

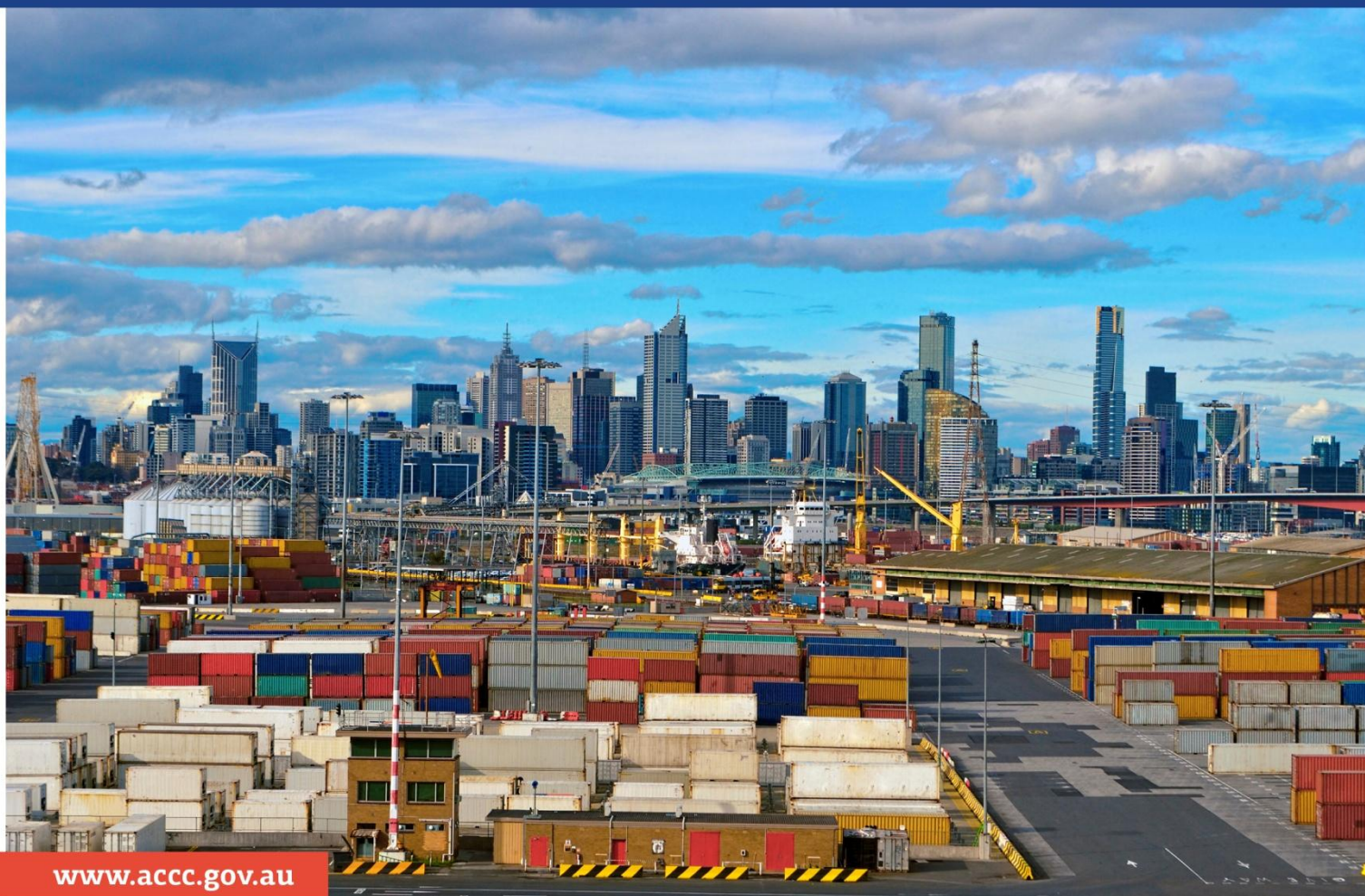


Australian
Competition &
Consumer
Commission

Report

Container stevedoring monitoring report no. 16

October 2014





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Australian Competition and Consumer Commission

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Glossary

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACS	Australian Customs and Border Protection Service
ASC	automated stacking cranes
ASX	Australian Securities Exchange
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CEFs	container examination facilities
CCA	<i>Competition and Consumer Act 2010</i>
COAG	Council of Australian Governments
CPI	consumer price index
CSMR	ACCC's Container stevedoring monitoring report
DP World	DP World Australia Ltd, jointly owned by DP World (25 per cent) and Citi Infrastructure Investors (75 per cent)
EBA	enterprise bargaining agreement
EBIT	earnings before interest and tax
EBITA	earnings before interest, tax and amortisation
ECP	empty container park
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 'net crane rate'.
Elapsed labour rate	The 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. See below for definition of 'elapsed labour time'.
Elapsed labour time	The elapsed labour time is the elapsed time between labour first boarding the ship and labour last leaving the ship, less any time when the labour has not worked, including non-operational delays. Elapsed labour time is an input to calculating the 'elapsed labour rate'.
FACT	Flinders Adelaide Container Terminal Pty Ltd, the sole container stevedore at Port Adelaide
GDP	gross domestic product
HPA	Hutchison Ports Australia, a member of Hutchison Port Holdings

	Group
MUA	Maritime Union of Australia
Net crane rate	The net crane rate is an indicator of capital productivity and reflects the intensity to which quay cranes are worked. It is measured by dividing total number of containers/TEUs handled by the elapsed crane time. See above for definition of 'elapsed crane time'.
Patrick	Patrick Terminals and Logistics, a division of Asciano Ltd
PBLIS	Port Botany Landside Improvement Strategy
PC	Productivity Commission
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 for better comparison of values over time.
SAAS	Southeast Asia-Australia Service
SSFL	Southern Sydney Freight Line
S&P	Standard & Poors
Ship rate	The ship rate is an indicator of labour and capital productivity while the ship is being worked. It 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.
Tangible assets	The physical infrastructure used by the stevedores to provide container stevedoring services.
TEU	20-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
VICTL	Victorian International Container Terminal Ltd, a consortium comprised of International Container Terminal Services Inc. and Anglo Ports Pty Ltd.

Key messages

There is now greater competition in container stevedoring

Increased competition has delivered benefits to users of stevedoring services and the wider Australian community in 2013–14.

- Productivity has improved, average prices have fallen and there has been considerable investment in container terminals.
- Greater competition is delivering benefits to users of stevedoring services, shipping lines, which should flow to consumers and Australian exporters by way of cheaper imports and lower costs.

These improvements build on significant historical achievements in industry performance since the waterfront reforms of 1998.

However, there are some risks to continued positive performance

There exist, however, some risks to the industry's performance – in particular, the impact of labour outcomes and port privatisations on container stevedoring performance in the future.

- **Impact of labour outcomes** - Enterprise bargaining agreements (EBAs) between the stevedores and their workforces are being renegotiated. The ACCC considers that EBAs provide valuable opportunities to provide incentives for further productivity gains in Australian stevedoring. It is important that the gains from enhanced competition and increased capacity in Australian stevedoring are not limited by such agreements.
- **Impact of port privatisations** – The sales of leases to operate ports provide a timely reminder to governments of the principles for privatisations set out in national competition policy. Importantly, the structure of such sales should have regard to promoting competition, and governments should consider the need for economic regulation of monopoly assets. There is significant concern that the sales of ports, if not properly managed, could lead to greater costs for container stevedores and other port users, and ultimately for consumers and exporters.

