as well as increased prices of inputs such as fuel. Maintenance expenses have also increased as some terminals have been forced to use older equipment to service the growth in demand but major equipment refresh programs by some stevedores have reduced the overall increase. Depreciation costs have also generally increased as the industry's asset base has grown due to the large amount of new tangible assets introduced by VICT and from new investments by other stevedores.

Equipment costs increased by 1.5 per cent in per lift terms during the year. However, over the decade equipment costs per lift have increased by 17.9 per cent.

Property costs

Property costs cover the container stevedores' concessions (or agreements) with landlord port authorities to operate container terminal facilities within the port's premises for defined periods of time. Expenses for the repair and maintenance of these concession facilities, as well as exogenous costs from land taxes and council rates, are also included also included.

Total property costs increased by 60.3 per cent to \$203.8 million in 2017-18.

The significant increase in property costs during the year reflects large increases in combined terminal rents, council rates and land taxes across most of the monitored ports. The most significant increase in property costs is observed in Melbourne. Much of this increase is due to the inclusion of VICT's fixed rental costs which are at a substantial premium to those paid by the Swanson Dock stevedores.⁶⁴ However, during the year, DP World also incurred a large fixed rental increase that is part of a schedule of staggered increases that will continue through to 2023.⁶⁵ Patrick also concluded its rent review with the Port of Melbourne which resulted in significant increases in rent on a dollar per square metre basis.

Table 4.4 below shows that stevedores' terminal rents, council rates and land taxes over the year have increased significantly at some ports. However, we note that DP World's leasing of additional space from its subsidiary DP World Logistics Australia had a significant impact in Sydney.

Table 4.4: Stevedore rents, rates and taxes: 2017-18 and real change from 2016-17

	Adelaide	Brisbane	Fremantle	Sydney	Melbourne
2017-18 value (\$'000)	5 533	32 646	9 337	49 876	91 938
Real change from 2016-17 (%)	- 0.3	8.1	7.8	15.1	276.8

Note: rents, rates and taxes do not include costs from property repairs and property maintenance.

Property costs increased by 48.3 per cent in per lift terms and by 43.7 per cent in per TEU terms in 2017-18. Property costs per lift have more than doubled over the decade (increasing by 128.7 per cent).

⁶⁴ Stevens, *Port privatisation forces price inflation on Australian importers and exporters*, Australian Financial Review, 2017.

⁶⁵ Ibid.

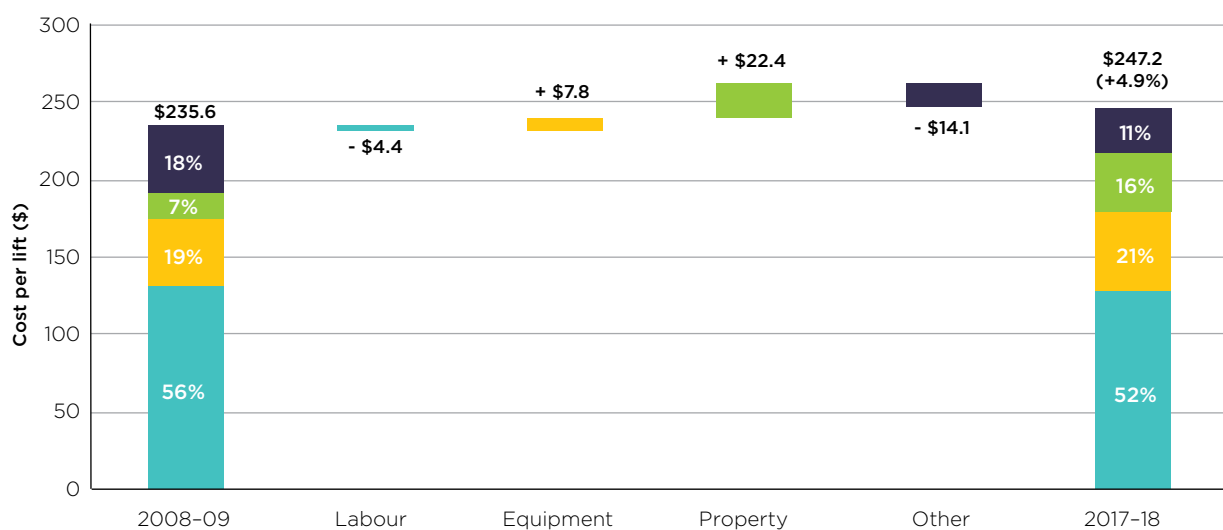
Trends in unit cost components

Over the greater part of the decade, there have been no significant changes in the spread of per unit costs among major elements such as labour, equipment and property costs.

Labour and equipment costs have made up the largest shares of the stevedores' unit costs throughout the length of the ACCC's monitoring program and continue to do so in 2017-18. However, continuing the trend from 2016-17, the share of property-related costs of total costs continued to rise in 2017-18 on account of previously mentioned significant increases in terminal rents and council and land charges. Average property costs per container increased by \$22.4 over the past ten years and property costs now comprise 16 per cent of stevedores' per lift costs compared to 7 per cent a decade ago. Increases in property costs during the period have been a factor in offsetting reductions in 'labour' and 'other' cost components.

Figure 4.5 illustrates the changes in the share of total costs of key components over the past ten years.

Figure 4.5: Changes in stevedores' average cost per lift: 2008-09 to 2017-18



Source: ACCC analysis of stevedores' costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

4.4. Profitability

The profits stevedores make relative to revenue can provide an indication of the financial health of the industry, how competitive the industry is and the degree to which the operators hold market power.

In measuring profitability, earnings before interest, taxation and amortisation (EBITA) is used as it is not affected by management decisions regarding financial capital structures and taxation arrangements which vary substantially between companies. However, we note that there are significant limitations in using accounting profitability measures such as EBITA as an indication of whether stevedores are using their market power in earning excessive profits. Appendix A provides a deeper discussion of this issue.