And there are opportunities to improve landside connections to container ports

As freight flows are anticipated to double by 2030, opportunities to improve landside connections to container ports must be explored. Tools are available to governments and industry. These tools include road reform, using price signals to allocate access to scarce facilities such as container terminals, and industry-led initiatives to address bottlenecks and improve the efficiency of container supply chains.

Summary

Australian container stevedoring has come a long way since reforms to the industry in 1998.

Today, further gains are being driven by greater competition resulting from new entry and capacity expansions at Australia's largest ports. Lower average prices, greater productivity and a greater focus on customers are tangible benefits of increased competitive rivalry between the container stevedores.

This year, Port Botany became the second port in Australia to benefit from the entry of a new terminal operator, Hutchison Ports Australia (HPA). HPA commissioned its first stevedoring terminal in Australia at the Port of Brisbane last year. This has broken the previously held duopoly between Patrick and DP World at those ports.

The ACCC's monitoring results for 2013–14 show the benefits of increased competition amongst container stevedores for shipping services as compared with previous years.

ACCC monitoring results for 2013–14 show the benefits of greater competition

Productivity improved

Two key measures of productivity on the wharves improved this year to record levels.

Capital productivity, measured by the average 'net crane rate',¹ increased to 30.8 from 29.4² in the previous year. This result is significant as improvements in capital productivity had eased over the preceding four years.

Labour productivity, measured by the average 'elapsed labour rate',³ also increased, to 45.6 containers per hour, from 44.4⁴ in 2012–13.

Average prices fell

Unit stevedoring revenues (which the ACCC uses as a proxy for stevedoring prices) decreased on a five-port average basis.

Unit stevedoring revenues for 20-foot containers fell by 1.1 per cent, from \$223.93 in 2012–13 to \$221.48 in 2013–14. Unit stevedoring revenues for 40-foot containers also fell, by 1.0 per cent, from \$112.73 in 2012–13 to \$111.57 in 2013–14.

This result is significant as it may indicate greater pricing pressure in the industry. Historically, unit stevedoring revenues for 20-foot and 40-foot containers have increased in most years since 2001–02 (by around 1 per cent).

Substantial investment in terminals occurred

The value of the stevedoring industry's asset base increased by 27.3 per cent in 2013–14, and has more than doubled over the last two years.

¹ The net crane rate is measured by dividing total number of containers/TEUs 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.

² This was published as 29.2 in the Container stevedoring monitoring report 2012–13. See footnote no. 40 of this report for further information.

³ The elapsed labour rate is computed as the number of containers handled divided by the elapsed labour time. See BITRE, *Waterline* issue no. 54.

⁴ This was published as 41.1 in the Container stevedoring monitoring report 2012–13. See footnote no. 41 of this report for further information.

This is primarily due to the development of new terminals by HPA in Brisbane and Port Botany, as well as investments by the incumbents Patrick and DP World (for example, in automation, cranes and straddle carriers) to boost capacity and improve performance.

Industry profitability remains reasonably high despite significant investment

Even after a major expansion in the industry's asset base, the industry's rate of return on average tangible assets remains above the average of industrial related companies listed on the Australian Securities Exchange, at 13.2 per cent.

In line with significant investment, primarily associated with new entry, the industry rate of return fell from 21.9 per cent in 2012–13 to 13.2 per cent in 2013–14.

Current improvements are building on long-term gains

Benefits from greater competition and capacity in the industry are building on an already markedly improved industry since the waterfront reforms of 1998.

In real terms since 1998–99:

- **Volumes** handled have more than doubled from 2.9 million 20-foot equivalent units (TEUs) to 6.9 million TEUs.
- Real **unit costs** have fallen by 42.1 per cent, assisted by economies of scale.
- Real **unit revenues** have fallen by 38.4 per cent, indicating that the benefits of lower costs have been shared with users through lower prices.
- **Productivity** has improved. Capital productivity has risen from 19.6 to 30.8 containers per hour. Labour productivity has more than doubled, from 22.4 to 45.6 containers per hour.
- Substantial **investment** in capacity and productivity has occurred, with the value of the stevedores' asset base (excluding the effect of changes in corporate ownership) increasing substantially since 1998–99.

However, there are risks to future stevedoring performance

Despite the substantial gains made in the industry, the ACCC sees two key risks to future container stevedoring performance – the impact of labour outcomes; and the impact of port privatisations where adequate regard is not given to promoting competition or the appropriate level of economic regulation.

Labour outcomes

While there is now greater competition in container stevedoring, there remains one major organisation representing the industry's labour force. Significant bargaining power is, therefore, likely to exist for the protection and advancement of employment conditions. However, it could also limit flexibility and the extent to which gains in stevedoring are shared with other parties such as users of stevedoring services.

The monitoring data shows that, while unit labour costs in real terms have generally followed a downward trend since the waterfront reforms of 1998, since 2010–11 they have been increasing. There is also a long history of industrial disputation on the Australian waterfront.

The ACCC considers it important that steps being taken to enhance competition and productivity in Australian stevedoring industry are not constrained by labour outcomes.

The ACCC notes that enterprise bargaining agreements (EBAs) between the stevedores and their workforces are being renegotiated. This provides a valuable opportunity to improve EBAs

to provide appropriate incentives for further productivity gains in Australian container stevedoring by setting meaningful performance benchmarks as part of the package of rewards and incentives given to employees.

The impact of port privatisations

There has been a trend towards the privatisation of ports in recent years. This trend continues with the Victorian Government's decision to offer a medium-term lease of the Port of Melbourne.

Privatisations provide an important opportunity for governments to review the structure of the assets being considered for sale and facilitate competition where that is possible, and, where it is not, to ensure that appropriate access and pricing regulation is put in place to ensure the most efficient long-term outcomes for consumers will be achieved.

Without proper regard to these issues, port privatisations could lead to greater costs for container stevedores and/or other port users. Key port users Asciano and Qube have raised concerns about the rising cost of port use where governments fail to strike the right balance between maximising the port sale price and the long-term efficiency of the port.⁵ The ACCC agrees with these concerns.

And there are opportunities to improve landside freight flows

With container volumes expected to double over the next 20 years, measures are needed to ensure Australia is able to handle this freight at least cost to Australian businesses and the community.

Road provision and pricing reform

Australia has an opportunity to realise significant productivity benefits to the national economy by engaging in structural reform of road provision and charging.

Such reform would support greater productivity in container supply chains and assist the industry in meeting expected growth in container volumes.

A considerable amount of work has been carried out to date, particularly in relation to user charges for heavy vehicles.

More recently, the Harper Competition Policy Review panel has shown support for reforming the way roads are charged and provided in Australia, highlighting that roads are the least reformed of all infrastructure sectors and that even small changes in productivity in this sector can cascade through the economy, boosting productivity and output.⁶

Responsibility to implement initial heavy vehicle investment and access reform measures now rests with the individual state and territory governments, as well as the Australian Government through the Transport and Infrastructure Council. The ACCC supports the continuation of this work.

Using pricing to allocate scarce capacity

The most efficient way to allocate limited capacity, and minimise the overall cost of infrastructure, is through prices that vary according to the supply and demand conditions at time of use.

The ACCC considers that peak pricing for truck access to terminals may be needed as volumes grow and land becomes scarcer. Industry should consider the merits of adopting such pricing tools.

⁵ See section 1.5.2.

⁶ Competition Policy Review, Draft Report, September 2014, p.28.

Industry-led initiatives

With so many parties involved in container supply chains, there may be opportunities for industry to improve container flows by implementing initiatives that align the incentives of supply chain participants and improve freight productivity.

In some situations, the adoption of technologies that facilitate better engagement between parties may solve particular problems. In other instances, industry initiatives can encourage better use of infrastructure, which may help ease congestion and minimise investment costs.