Stevedore profitability measures decreased across the board in 2017-18. Similar to broad measures of industry revenues and costs, the inclusion of VICT into the monitoring regime in 2017-18 is a large reason for the fall in overall profitability as VICT is only beginning to establish itself in the Melbourne market. However, even without VICT, per lift profit was the lowest since monitoring began.

In dollar terms, total stevedoring industry profits decreased from \$183.2 million in 2016-17 to \$59.7 million in 2017-18. All stevedores suffered a decline in profit during 2017-18.

Operating profit per unit

Operating profit (EBITA) per lift acts as a proxy for the profit made per lift of container handled by the industry.

Figure 4.6 details trends in the industry's profit on a per lift basis. In 2017-18, profit per lift fell significantly, decreasing by 69.8 per cent to \$11.6. Irrespective of the impact of VICT's addition to the monitoring program, reductions in profitability are a confluence of both the continued fall in revenue per lift (despite the recent trend in the infrastructure charges), and rising costs.

Since 2008-09, operating profits per lift have declined by 81.7 per cent.

Figure 4.6: Operating profit (EBITA per lift): 2008-09 to 2017-18



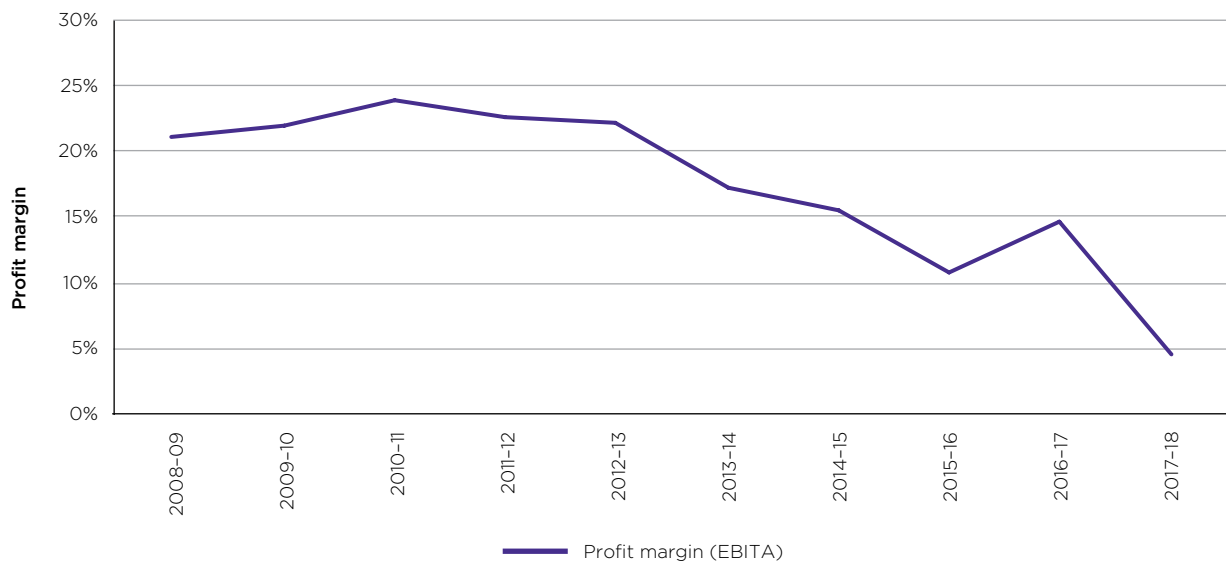
Source: ACCC analysis of stevedores' profits. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

Operating profit margins

The ratio of EBITA against real total revenue isolates the effects of varying operational size among stevedores and allows a broader assessment of the industry's operating profitability.

Figure 4.7 shows that industry profit margins fell by 10.2 percentage points to 4.5 per cent in 2017-18. This represents the biggest drop in industry profit margins in the last decade and is by far the lowest margin during that period.

Figure 4.7: Industry profit margins (EBITA over real total revenue): 2008–09 to 2017–18



Source: ACCC analysis of stevedores' profits. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017–18.

Rates of return on assets

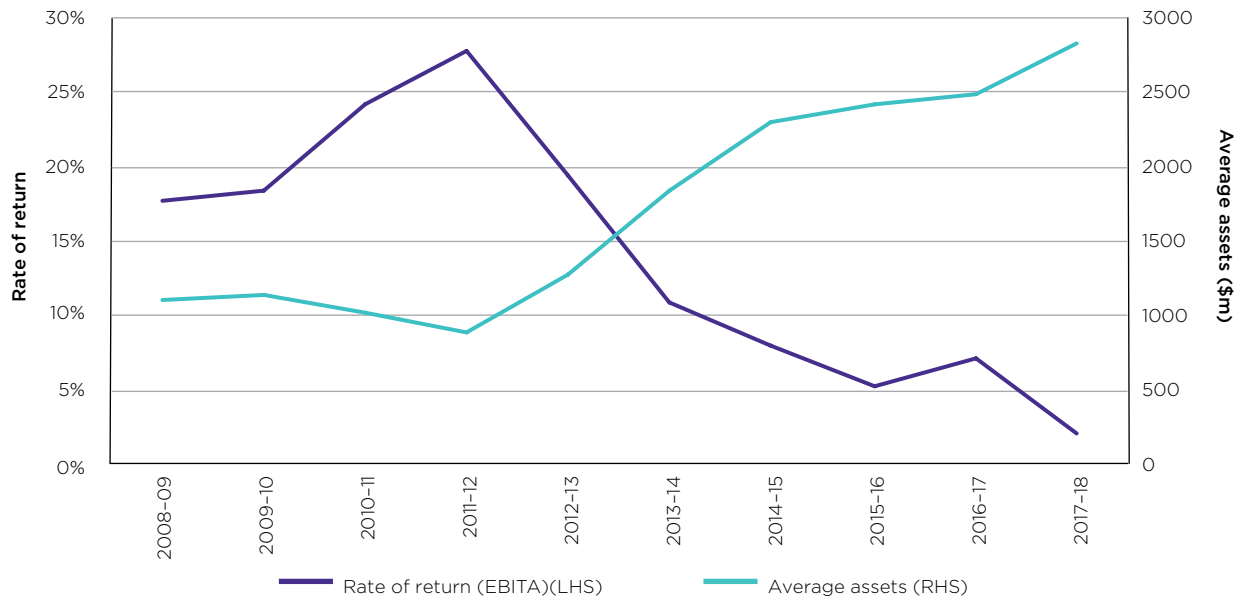
Rate of return on assets⁶⁶ is another measure of profitability for the stevedoring industry. The ratio of EBITA and the average value of opening and closing balances of tangible assets (physical infrastructure) is a useful proxy for the industry's effectiveness as stewards of physical capital to produce profit.