Industry coordination initiatives can raise concerns under the *Competition and Consumer Act 2010* (CCA), but where this is the case, parties can obtain legal protection through the authorisation or notification provisions of the CCA where the conduct results in public benefits that outweigh any detriments.

Report outline

The ACCC's observations on container stevedoring performance, investment and competition are included in chapter 1. Chapter 2 presents the main monitoring results for 2013–14 and chapter 3 sets out the monitoring results in more detail. Selected industry and company data are presented in appendices A, B and C. Appendix D presents a brief description of the main characteristics of the industry. The ACCC's monitoring methodology and approach to assessing industry profitability is discussed in appendix E. A copy of the ministerial direction is at appendix F. Appendix G reproduces the relevant provisions of the CCA.

1 Competition and performance of Australian stevedoring

1.1 Introduction

In container stevedoring today improvements are being driven by the entry of new competitors and capacity expansion at Australia's largest container ports, which is promoting the level of competitive rivalry between stevedores.

The ACCC's monitoring results for 2013–14 show the benefits of increased competition amongst container stevedores for shipping services.

The benefits of greater competition amongst stevedores will be most immediately realised by shipping lines, and will ultimately flow through to importers and exporters and the wider Australian community by way of cheaper imports and more competitive exports.

The continued roll-out of automated technologies is expected to play a role in driving further performance improvements in Australian stevedoring, as has been the experience with Patrick's terminal in Brisbane.

Greenfield investment in new stevedoring terminals at major ports is delivering an increased level of automation to Australian stevedoring. As container volumes grow, and stevedores compete for shipping lines' business, stevedores are expected to consider the business case for further automating terminal facilities in Australia.

Australian container stevedoring is a markedly different industry today to the industry the ACCC began monitoring in 1998–99. Since that time, container volumes have more than doubled, real unit costs and revenues have fallen, industry profitability has increased, productivity has improved, and there has been substantial investment in new technologies and equipment.

While much has already been achieved in the industry, there are two key risks to enhanced future performance. There remains one major organisation that represents the industry's labour force and there is a history of industrial disputation on the waterfront. Relevant enterprise bargaining agreements (EBAs) are currently or will soon be renegotiated. This provides opportunity for further productivity gains in container stevedoring and to ensure that the gains from increased efficiency are appropriately shared between the workforce, the company and the customers of the stevedores—the shipping lines, and ultimately Australian producers and consumers.

Another potential risk to continued improvements in stevedoring is that port privatisations might be carried out in a manner not conducive to competition. While privatisations may, of course, increase the efficiency of such assets, it is important that they are never driven by budget goals at the expense of creating a competitive market structure or putting in place appropriate access or price regulation. Privatisations provide an important opportunity for governments to review the structure of the assets being considered and facilitate competition where that is possible, and, where it is not possible, to ensure that appropriate access and pricing regulation is put in place to ensure the most efficient long-term outcomes will be achieved.

By 2030, total container movements through our ports are projected to be approximately 2.5 times the volume handled in 2010.⁷ The total national road freight task is projected to be 1.8 times its 2010 level.⁸ It is therefore important that landside networks are able to support this increased volume of freight at least cost to Australian businesses and the community. There are a number of opportunities to improve the efficiency of landside container flows. Reforming

⁷ BITRE, *Freightline*, http://www.bitre.gov.au/publications/2014/files/Freightline_01.pdf, p. 8, May 2014.

⁸ *ibid.*

the way roads are provided and charged, and using price signals to ration scarce capacity in other areas, such as in accessing terminals, will assist in enabling the handling of this projected growth.

Industry background

What is container stevedoring?

Container stevedoring involves lifting containerised cargo on and off ships. Container stevedoring companies provide other related services such as storage, maintenance and repositioning of containers. Stevedores also provide services that facilitate the movement of containers from the terminals to road and rail transport links.

Who provides container stevedoring services in Australia?

In Australia, container stevedoring services are provided by specialist firms that operate port terminals and own container-handling equipment (i.e. cranes and straddles).

There are currently four container terminal operators across the monitored container ports in Australia. These operators are DP World Australia (DP World), Patrick Terminals & Logistics (a division of Asciano Ltd) (Patrick), Hutchison Ports Australia (HPA) and Flinders Adelaide Container Terminal (FACT).

Patrick and DP World operate container terminals at the Port of Brisbane, Port Botany (in Sydney), Port of Melbourne and Port of Fremantle. HPA is a new entrant to Australian stevedoring and has recently begun operating container stevedoring terminals at the Port of Brisbane and Port Botany. FACT is the sole container stevedore at Port Adelaide.

What is the ACCC's role in relation to container stevedoring?

The ACCC is required to monitor prices, costs and profits of the container stevedores at the ports of Adelaide, Brisbane, Burnie,⁹ Fremantle, Melbourne and Sydney. This role is conducted pursuant to a ministerial direction under Part VIIA of the *Competition and Consumer Act 2010*.

As part of this role the ACCC releases an annual monitoring report. The monitoring reports provide information to governments and the community on the operating performance of, as well as the level of competition, investment and productivity in, Australia's container stevedoring industry.

1.2 Past reforms have driven significant industry gains

The ACCC's monitoring program documents the considerable improvements in Australian stevedoring performance since the waterfront reforms of 1998.

Since 1998–99, the ACCC has observed:

- **significantly higher volumes** are now processed by container stevedoring terminals—since 1998–99, the number of twenty-foot equivalent units (TEUs)¹⁰ has increased by 141 per cent, from 2.9 million TEUs in 1998–99 to 6.9 million TEUs in 2013–14.¹¹

⁹ Since (and inclusive of) 2011–12, the ACCC's monitoring program has recorded no container stevedoring activity at Burnie because the sole stevedore at that port, Patrick, advised the ACCC that it had closed its operations in May 2011.

¹⁰ TEUs are 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.

¹¹ The Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Waterline*, forthcoming publication no. 55.

- **stevedoring productivity has improved**—the average net crane rate (a commonly used measure of capital productivity) for the five major ports has improved from 19.6 containers per hour in 1998–99 to 30.8 in 2013–14, a record result for the industry over the monitoring program.¹² The average elapsed labour rate (a commonly used measure of labour productivity) has also increased from 22.4 containers per hour in 1998–99 to 45.6 in 2013–14.
- **real unit costs and average prices are lower**—improved capital and labour productivity levels and higher volumes have resulted in lower unit costs for the stevedores and lower unit revenues (a proxy for average prices for users of stevedoring terminal services). In real terms,¹³ unit costs are 42.1 per cent lower and unit revenues are 38.4 per cent lower in 2013–14 than they were in 1998–99.
- **substantial investment in capacity and efficiencies has occurred**—the value of the stevedoring industry asset base (excluding effects of changes in corporate ownership) has increased substantially since 1998–99 and more than doubled over the last two years.
- **industry profitability remains reasonably high, even at a time of significant expansion**—profitability levels are higher compared to levels reported by the stevedoring industry in 1998–99. The industry rate of return¹⁴ on average tangible¹⁵ assets has increased from 10.6 per cent in 1998–99 to 13.2 per cent in 2013–14 (although, this figure has decreased over the last two years from 29.2 per cent in 2011–12 following the commencement of HPA and the major expansion in the industry's asset base).

1.3 New entry is delivering greater capacity and competition to the industry

Today, further efficiencies in Australian stevedoring are being driven by the entry of new operators in Brisbane, Sydney and soon Melbourne.