Figure 4.8 shows annualised EBITA for the stevedores over the past ten years expressed as a percentage of average tangible assets. Since returns are a function of profits, they show a similar trend: a fall from a high of 27.8 per cent in 2011–12 to 2.1 per cent in 2017–18. Of the five stevedores, Flinders Adelaide continued to have the highest return on average tangible assets in 2017–18. The profitability of Flinders Adelaide, Patrick and DP World all fell during the period, but remain significantly higher than Hutchison and VICT.

The chart also shows the rapid increase in average asset levels since 2011–12. This increase has been driven by the entry of Hutchison in 2012–13 and VICT in 2017–18. Significant additions to quayside and landside infrastructure by Patrick and DP World during the period have also had a large effect. This increase in average assets is a key reason for the decrease in return on assets, as revenue, particularly for the new entrants, has not increased commensurate with additions to the asset base.

⁶⁶ More information on the ACCC's approach in measuring the industry's return on assets is available in Appendix A.3.

Figure 4.8: Stevedores' rate of return (EBITA over average tangible assets): 2008-09 to 2017-18



Source: ACCC analysis of stevedores' return on assets. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Base year for ACCC deflator series: 2017-18.

5. Stevedores' comparative performance

This chapter presents data submitted to the ACCC by the five stevedores operating in Australia's monitored ports throughout the whole of 2017-18: DP World, Patrick, Hutchison, VICT and Flinders Adelaide. Key observations on the five stevedores' throughput, as well as factors affecting their revenues, costs and profits are outlined in this chapter.

Individual company data is indexed to protect commercially-sensitive information.

5.1 DP World Australia

DP World is one of Australia's largest container stevedores with operations spanning the ports of Melbourne, Sydney, Brisbane and Fremantle. DP World acquired its Australian terminals following its 2006 purchase of P&O Ports (the Peninsular and Oriental Steam Navigation Company).

DP World Australia is part of DP World's global business, which operates more than 78 marine and inland terminals across six continents.

Container volumes

DP World was again Australia's largest stevedore in 2017-18 after total container lifts rose by 8.8 per cent to 2.3 million containers, while the number of TEUs handled increased by 9.8 per cent to 3.5 million TEUs. DP World experienced significant volume growth at all terminals during the year with the number of containers handled at Melbourne growing by 8.1 per cent, Sydney by 9.6 per cent, Brisbane by 6.2 per cent and Fremantle by 16.9 per cent.

Much of DP World's volume growth in 2017-18 was organic. While DP World was not able to win new services during the period it was able to renew a long-term contract with the largest shipping group in Australia, CMA-CGM Group, comprising of CMA CGM, ANL, APL and ANL Sofrana Line.⁶⁷

Revenue

DP World's total revenue increased by 5.7 per cent but fell by 2.8 per cent on a per lift basis.

While there has been significant growth throughout DP World's Australian terminals, the key driver for revenue growth has been the growth in landside and other revenues. DP World recorded a 34.7 per cent growth in landside and other revenues, with most of the growth attributable to the significant increases in infrastructure charges. Storage revenues have also grown marginally at some terminals. Revenues from directly returned empty containers increased at most terminals although these were not material in the growth in DP World's landside and other revenues.

In contrast, quayside revenues fell by 1.6 per cent over the period despite the significant growth in volumes. Quayside revenues fell significantly on a per lift basis and on a per TEU basis over the decade.

Costs

DP World's total operating costs increased by 9.0 per cent in 2017-18, although the significant growth in volumes have stabilised the per lift growth in costs at 0.3 per cent.

In 2017-18, total labour costs increased by 8.4 per cent and were significant in driving the overall increase in DP World's costs. The higher labour costs were attributable to the significant increase in terminal volumes which necessitated more man hours as well as growth in staff wages. Total property costs increased by 13.1 per cent during the period. This follows a significant fixed rental increase by the Port of Melbourne and a large increase in Sydney following the terminal's expansion into the adjacent logistics area (which is operated by its subsidiary DP World Logistics Australia) to accommodate increased volumes. Property costs in Brisbane and Fremantle fell due to lower property repairs and