Firstly, new entry is delivering increased capacity, which will be crucial for meeting the Bureau of Infrastructure, Transport and Regional Economics' (BITRE) predictions of growth in demand from shipping lines for container stevedoring services. The results of the ACCC's monitoring program show that total container volumes grew by 3.0 per cent in 2013–14. This compares to an average annual increase over the last ten years of 5.2 per cent between 2002–03 and 2012–13, and 2.1 per cent over the preceding five years (2007–08 to 2012–13) following the Global Financial Crisis (GFC). Despite this softening of trade in recent years, the BITRE's long-term demand outlook for container stevedoring services in Australia remains positive, with container volumes projected to more than double between now and 2030.¹⁶

The construction of new terminals at major ports will also mean that shipping lines can expect a greater choice of berthing windows, particularly in the short term as additional windows are made available in excess of current demand. This increased choice of berthing windows may

¹² *ibid.*

¹³ Costs and revenues have been calculated in real terms based on data published by the Australian Bureau of Statistics. See cat. no. 5206.0, Table 4. Expenditure on Gross Domestic Product (GDP), Chain price indexes, Series ID A2303862V (available at www.abs.gov.au).

¹⁴ The ACCC considers that the appropriate measure of rate of return for monitoring purposes is the ratio of earnings before interest, tax and amortisation (EBITA) to the average value (of opening and closing balances) of tangible assets. The ACCC excludes the value of intangible assets (primarily goodwill) from the industry's asset base when assessing operating performance. The effect of asset revaluations by the stevedores is also excluded. The resulting measure should therefore not be interpreted as a return on the funds invested by shareholders in the respective stevedoring businesses.

¹⁵ 'Tangible assets' refers to the physical infrastructure (e.g. cranes, straddles etc.) used by the stevedores to provide container stevedoring services.

¹⁶ BITRE, *Freightline*, http://www.bitre.gov.au/publications/2014/files/Freightline_01.pdf, p. 8, May 2014.

allow cost savings for shipping lines if they can increase the overall efficiency of their service schedule, by, for example, reducing fuel use.

Secondly, the entry of new stevedores is promoting competitive rivalry between container stevedores. As a result, shipping lines are expected to have greater bargaining power in negotiations with stevedores to secure the service features they need. For example, there might be increased pressure on the commercial rates, productivity and/or service levels provided by container stevedores.

1.3.1 New entry continued in 2013–14

Since the ACCC's monitoring program began in 1998–99, the supply of container stevedoring services in Australia has been dominated by two firms currently known as DP World and Patrick.

In recent years, however, opportunities have been provided by ports and state governments for the entry of new operators at Australia's largest container ports: Brisbane, Sydney and Melbourne.

In Brisbane and Sydney, HPA has commenced operations and is attracting shipping line customers

Two Australian east coast ports (Brisbane and Sydney) now offer shipping lines greater choice of suppliers of stevedoring services and more berthing availability.

In Brisbane, HPA was awarded the rights to develop and operate a new terminal through a competitive tender process in 2008. HPA commenced operations at its first berth in January 2013 and serviced its first ship on 10 May 2013 after entering into agreements with Auspac¹⁷ consortium members Neptune Pacific Line and Pacific Forum Line.¹⁸ The second berth at HPA's Brisbane terminal is operational with further work on the back-up terminal area scheduled in 2014–15.¹⁹

The ACCC also understands the Kiwi International Express (KIX) service, run by ANL, APL and Hanjin Shipping,²⁰ has begun calling on HPA's Brisbane terminal.

In Sydney, the New South Wales (NSW) Government awarded HPA the rights to operate the third container terminal at Port Botany through a tender process in 2009, giving HPA container terminals at two Australian ports.

This year marked the commencement of HPA's operations at Port Botany. The Auspac consortium became the first service to call at HPA's Port Botany terminal in November 2013,²¹ and on 25 February 2014, HPA announced that it had entered into a three-year agreement with the Southeast Asia-Australia Service (SAAS) in Sydney, comprising major international shipping lines: UASC; Hapag-Lloyd; Hanjin; CSCL; RCL; OOCL; and Hyundai. According to HPA, the SAAS is a weekly service that runs between Singapore, Malaysia, Brisbane, Sydney, Melbourne and Adelaide, and consists of container exchanges regularly in the order of 1500

¹⁷ The Auspac consortium is made up of Neptune Pacific Line, Pacific Forum Line, Pacific Direct Line, Sofrana and Swire with two 900 TEU capacity vessels. It runs services connecting the South Pacific islands and New Zealand with Australia.

¹⁸ Hutchison Ports Australia, Media Release, '*Auspac consortium first to call at new Brisbane container terminal*', <http://www.hutchisonports.com.au/announcements/auspac-consortium-first-to-call-at-new-brisbane-container-terminal>, 20 May 2013.

¹⁹ Hutchison Ports Australia, '*Brisbane container terminals – greater capacity more service*', <http://www.hutchisonports.com.au/brisbane-container-terminals>, accessed on 25 September 2014.

²⁰ ANL, New service announcement, '*New ANL Service - Kiwi International Express (KIX)*', <http://www.anl.com.au/news/3/new-anl-service-kiwi-international-express-kix->, 16 July 2013.

²¹ Hutchison Ports Australia, Media Release, '*Port Botany's newest stevedore starts operations*', <http://www.hutchisonports.com.au/announcements/port-botany-s-newest-stevedore-starts-operations>, 11 November 2013.

TEU. The first ship under the SAAS was to call at HPA's Port Botany terminal in early April 2014.²²

The entry of a third stevedore at Port Botany is significant as this port has experienced periods of poor service and congestion in the past, particularly at peak times. Long-term trends in the net crane rate indicate that productivity levels at Port Botany have generally been below the five-port average since 2000–01, suggesting that some of the gains following waterfront reforms and capital investment did not materialise at Sydney to the same extent that they did at other ports. A third terminal operator is likely to bring additional competitive pressure that should drive stevedores to offer a more productive quayside service.

In Melbourne, a new stevedore to Australia has been appointed to develop and operate the new container terminal at Webb Dock

In Melbourne, a third terminal is being constructed by a new operator to Australia's shores, Victorian International Container Terminal Ltd (VICTL). VICTL is a consortium comprised of the Philippines based International Container Terminal Services Inc. and Australia's Anglo Ports Pty Ltd.

The Victorian Government announced VICTL as the successful bidder to operate the third container terminal at the Port of Melbourne at Webb Dock on 2 May 2014. The Victorian Minister for Ports, the Hon. David Hodgett MP, announced that the introduction of a new stevedore will be important for increasing competition and for delivering capacity to assist in meeting the state's demands for trade growth.²³ The new terminal at Webb Dock will reportedly be equipped to handle over one million standard containers each year.²⁴

According to the Victorian Government, the development of the new container terminal represents a capital investment in excess of \$440 million by VICTL and the use of leading edge, automated container handling technologies to manage trucks and terminal facilities.²⁵ VICTL will also reportedly promote off-peak truck movements to improve the efficiency of Victoria's transport logistics and feed expanding supply chains.²⁶ Work on the new terminal is expected to start later this year with the first phase of the terminal planned to be ready for operation by 31 December 2016.²⁷

In Fremantle, the port is tendering its stevedoring terminal leases

Significantly, Fremantle Ports has advertised for expressions of interest to develop and operate its container terminal located at North Quay.²⁸ Patrick's and DP World's leases expire in May 2017.²⁹

The Western Australian Government's press release states that 'it's now timely to build some key strategic objectives into the new leasing arrangements to enhance efficiency in servicing the container trade'.

²² Hutchison Ports Australia, Media Release, 'Major shipping consortium signs with Hutchison's Botany terminal', <http://www.hutchisonports.com.au/announcements/major-shipping-consortium-signs-with-hutchison-s-botany-terminal>, 25 May 2014.

²³ Premier of Victoria, Media Release, 'Winning bidder announced for Australia's premier container port operator', <http://www.premier.vic.gov.au/media-centre/media-releases/9813-winning-bidder-announced-for-australia-s-premier-container-port-operator.html>, 2 May 2014.

²⁴ Ibid.

²⁵ Victorian Department of Transport, Planning and Local Infrastructure, Transcript, 'Webb Dock International Container Terminal - 3rd Terminal Operator Announcement', <http://www.dtpi.vic.gov.au/about-the-department/news-and-events/video-updates/webb-dock-international-container-terminal-3rd-terminal-operator-announcement>, May 2014.

²⁶ Premier of Victoria, Media Release, 2 May 2014.

²⁷ International Container Terminal Services, Inc., Media release 'ICTSI brings innovation and greater competition to Australian Ports', <http://www.ictsi.com/media-center/our-releases/2014/05/ictsi-brings-innovation-and-greater-competition-to-australian-ports/>, 2 May 2014.

²⁸ Fremantle Ports 2014, *Invitation for expressions of interest to develop and operate the international container terminals located at North Quay*.

²⁹ Lloyds List Australia & Rail Express News Summary, 10 September 2014.

This decision to tender for new terminal operators is a positive step towards reducing barriers to entry, improving the level of contestability, and driving competitive outcomes in container stevedoring in Fremantle. Patrick has identified successful negotiation of long-term access, on acceptable terms, at the Port of Fremantle following the end of the current term in 2017, as a key business risk it faces in relation to increased competition.³⁰

Tendering opportunities where long-term leases are approaching the end of their terms have historically been rare in Australian stevedoring. The exclusive and long-term (usually 20 to 40 years) nature of lease arrangements between stevedores and port managers can potentially be barriers to entering container stevedoring. However, when an industry is contestable, suppliers are less likely to have the ability to persistently sustain high prices, and are more likely to compete to provide a superior service.

This tender process presents Fremantle Ports with an opportunity to facilitate service improvements, both on the quay-side and the landside, by selecting bidders that put forward packages to provide competitive and productive stevedoring services. A well designed competitive tender process focused on productivity outcomes has the potential to deliver considerable benefits to users of container stevedoring terminals at the Port of Fremantle.

In Adelaide, additional capacity will be provided by expanding the existing terminal

The ACCC understands that capacity expansion at the Port of Adelaide will be provided by investment in the existing terminal, since an additional terminal is not likely to be required for many years.

FACT reported that it has placed orders for two post-panamax cranes as part of its 30-year strategic plan to boost service levels at the Adelaide container terminal. The \$24 million investment is expected to deliver improvements in productivity, safety and efficiency, and expand the terminal's capacity.³¹ The cranes are scheduled to be commissioned in the first quarter of 2015 and will join five new straddle carriers at the port, which are scheduled to be commissioned in 2014–15.

FACT considers that the increased efficiency, through reduced vessel time in port, will enable the Adelaide terminal to meet its projected annual throughput target of over 700,000 TEUs and expects that ultimately vessel turn-around times will be up to 25 per cent faster than current.³² FACT has reported that its quay-line capacity will increase from 630,000 TEU with a berth utilisation rate around 45 per cent to approximately 900,000 TEU and a berth utilisation rate below 40 per cent once the new cranes are commissioned.

1.3.2 Stronger competition in container stevedoring is delivering benefits to service users

The emergence of new entrants is expected to increase competition in container stevedoring. The existence of spare capacity associated with new terminals is expected to spur competition amongst the stevedores until demand grows over time.

However, the full impact of increased competition may not be reflected in stevedoring prices and/or service terms and conditions until contracts are renegotiated over time between shipping lines and stevedores. Contracts can be up to five years in duration.³³

³⁰ Asciano, 'Full Year Financial Results for the twelve months ended 30 June 2014 incorporating the requirements of Appendix 4E', p. 37, http://asciano.com.au/investors/financial_reports.

³¹ Flinders Adelaide, Media Release, 'Efficiency gains on the horizon for FACT customers', <http://www.flindersact.com.au/DOWNLOADS%5CMedia%20Release%2017.03.2014.pdf>, 13 March 2014.

³² Flinders Adelaide, Media Release, 'Efficiency gains on the horizon for FACT customers', 13 March 2014.

³³ Hutchison Ports Australia, 'Submission to the Competition Policy Review', http://competitionpolicyreview.gov.au/files/2014/07/Hutchison_Ports.pdf.

Businesses that are exposed to competition are more likely to face appropriate incentives to minimise costs and invest efficiently in a better service or offer their customers the most attractive terms and conditions of service.

In 2013–14, the ACCC has observed that increased competition is delivering benefits to users of stevedoring services.

Following HPA's entry in Brisbane and Sydney, and prior to the entry of VICTL in Melbourne, both Patrick and DP World have publicly indicated that they are improving service levels to prepare for greater competition. For example, Patrick's parent company Asciano has identified increased competition resulting from the entry of a third stevedore as a key business risk,³⁴ and indicated that it is taking steps to prepare for new entry:

[T]here is going to be a third player that is going to become quite dominant in this market over the years to come. So really our focus is on low cost and high levels of service and good relationships with our existing customers.

Similarly, DP World has stated that its expectation of an increased level of competitiveness in the market is reflected in its changes to its management team and its investment in its business.³⁵ Paul Scurrah, Managing Director and CEO of DP World Australia, reportedly said:

[T]he vision is to establish ourselves as the Australian market leader... we will meet competition head on with a service focus.³⁶

Further, there has been praise from industry in Melbourne for DP World's 'renewed commitment to engagement with the industry', following changes to its management team.³⁷ The ACCC has also received views from industry stakeholders that recent management changes have seen DP World increase its customer focus and improve its engagement with stakeholders.

The ACCC welcomes these signs of increased customer focus from the incumbent stevedores.

The stevedores have also been investing in improving service levels and capacity, which may be partly explained by increased competition. The following text box provides details of some of these investments.

³⁴ Asciano, 'Full Year Financial Results for the twelve months ended 30 June 2014 incorporating the requirements of Appendix 4E', p. 37, http://asciano.com.au/investors/financial_reports.

³⁵ Sydney Morning Herald, 'DP world posts \$68m annual loss', 22 April 2014.

³⁶ Lloyds list 15 Jan 2014; LOCAL EXCLUSIVE: New DP World boss sets out policy agenda.

³⁷ *ibid.*

Recent and planned investments by the stevedores

The value of the industry's asset base grew by 27.3 per cent in 2013–14, following an increase by 60.3 per cent last year³⁸ (which represented the largest annual increase observed in over 10 years). The value of assets in the industry has more than doubled over the past two years.

As new terminals are rolled out at major east coast ports, and demand for stevedoring services continues to grow, Patrick and DP World have been undertaking a number of major investments to improve service levels, increase capacity and deliver efficiencies to their stevedoring operations.

HPA has continued to develop its newly opened Brisbane and Sydney terminal facilities, while on the south coast FACT has investments underway to improve its service levels and boost its capacity.

Patrick

Patrick reported the following key investments for 2013–14 and beyond:

- Capital expenditure for the period significantly increased, primarily reflecting expenditure on the redevelopment of the Port Botany terminal, which includes the expansion of the existing terminal and automation of its operation (see section 1.4). On the landside, the Port Botany redevelopment also includes a new truck ramp entry point and new truck grids. The Port Botany redevelopment and automation is expected to be completed in 2014–15.
- Eight new cranes (ordered in late 2012–13) were delivered and fully commissioned across Patrick's four container terminals during 2013–14.
- Patrick has been implementing optical character recognition at its Port Botany and Brisbane terminals, which is streamlining entry conditions for these terminals with the aim to reduce truck turn-around times.