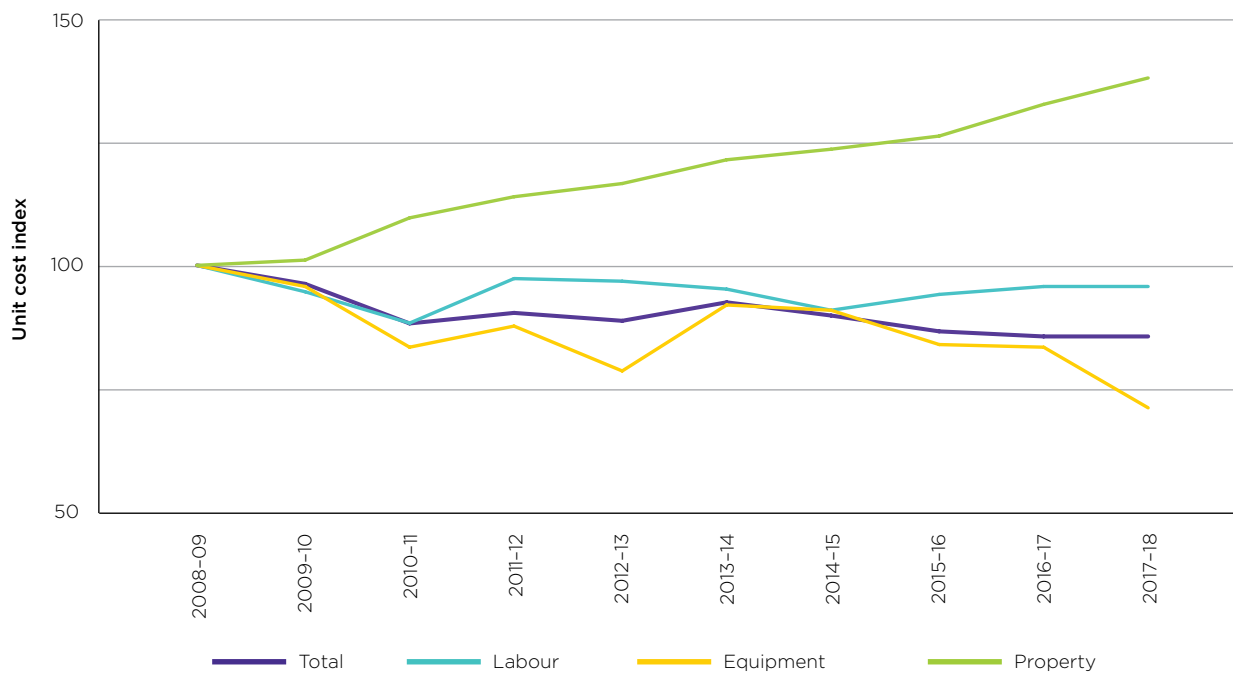
⁶⁷ DP World Australia, *DP World Australia signs a long-term partnership extension with CMA CGM Group*, April 2018.

maintenance costs, however property rates, rent, and taxes increased in Brisbane and were flat in Fremantle. Total equipment costs fell by 5.4 per cent in the year, despite significantly increased wear and tear from strong volume growths, due to effective cost containment efforts at some terminals.

Other notable cost factors in 2017-18 included a general increase in utility rates as well as large one-off costs associated with subcontracting ships to other stevedores as a result of congestion, adverse weather, terminal maintenance and the commissioning of several new quay cranes.

Figure 5.1 below outlines trends in DP World's cost components for the past decade. Since 2008-09, total costs per lift have fallen by 14.0 per cent. During this time equipment costs have fallen by 28.6 per cent and labour costs have fallen by 4.2 per cent. However, property costs have risen by 38.2 per cent.

Figure 5.1: Movements in cost components per lift in real terms: 2008-09 to 2017-18



Source: ACCC analysis of DP World's costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Indexed to a base year of 2008-09.

Operating profit

Over the period, DP World's national operating profit fell by 14.3 per cent.

5.2 Patrick

Patrick has provided various waterfront-related services on Australian ports since 1919, but the company has only focused on providing stevedoring services since the 1950s. Since then, Patrick has become one of the largest stevedoring businesses in Australia with operations in the ports of Melbourne, Sydney, Brisbane, and Fremantle. Formerly part of Asciano Holdings, Patrick was acquired in August 2016 in a joint venture by Qube Holdings and Brookfield Infrastructure Partners.

Container volumes

In 2017–18, Patrick's total lifts increased by 1.7 per cent to 2.1 million containers, while the number of TEUs handled increased by 7.8 per cent to 3.4 million TEUs. There were varying levels of lift growth throughout its terminal portfolio with the highest growth being at Fremantle, and the lowest growth in Melbourne. It is noted that Patrick has recontracted 95 per cent of its customer base for the forward financial year.⁶⁸

The increase in 2017–18 volumes is in part due to Patrick being awarded a section of the CNZ shipping service. In addition, Patrick has benefitted from subcontracted volumes from DP World, Hutchison and VICT following terminal congestion, safety issues or industrial disputes at these stevedores. Patrick also secured extensions of the ANZEX and WASCO services during the year.

Revenue

Patrick's total revenue increased by 4.3 per cent in 2017–18. Patrick also recorded a 2.5 per cent increase in total revenue per lift, the only stevedore to manage to do so for the year.

Patrick's result generally benefitted from strong organic growth in the containerised freight market, as well as its success in winning new contracts and retaining existing ones. However, similar to other stevedores, total quayside revenue fell by 6.3 per cent over the year, and fell even more on both per lift and per TEU basis.

Much of the revenue growth was driven through very high growth in landside and other revenue. Indeed, Patrick recorded a 57.3 per cent increase in landside and other revenue, with the result largely attributable to infrastructure charges and to a lesser extent increases in storage revenues.