DP World

DP World reported a number of significant investments in 2013–14:

- DP World completed its major capital investment program; the mode change of its terminal in Brisbane (see section 1.4).
- A new quay crane was commissioned at its Melbourne terminal in late 2013, which, according to DP World, provides additional capacity and greater reliability at this terminal.
 - DP World noted that some of its older cranes can have operating restrictions on the largest vessels calling at its terminals today, so it is replacing or adding quay cranes as required to meet the needs of its customers.

DP World reported the following planned investments for 2014–15 and beyond:

- DP World continues to upgrade and standardise its IT systems, with all terminals now operating on the same terminal operating system. Melbourne was upgraded in 2013 and Brisbane in conjunction with the mode change in 2014. DP World reported that by replacing the legacy system nationally it has standardised its systems, and improved reporting and reliability.
- DP World has ordered two new super post-panamax quay cranes for its Sydney and

³⁸ The above calculation is based on end-of-financial year asset values for the industry in 2012-13. Based on an average of the end-of-year asset values in 2011-12 and 2012-13, the change in the industry asset base was 34.8 per cent in 2012-13 from the previous year.

Fremantle terminals. Delivery for this equipment is expected in the first half of 2015.

FACT

FACT reported the following investments in 2013–14:

- partial payment of two new Liebherr post panamax cranes, with the balance of payment to take place in 2014–15 once the cranes have been delivered
 - FACT noted that the commissioning of the two new cranes has been pushed back from late 2014 until the first quarter of 2015
- partial payment of five Terex straddle carriers, with the balance of payment to take place in 2014–15 once the straddles have been commissioned.
- new hardstand³⁹ (.75ha) and hardstand maintenance
- the purchase of three empty container movers
- the purchase of ancillary type improvements such as safety cages, spreaders, platforms, fire suppression, vehicles and other safety related initiatives.

In addition to completing the acquisition of the new cranes and straddle carriers, FACT plans to complete the following investments for 2014–15:

- additional hardstand development
- purchase of a crane and equipment simulator for training purposes.

HPA

HPA undertook the following major investments in 2013–14:

- Phase one of HPA's Sydney terminal development works was completed and the terminal was opened for business. Automated Stacking Cranes (ASCs) were installed and a new rail siding and office and maintenance buildings were constructed.
- Phase one of HPA's Brisbane terminal was also completed in 2013–14, having been opened for business in the preceding year (2012–13). ASCs were also brought online in Brisbane in 2013–14.
 - For more information on HPA's use of ASCs see section 1.4.

HPA also reported a number of planned investments for 2014–15:

- Phase two works on its Sydney terminal will begin in 2014–15. This will include the installation and commissioning of another three container stacks using ASCs. The work is due to be completed mid-2015 and expected to almost double the capacity of HPA's Sydney terminal. Additional reach stackers and shuttles will also be acquired during phase two.
- Two additional quay cranes will come online at its Brisbane terminal in 2014–15, giving it a total of four quay cranes.
- Initial phase two works at its Brisbane terminal will commence with additional manual

³⁹ Hardstand is a hard-surfaced paved area that can be used for container storage.

handling areas due to be competed in 2014–15. Additional ASCs at Brisbane are planned but as yet have not been scheduled.

Source: The information contained in this summary box is provided by the stevedores and reproduced by the ACCC.

ACCC monitoring data indicates price competition in 2013–14

The ACCC does not collect information on actual prices charged for stevedoring services as these are subject to private negotiation between shipping lines and stevedores. Instead, unit revenues are used as indicators of average stevedoring charges.

In 2013–14, industry unit stevedoring revenues earned on 20-foot containers decreased by 1.1 per cent. Industry unit revenues for 20-foot containers have only decreased once before over the ACCC's monitoring program – in 2008–09, by 0.9 per cent. On average, unit stevedoring revenues for 20-foot containers have increased by 1.1 per cent each year since 2001–02.

Similarly, unit industry stevedoring revenues earned on 40-foot containers also decreased in 2013–14, by 1.0 per cent. This represented the largest annual decline observed over the ACCC's monitoring program. On average, unit stevedoring revenues for 40-foot containers have increased by 0.9 per cent on average each year since 2001–02.

A decline in unit revenues may indicate that there has been some pricing pressure on the stevedores in 2013–14. Pricing pressure may indicate greater competition as stevedores try to maintain market share and win new business, and greater bargaining power on the part of shipping lines due to the increased number of stevedores and greater capacity at certain ports.

Productivity improved in 2013–14

Productivity gains on the wharves can occur through improvements with existing infrastructure, or investments in new technology or capital equipment such as quay cranes or, in particular, the roll-out of automated container handling facilities at stevedoring terminals. Productivity improvements can also be driven by improved work practices.

Significantly, in 2013–14, productivity has improved to record levels – with the five-port average net crane rate increasing from 29.4⁴⁰ containers per hour in 2012–13 to 30.8 in 2013–14 and the five-port average elapsed labour rate improving from 44.4⁴¹ containers per hour in 2012–13 to 45.6 in 2013–14. These improvements are welcome developments in the industry.

A return to a more stable industrial climate in the second half of 2013–14 at Port of Fremantle and Port Botany (see section 1.5.1), as well as increased competition, and the commissioning of new equipment have likely contributed to the improvements in productivity.

New entry in container stevedoring may drive productivity improvements as stevedores strive to win business and retain existing shipping line customers.

Productivity improvements in the industry may also be driven by terminals constructed by new entrants coming online at major ports. Significantly, new terminals are being developed with automated container handling facilities from day one. New terminals will also have newer,

⁴⁰ The net crane rate was reported as 29.2 in last year's Container stevedoring monitoring report (no.15). This year, the data was revised for the last two quarters of 2012–13. As a result, the annualised net crane rate for 2012–13 has been revised from 29.2 to 29.4. The ACCC considers this does not make any material changes to the analysis in last year's Container stevedoring monitoring report.

⁴¹ The elapsed labour rate was reported as 41.1 in last year's Container stevedoring monitoring report (no. 15). This year, the data was revised for the last two quarters of 2012–13. As a result, the annualised elapsed labour rate for 2012–13 has been revised from 41.1 to 44.4. Accordingly there was a considerably larger than reported improvement in the elapsed labour rate last year – from 39.6 in 2011–12 to 44.4 in 2012–13 rather than the previously stated improvement to 41.1.

potentially more advanced, capital equipment, which may mean they have the capability to work more productively than current levels in the industry.

Industry returns remain reasonably high even through a significant expansion in 2013–14

Even after a major expansion in the industry's asset base due to substantial investment in terminal facilities, the industry's rate of return on average tangible assets has remained reasonably high, at 13.2 per cent. This compares to a benchmark of an average of industrial related companies listed on the Australian Securities Exchange (ASX), as measured by the Industrials Index, of 7.9 per cent in 2013–14.⁴²

In 2011–12, the stevedoring industry's rate of return on average tangible assets reached 29.2 per cent, the highest level in the history of the ACCC's monitoring program. This decreased to 21.9 per cent in 2012–13. The fall since 2011–12 has been primarily due to the investment in new terminals, as well as investment in existing terminals. The other significant impact was a fall in industry profits in 2013–14, as measured by earnings before interest, tax and amortisation (EBITA).

The fall in returns in 2013–14 was due to both the increase in assets and decrease in profits, each having a similar impact.

While these results are primarily the product of investment and costs associated with new entry, they are also potentially due to greater competition in the industry. Increased competition is likely to put pressure on any 'above-normal' rates of return that have existed in an industry which, until recent years, has not been subject to competition from new players.