Costs

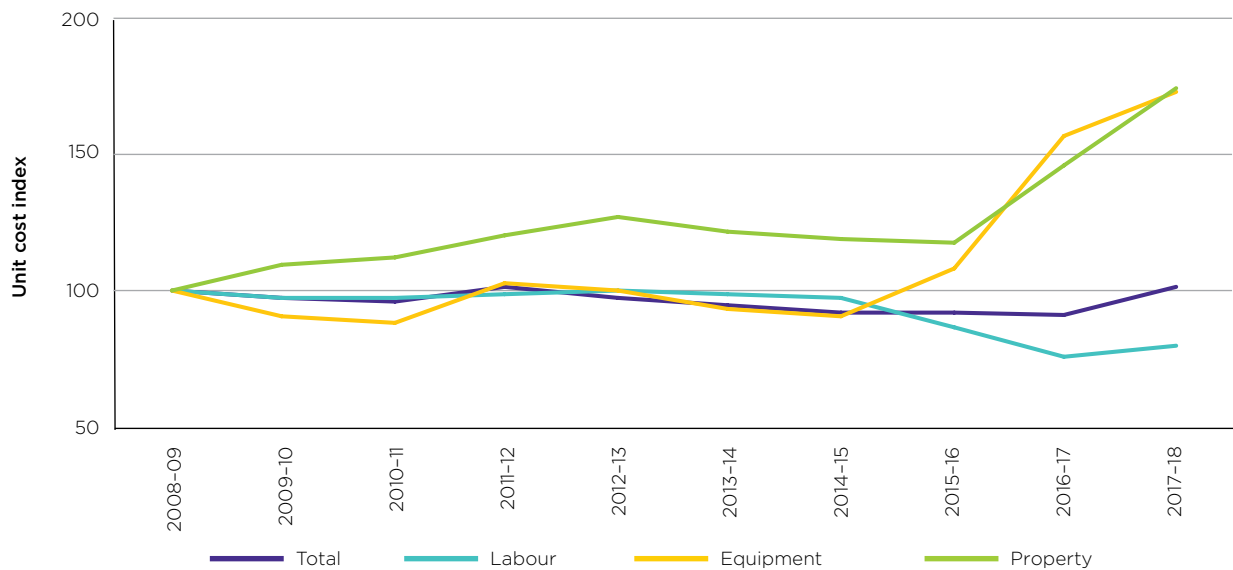
In 2017–18, Patrick's operating expenditure increased by 12.7 per cent in aggregate terms and by 10.7 per cent on a per lift basis.

Total labour costs increased by 7.4 per cent following growth in staff wages and significant increases in management and admin costs during the year. Property-related expenses increased markedly during the year, at 21.0 per cent. While property costs increased across all terminals, Patrick experienced the most significant increase at the Port of Melbourne. Equipment costs have also risen significantly at 11.8 per cent, following increased wear and tear from higher volumes, and increases in input costs such as fuel.

Figure 5.2 illustrates developments in Patrick's cost components over the past decade. Over the period, total costs per lift have only increased marginally (1.0 per cent) with effective containment of labour costs (-21.5 per cent) likely the major factor. However, property costs by the end of the decade have increased by 74.0 per cent while equipment costs have increased by 73.0 per cent.

⁶⁸ Qube Holdings, *Results for Announcement to the Market FY18 Full Year Report*, August 2018.

Figure 5.2: Movements in cost components per lift in real terms: 2008-09 to 2017-18



Source: ACCC analysis of Patrick's costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Indexed to a base year of 2008-09.

Operating profit

Patrick's national operating profit contracted by 20.1 per cent in 2017-18.

5.3 Hutchison Ports Australia

Hutchison Ports Australia is a relatively new entrant into the Australian container stevedoring industry having only commenced operations in Brisbane in January 2013 and in Sydney in November 2013. Hutchison Ports Australia is a subsidiary of the Hong-Kong based Hutchison Port Holdings, the world's third largest port operator by container volumes handled.⁶⁹

Container volumes

Hutchison's total lifts posted a 20.4 per cent increase to 328 000 containers in 2017-18, while the number of TEUs handled rose 23.6 per cent to 520 000 TEUs. The number of container lifts at Brisbane jumped by 36.4 per cent over the period, while the number of containers handled at Sydney increased by 13.9 per cent.

The significant increase in 2017-18 volumes reflects the full year contribution of the A3S service contract that Hutchison won in 2016-17, as well as from the renewed NZS service contract in October 2017. The increase in national volumes in 2017-18 represents further progress towards being able to effectively compete with incumbent terminal operators in Sydney and Brisbane. Additional volume growth is expected in 2018-19 with Hutchison being awarded the Brisbane call of the A1X contract.

Revenue

Hutchison recorded the largest increase in total revenue in 2017-18 of all the stevedores, with an increase of 11.4 per cent, on the back of high growth in container volumes. On a per lift basis, however, total revenue fell by 7.5 per cent.

⁶⁹ Lloyd's List, *Top 10 box operators 2017*, December 2017.

Landside and other revenues grew marginally during the year. This was driven by Hutchison implementing increases in various landside tariffs through the Truck Appointment System and a small increase to the existing infrastructure charge in Brisbane.

Quayside revenues have grown by 8.2 per cent over the year. However, similar to other stevedores, Hutchison's quayside revenues fell significantly on a per lift basis and on a per TEU basis.

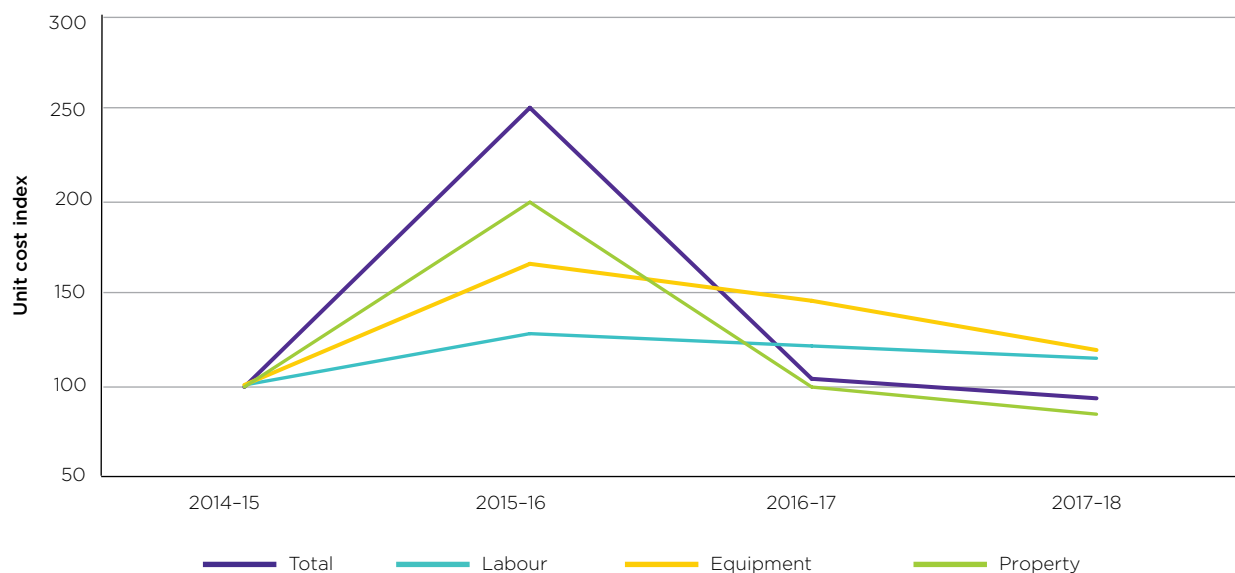
Costs

In 2017-18, Hutchison's total operating expenditure increased by 8.0 per cent. However, the greater relative growth in volumes meant that costs contracted by 10.4 per cent on a per lift basis. Hutchison was the only the stevedore to achieve a reduction in unit costs during the year.

Hutchison's total labour costs grew by 12.0 per cent in 2017-18, the highest of all the stevedores. This increase is reflective of the full-year impact of the recruitment conducted by Hutchison in 2016-17 to service newly won shipping contracts. While total equipment costs fell by 2.6 per cent and total property costs rose by only 2.3 per cent, business costs unrelated to the provision of core services increased by 10.7 per cent mainly due to losses from foreign exchange translation.

Figure 5.3 below outlines trends in Hutchison's cost components per lift since 2014-15. After large increases in 2015-16, Hutchison's costs have trended down in the two subsequent years.

Figure 5.3: Movements in cost components per lift: 2014-15 to 2017-18



Source: ACCC analysis of Hutchison's costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Indexed to a base year of 2014-15.

Operating profit

Despite a decrease in unit costs, Hutchison's total costs continued to exceed its total revenues in 2017-18. Total operating losses this year have increased by 3.2 per cent, somewhat reversing progress made towards being profitable in the previous year.

5.4 Flinders Adelaide Container Terminal

Flinders Adelaide is the operator of South Australia's only international container terminal. Flinders Adelaide is currently only servicing Adelaide. Formerly DP World Adelaide, Flinders Adelaide was acquired in full and vertically-integrated in 2012 with the South Australian port operator, Flinders Port Holdings.

Container volumes

In 2017-18, Flinders Adelaide's lifts rose by 1.4 per cent to 291 000 containers while the number of TEUs increased by 2.9 per cent to around 413 000 TEUs.

Revenue

Flinders Adelaide's total revenue decreased by 6.0 per cent in 2017-18 while on a per lift basis total revenue decreased by 7.3 per cent.

Total quayside revenue fell slightly at 1.6 per cent, and also decreased on a per lift and per TEU basis.

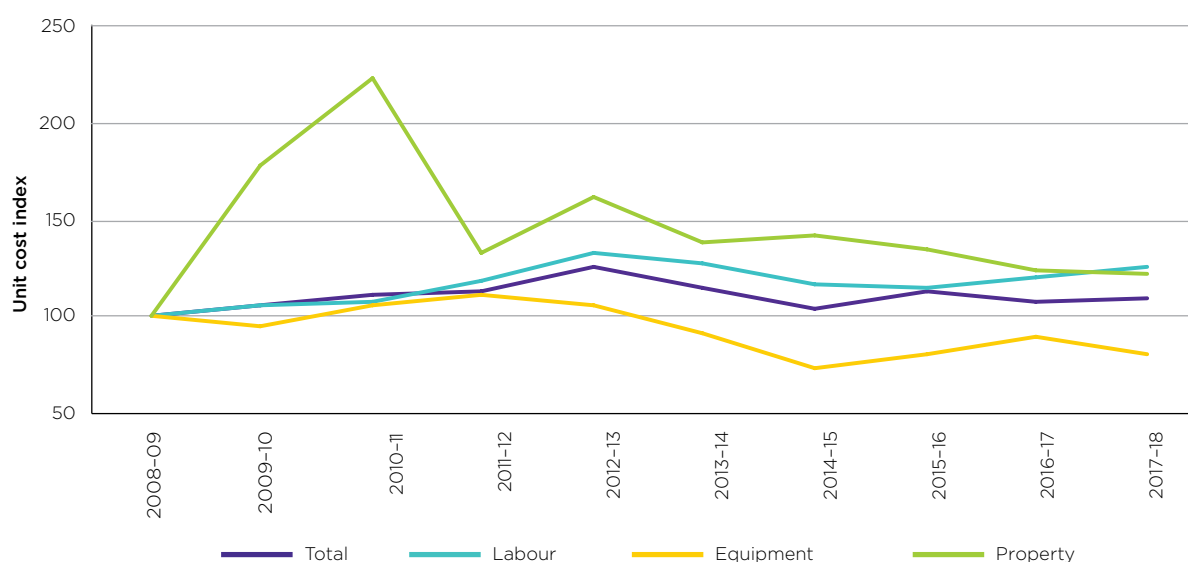
Costs

In 2017-18, Flinders Adelaide total operating expenditure increased by a relatively modest 3.6 per cent and on a per lift basis increased by 2.2 per cent.

The terminal recorded a 7.4 per cent increase in labour costs during the year. This was attributed to the impact of the port's constraints on servicing increasingly prevalent large ships and the resulting impact on labour scheduling and cost. However, property costs fell by 0.4 per cent during the year. Flinders Adelaide noted that the resulting significant increase in lease costs following the port's revaluation of terminal land applies from 1 July 2018.