The way stevedores compete is changing

In Australia, no single port acts as the primary destination for container ships, as is often the case in other countries. Rather, shipping lines typically call on a number of ports that are separated by long distances. Shipping lines therefore need to establish a sequential network of suitable berthing windows across ports so that they are able to maintain their shipping schedules.

In the past, there has been a preference amongst some of the larger shipping lines to contract with a particular stevedore on a multi-port basis in Australia. However, the competitive dynamic is changing, and there will soon be four container stevedores operating along Australia's east coast, instead of two as there had been for many years. In addition, two of these four operators (HPA and VICTL) do not have a presence at all of the four largest container ports.

Multi-port contracting is likely to offer a number of advantages. For example, it may reduce transaction costs by allowing a shipping line to deal with a single stevedore rather than a different one at each port. Also, a multi-port provider may offer shipping lines incentives in terms of volume discounts that would not be available from single-port operators. A stevedore that provides services on a multi-port basis may also be able to coordinate its various terminals so that a vessel that arrives at a port behind schedule can be brought back on schedule by the time it leaves Australia.

While multi-port contracting may offer a number of advantages, it is, by itself, unlikely to deter a single-port stevedore from competing aggressively for business. A single-port stevedore, for instance, may be able to offer its customers a price discount or service guarantee to attract new business away from an established operator with a national presence.

⁴² The asset values for the S&P/ASX 200 Industrials Index include the effect of asset revaluations and are therefore not directly comparable to the asset base for the Australian stevedores derived by the ACCC because tangible assets are measured at historic cost. However, the effect of asset revaluations would not be expected to account for all of the difference between the stevedoring industry's rate of return on tangible assets of 13.2 per cent and the index figure of 7.9 per cent. Even if asset revaluations reported by the stevedores were to be included, the stevedoring industry is above the rate of return of the Industrials Index.

This view appears to be supported by the recent tender process for the third container terminal at the Port of Melbourne. The ACCC notes that three of the four bidders shortlisted to develop and operate the third terminal in Melbourne did not have a presence operating a container stevedoring terminal elsewhere in Australia. The interest from these bidders indicates that operating a terminal at only one port in Australia does not preclude investors seeking to enter the container stevedoring industry (at least in Melbourne).

Further, the ACCC notes that some shipping services appear to be choosing different stevedores at different ports. For example, Hapag-Lloyd announced that from April 2014 it would be contracting with HPA in Sydney under the SAAS, while its contracted stevedore in Brisbane and Melbourne remained to be DP World.⁴³ This indicates that it can be in shipping lines' interests to contract with different stevedores at different ports.

In addition, a common view expressed to the ACCC by stakeholders is that while multi-port contracting has historically been a practice in Australia, it is not common overseas, and it need not be in Australia. The move away from multi-port contracting is a positive one for competition, increasing the pressure on offerings at individual ports.

Proposed alliance between HPA and VICTL

The ACCC notes press reports that HPA will hold talks with VICTL to discuss jointly operating on the east coast to compete with Patrick and DP World Australia.⁴⁴

There are potential benefits from cooperative arrangements between new entrants across ports – for example, if better service features can be provided to users, or if the arrangements increase new entrants' competitiveness against well-established rivals.

1.3.3 Challenges for new entrants

While the ACCC understands that newly established terminals in Brisbane and Sydney are having some success in attracting shipping line customers, entering a well-established, capital intensive industry like container stevedoring is not without its challenges, and it will inevitably take new stevedores some time to embed their operations and attract sufficient shipping line customers. The features identified below may slow the process of acquiring sufficient stevedoring business to operate profitably. Some are likely to reflect the economics of the industry – for example, the volume driven nature of business and the likely presence of economies of scale. Others may relate to existing arrangements in the industry.

Existing contracts or arrangements between shipping lines and incumbent stevedores

Shipping lines will generally have agreements with existing stevedores for shipping services. Existing agreements between shipping lines and incumbent stevedores may limit the amount of business that new entrants are able to attract initially upon entering the market. This would be expected to diminish as contracts come up for renewal and new entrants have more opportunities to make offers for new business.

HPA has expressed a view that agreements between shipping lines and stevedores relating to a particular shipping conference service should have a common end date.⁴⁵ According to HPA the staggered end dates of shipping line agreements with stevedores make it difficult for conference services to go to the market.⁴⁶ The ACCC considers that this is a commercial matter for shipping lines to consider in their negotiations with stevedores.

⁴³ Hapag-Lloyd, 'South East Asia Australia Loop (SAL): Change of Terminal at Sydney', http://www.hapag-loyd.com/en/news/news_page_33947.html, 26 Feb 2014.

⁴⁴ The Australian, *Hutchison in bid to end ports duopoly*, 25 July 2014, p.18; Australian Financial Review, *Port operators set to team up on east coast: analysts*, 23 May 2014.

⁴⁵ Hutchison Ports Australia, Submission to Competition Policy Review, http://competitionpolicyreview.gov.au/files/2014/07/Hutchison_Ports.pdf, 26 June 2014.

⁴⁶ *ibid.*

Economies of scale

Container stevedoring is a capital intensive industry, requiring large and lumpy investment in equipment like cranes, straddles and technology. In addition, efficiencies available to a larger operator, for example, in terms of management and coordination of workforce and equipment, may not be available to stevedores operating on a smaller scale. A higher output allows a firm to achieve economies by spreading these costs over a greater number of units. For these reasons it is generally accepted that there are economies of scale in container stevedoring.

Until a new entrant is able to acquire sufficient market share, it may have trouble profitably offering attractive services and competitive rates to shipping line customers. New operators may sustain losses in early periods until they can attract market share and earn revenues at levels needed to recover initial capital costs.

Competitive responses to entry

In response to market entry and capacity expansions at major ports, the incumbent stevedores are expected to try to protect their market share by offering more attractive prices and/or service terms and conditions to shipping lines during contract negotiations. The incumbents are also expected to invest in infrastructure to provide a better service.

Rebates and discounts based on national volumes

As noted above, contracts between shipping lines and container stevedores are sometimes negotiated on a multi-port basis. While the ACCC is not privy to the terms, conditions and rates negotiated between shipping lines and stevedores, the ACCC understands that some stevedoring contracts may contain rebates or discounts where shipping lines use a particular stevedore in a number of ports and provide a high proportion of their volume to a particular stevedore nationally. According to HPA, stevedores have tended to bundle their ports to offer a price based on a shipping line's total volume for that service or for Australia overall.⁴⁷

How rebates and discounts actually play out in practice in Australian stevedoring is not clear; however, it is conceivable that they may make it more difficult for new entrants to profitably compete, if a new operator is unable to offer shipping lines services at as many locations.

While rebates and discounts can reduce prices and are therefore generally beneficial for consumers and efficiency, depending on how they are structured, and their purpose or effect, rebates may be used by a dominant firm to foreclose potential rivals. Where there is evidence of such behaviour, the ACCC has powers under the CCA to investigate anti-competitive conduct and if necessary take enforcement action through the courts.

Subcontracting arrangements between stevedores

Sometimes a stevedoring terminal can become constrained in its ability to provide services to scheduled shipping lines, for reasons including equipment malfunctions, technology glitches, congestion, adverse weather or industrial unrest.