Figure 5.4 below outlines trends in Flinders Adelaide's cost components on a per lift basis for the past ten years. During the period, total costs per lift increased by 9.8 per cent, labour costs increased by 26.6 per cent and property costs increased by 22.2 per cent. Equipment costs fell by 19.5 per cent

Figure 5.4: Movements in cost components per lift in real terms: 2008-09 to 2017-18



Source: ACCC analysis of Flinders Adelaide's costs. Deflator series derived from the ABS CPI (cat. no. 6401.0, tables 1 and 2, Index Numbers; All groups CPI; Australia). Indexed to a base year of 2008-09.

Operating profit

In 2017-18, Flinders Adelaide's operating profit contracted by 53.5 per cent.

5.5 Victoria International Container Terminal (VICT)

VICT is the most recent entrant to the container stevedoring industry in Australia. It had been operating on a trial basis since January 2017 but its service as a fully-fledged terminal operator began in April 2017.

VICT operates at Webb Dock in Melbourne and is the first Australian stevedore to automate most of its terminal operations. VICT is owned by the Philippines-based International Container Terminal Services Incorporated (ICTSI). ICTSI is the 7th largest port operator in the world with a network spanning more than 30 terminals across 20 countries.⁷⁰

2017-18 is the first year that VICT has provided financial data for the monitoring report. As a result, there is limited analysis on the company's trends in revenues, costs and profitability.

Container volumes

In 2017-18, VICT handled approximately 110 000 containers or 160 000 TEUs in its first full year of operations. This year's volumes are reflective of the full-year contribution of the ASAL contract that VICT won in 2016-17. Other stevedores have also had to subcontract to VICT during the period owing to scheduling issues caused by adverse weather, terminal maintenance and general congestion.

It is expected that VICT's volumes will further increase in the future with the stevedore being awarded the A3C service in Melbourne. Winning the A3C contract, which deploys ships above the 8000+ TEU capacity range, highlights the quayside advantage that operating at Webb Dock confers VICT over its physically constrained competitors at Swanson Dock. VICT was also successful in tendering for the Melbourne call of the A1X service.

Costs

Since VICT is the most automated terminal in Australia, it has a significantly different cost structure to the rest of the industry. Automation will mean that VICT typically incurs lower labour costs compared to its competitors. However, the stevedore's property costs in Melbourne are at a substantial premium compared to its competitors.

⁷⁰ Lloyd's List, *Top 10 box operators 2017*, 2017.

Appendix A

ACCC monitoring methodology

This appendix explains the ACCC's monitoring methodology and outlines the approach in assessing the profitability of stevedoring terminal operations in Australia.

A.1. Description of methodology

The ACCC's role, set out in the Ministerial direction, is to monitor prices, costs and profits at container terminals operating in Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney. During the 2017-18 reporting period, there was no container terminal operating in Burnie so it was excluded from the report.

Data is provided by each of the container stevedores in response to a request from the ACCC at the conclusion of the financial year. We appreciate the cooperation of the stevedores in responding to these requests, which are made on a voluntary rather than mandatory basis. 2017-18 represents the first year that VICT have provided data for the container stevedoring monitoring report. While VICT has provided data, the 2017-18 container stevedoring monitoring report does not include analysis on VICT's performance as an individual stevedore. This is because the ACCC requires data over successive financial years to be able to construct an index.

Much of the data provided to the ACCC is commercially sensitive. For this reason, the data is typically presented in the monitoring report for the industry as a whole, rather than broken down by stevedore. While useful, the aggregated nature of the data presented in the reports is currently masking very different financial outcomes between the established stevedores and the recent market entrants. Other data provided by the stevedores is used for the ACCC's internal analysis only and is not presented in the monitoring report.

The data provided by the stevedores consists of container volumes, revenues, costs, earnings (EBITA) and profit. The stevedores will also describe key investments made during the year, as well as those planned for the future. The ACCC does not collect data on actual prices charged for stevedoring services as these are privately negotiated between stevedores and users.

The ACCC calculates revenues, costs and margins on a per unit basis, with unit revenues acting as a proxy for price. The standard unit is a lift, which is either a container being loaded off the ship and on to the dock or vice versa. Stevedoring charges are typically calculated per lift and therefore this is a close proxy for the prices charged by the stevedores.

Data provided by the stevedores is split by whether it relates to stevedoring or other terminal activities. Quayside revenue, which makes up the largest proportion of a stevedore's total revenue, is defined as the revenue attributable to the loading and unloading of cargo. Landside and other revenues may include those relating to break-bulk work (e.g. non-containerised cargo such as bags, crates and barrels), storing and maintaining containers, and fees from transport operators using the stevedores' Vehicle Booking System and from infrastructure charges.

Financial data is adjusted for inflation to allow for meaningful comparisons between years. The figures in the 2017-18 monitoring report were adjusted for inflation using the same methodology as the 2016-17 report. The process that is used to adjust for inflation is as follows:

- figures were adjusted using the ABS Consumer Price Index series (base year = 2018)
- figures from past years were adjusted upwards in order to compare with the actual data for 2017-18.

The stevedoring monitoring report also provides information on the productivity of the stevedores and other operational performance such as truck turnaround times. This information is kindly provided by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) in advance of its publication in its Waterline series.

A.2. Industry consultation

The ACCC supplements its data collection activities by meeting directly with relevant stakeholders about the freight supply chain.

Each year, ACCC staff will meet directly with the stevedores as well as various port operators, shipping lines, transport companies and freight supply chain industry associations.

The ACCC's analysis and commentary in the container stevedoring monitoring report is also informed by work it does as part of investigations into possible breaches of the competition provisions within Part IV of the *Competition and Consumer Act 2010*. Such investigations also include assessments of proposed mergers or acquisitions. These investigations are typically conducted in private.

A.3. Measuring industry profitability

Earnings before interest, taxation and amortisation (EBITA)

There are a range of measures that can be used to assess a company's profitability. The ACCC commonly uses earnings before interest, taxation and amortisation (EBITA) in its monitoring reports of operating profitability. That is, it measures the earnings that the firm makes in its normal course of business, ignoring financial costs and the yearly write-off of long-term intangible assets.

EBITA is a useful measure for comparing companies because it excludes accounting costs that can vary greatly between companies due to factors other than operating performance. Interest payments can vary according to the choice of financing arrangements. Taxation can vary by political jurisdictions or different tax minimisation techniques. Amortisation can vary depending upon the subjective value placed on intangible assets such as goodwill, or because of different takeover histories.

Unlike other measures of operating profitability, EBITA includes the costs associated with the depreciation of tangible assets. This is important for infrastructure-based industries for which investment in facilities will represent a sizable proportion of overall costs.

Operating profit, profit margins and return on assets

The container stevedoring monitoring report presents operating profit in a number of different ways. The purpose of each indicator is to provide some context for the scale of the industry. Very high performance against these indicators may suggest that the level of competition within the industry is not sufficient to constrain the stevedores from setting high prices.

These indicators are:

- operating profit: revenue less costs per lift
- profit margins: EBITA as a percentage of real revenue
- return on assets: EBITA as a percentage of average tangible assets.

The use of return on assets as a measure of profitability creates a few challenges. First, a company's assets can include a sizeable value for intangible assets. For stevedoring, intangible assets include goodwill and berth licensing agreements. However, the value attributed to intangibles may reflect an expectation, at the time of purchase or acquisition of assets for a business, to earn economic rents that may obscure changes in the profitability of providing services. For this reason the ACCC excludes intangible assets from the asset base when assessing performance.

The ACCC's approach of excluding intangible assets will create a difference between the stevedores' statutory reports and the ACCC's stevedoring monitoring reports. However, this is not unusual where price oversight of infrastructure is involved and is consistent with the broader ACCC approach with other industries (e.g. airport services).

The second challenge is that the return on assets measure can be affected by changes in asset values arising from asset revaluations, transfers, and sales. Asset valuation methods differ between businesses, which raises comparability issues. They may also change over time, which would impact time series analyses. The ACCC has not attempted to evaluate the suitability of stevedores' asset valuations since prices are not regulated. However, they are required to report asset values on a depreciated historical cost basis over time so that the ACCC can assess trends in profitability.⁷¹

Finally there is the challenge that EBITA does not fully identify whether the stevedores are earning excessive economic profits as a result of market power. The key issue is that stevedores will carry out a lot of upfront investments on capital that will have a significant life span, so a single year's financial returns may not capture the full cost of these investments. To evaluate the returns of the stevedores, a method such as the internal rate of return should be used. Unfortunately the ACCC does not possess the necessary information to use this approach. Evaluating profits using EBITA is the best option that the ACCC has available to it.

71 While asset revaluations are permitted under international accounting standards, it is not compatible with the ACCC's monitoring program hence the effect of any revaluations made in 2017-18 is excluded. Asset information provided by the stevedores for the period ending 30 June 2018 reflects the opening value of tangible assets as at 30 June 2017 plus additions to assets, less depreciation of expenses and disposal of assets and write-downs of tangible assets that occurred in the 12 months to 30 June 2018.

Appendix B

Part VIIA, Competition and Consumer Act 2010

s. 95ZE

Directions to monitor prices, costs and profits of an industry

1. The Minister may give the Commission a written direction:
 - a. to monitor prices, costs and profits relating to the supply of goods and services by persons in a specified industry, and
 - b. to give the Minister a report on the monitoring at a specified time or at specified intervals within a specified period.

Commercial confidentiality

2. The Commission must, in preparing such a report, have regard to the need for commercial confidentiality.

Public inspection

3. The Commission must also make copies of the report available for public inspection as soon as practicable after it gives the Minister the report.

s. 95ZG

Exceptions to price monitoring

1. The Minister must not direct the Commission under this Division to monitor prices, costs and profits relating to a supply of goods or services of a particular description that is an exempt supply in relation to goods or services of that description.
2. The Minister must not direct the Commission under this Division to monitor prices, costs and profits of a State or Territory authority that supplies goods or services unless the State or Territory concerned has agreed to the direction being given.

s. 95G(7)

The Commission's functions under this Part

General

7. In exercising its powers and performing its functions under this Part, the Commission must, subject to any directions given under section 95ZH, have particular regard to the following:
 - a. the need to maintain investment and employment, including the influence of profitability on investment and employment
 - b. the need to discourage a person who is in a position to substantially influence a market for goods or services from taking advantage of that power in setting prices
 - c. the need to discourage cost increases arising from increases in wages and changes in conditions of employment inconsistent with principles established by relevant industrial tribunals.

Appendix C

Ministerial direction

COMMONWEALTH OF AUSTRALIA

Prices Surveillance Act 1983

DIRECTION NO 17

1. I, Peter Costello, Treasurer, pursuant to section 27A of the *Prices Surveillance Act 1983*, hereby direct the Australian Competition and Consumer Commission to undertake monitoring of prices, costs and profits relating to the supply of services by a container terminal operator company in ports at the following locations:
 - a. Adelaide
 - b. Brisbane
 - c. Burnie
 - d. Fremantle
 - e. Melbourne, and
 - f. Sydney.
2. In this direction, 'container terminal operator company' means a provider of container stevedoring services in ports at the locations listed in paragraph (1).
3. The ACCC is to report to me on its monitoring activities referred to in paragraph (1) within four months after the end of each financial year.

Peter Costello



PETER COSTELLO

January 1999

Federal Register of Legislative Instruments F2008B00402



AUSTRALIAN COMPETITION
& CONSUMER COMMISSION