Having been a two-player industry for some time, the ACCC understands that incumbent operators may have established methods to manage irregular terminal constraints through subcontracting arrangements where they agree to service each other's customers while their rival's terminal is unable to service ships. For example, in July 2014, it was reported that DP World intended to subcontract its vessels to Patrick in Fremantle when its terminal was experiencing industrial dispute.⁴⁸ HPA has expressed the view that agreements that automatically transfer 'overflow' or subcontracting work to another stevedore are no longer appropriate in a market where there are more than two suppliers.⁴⁹

⁴⁷ *ibid.*

⁴⁸ ABC News, 'Fremantle Port dispute: DP World Australia to hand business to rival Patrick amid stoush with MUA', <http://www.abc.net.au/news/2014-07-29/fremantle-port-to-stop-servicing-ships-amid-dispute/5633404>, 29 Jul 2014 (updated: 30 Jul 2014).

⁴⁹ Hutchison Ports Australia, 'Submission to Competition Policy Review', 26 June 2014.

The extent to which existing ‘overflow’ arrangements may impede a new entrant in establishing itself may depend on the significance of such arrangements in practice. However, the ACCC expects that the entry of a new stevedore at a particular port provides another option for the incumbent operators to consider in negotiating such services.

Initial hesitation from shipping lines

Shipping lines may be initially cautious in considering a new entrant's services. Their desire to switch suppliers will depend on the price and level of service being offered by their provider, compared with what is offered by a new entrant. This is likely to become less of an issue over time, as new entrants' operations become visible if they offer competitive prices and/or services or more suitable berthing windows.

1.4 Automation is expected to pave the way for future improvements

In recent years, the ACCC has observed a trend towards the automation of stevedoring terminals along the east coast. Automated equipment has or will be installed by new entrants HPA and VICTL, as well as by the major incumbent operators, Patrick and DP World.

According to the stevedores, automated technologies can drive a range of improvements in stevedoring performance.

As container volumes grow, stevedores may consider the business case for further automating terminal facilities and whether it can drive service improvements to increase their competitiveness.

The following textbox outlines the key types of automated technology being adopted in Australian stevedoring.

Key types of automation in Australian stevedoring

Two key types of automated equipment have been introduced by the stevedores – automated straddles (AutoStrads™) and automated stacking cranes (ASCs). These are outlined below.

AutoStrad technology (Patrick)

AutoStrad automated straddle carrier technology has been in operation in Australia since it was successfully introduced by Patrick at its Brisbane terminal in 2005.

According to Asciano (Patrick's parent company), AutoStrads operate unmanned, using radar and laser guidance technology to navigate around the yard, moving and stacking containers from the quay line into the holding yards, onto vehicles and back to the quay cranes with accuracy better than 2 centimetres.

In July 2012, Asciano announced plans to introduce AutoStrad equipment at its Port Botany terminal. The project includes the installation of 44 AutoStrads and associated infrastructure and systems. Thirty nine new AutoStrads for the redevelopment project have been received by Patrick, and are being tested at Patrick's Fisherman Island terminal in Brisbane.

Automated stacking cranes (DP World & HPA)

ASCs are the other main form of automated stevedoring equipment being rolled out in Australia. This is the type of automated technology introduced by DP World and HPA.

According to DP World, the ASCs are fully automated rail mounted gantry cranes that perform container moves within each 300 metre long module.

In May 2014, DP World delivered ASC technology to its Brisbane terminal. The \$250m automation project includes the introduction of 14 ASCs with 14 straddle carriers running from

the ASCs to the quay cranes, as well as seven modules (with two ASCs on each).

Under this system, DP World transfers containers by manned shuttle carriers from the quay crane to a waterside exchange area at the front of a module serviced by an ASC. The ASCs then automatically select and load containers onto trucks as they pass through the terminal.

DP World reported that the introduction of its automated container handling operations will drive consistent operational performance and boost productivity. Commissioning of all equipment was completed during 2014 and the new automated mode is now operational.

HPA has introduced ASCs into its new stevedoring operations at Brisbane and Sydney. This is the first time this technology will be used in Sydney. Both terminals have three stacks utilising ASCs. Each stack has a wharf-side and landside ASC linked to the terminal's management software program, nGen. HPA has stated that use of ASCs provides greater on-site container capacity to manage peak demand, improve security and employee safety.

VICTL's terminal will reportedly be 'Australia's first fully automated container terminal'⁵⁰

Significantly, the Port of Melbourne will soon become Australia's third container port with automated container terminal facilities. Twelve automated stacking cranes (ASCs) and 11 automated shuttle carriers will reportedly be delivered by Kalmar to VICTL's Melbourne facility during 2016.⁵¹

Media releases by International Container Terminal Services, Inc., majority shareholder of VICTL, indicate that the new terminal at Webb Dock will utilise the 'best-proven technologies and innovations to deliver fully-automated operations from the gate to the quayside' to deliver 'superior operating efficiency', as well as 'limit the noise and light impact on surrounding communities'.⁵²

VICTL's planned introduction of automated container handling equipment at the Port of Melbourne could potentially spur on the incumbent operators to consider introducing automated technologies to their existing facilities in Melbourne.

DP World is reportedly considering automating its Port Botany facility

DP World has indicated that it is in discussions with its board and shareholders about the potential to automate its Port Botany terminal, according to press reports earlier this year. DP World reportedly estimated it would take three years to automate the terminal once it received the necessary approvals.⁵³

1.4.1 Benefits of automation

Automated container handling technology has been shown to lead to productivity improvements in stevedoring. After Patrick's introduction of AutoStrad technology in Brisbane in 2005–06, there were noteworthy productivity improvements observed at that port once the technology was embedded. Patrick's current automation of its Port Botany facility is therefore significant as it can be expected to lead to productivity improvements.

⁵⁰ International Container Terminal Services, Media Release, 'ICTSI to develop Australia's first fully automated container terminal', <http://www.ictsi.com/media-center/our-releases/2014/05/ictsi-to-develop-australia-s-first-fully-automated-container-terminal/>, 3 May 2014.

⁵¹ Cargotec, Media Release, 'Cargotec's Kalmar wins significant order for Melbourne's new automated container terminal', <http://www.cargotec.com/en-global/macgregor/releases/Pages/cargotec-s-kalmar-wins-significant-order-for-melbourne-s-1853183-Wed-03-Sep-2014-13-00.aspx>, 3 September 2014.

⁵² International Container Terminal Services, Media Release, 'ICTSI brings innovation and greater competition to Australian Ports', <http://www.ictsi.com/media-center/our-releases/2014/05/ictsi-brings-innovation-and-greater-competition-to-australian-ports>, 2 May 2014.

⁵³ Australian Financial Review, 'Automation 'inevitable' at Port Botany', 18 May 2014.

It is yet to be seen what the effect of the introduction of ASCs will be on productivity in Brisbane in the longer term. While quay-side productivity has fallen and truck turnaround times increased at the Port of Brisbane during the implementation of its mode change, DP World expects that introduction of its automated container handling operations will drive consistent operational performance and boost productivity.

Aside from improved productivity, other benefits, such as improved safety and service flexibility and reliability, are associated with the introduction of automated container handling equipment.

The benefits expected to result from the automation of Australian stevedoring terminals may depend on the type of automated technology adopted. Different technologies (e.g. AutoStrads, ASCs) will have different costs (both in terms of initial capital costs and ongoing running costs). They may also differ in the improvements they can deliver (in terms of productivity, operating cost savings, safety, reliability etc.).

1.4.2 Timing and degree to which automation will likely be rolled out further

A number of factors will likely contribute to the timing and degree to which automated equipment is installed at Australian container stevedoring terminals. These factors include container volume growth, new entry, increased competition and the cost and productivity of labour. These are discussed below.

- Container volume growth – because investment in automated container handling equipment is lumpy and there will be a minimum scale required to justify investment. Stevedores are expected to consider the business case behind installing automated equipment as volumes increase or are expected to increase.
- New entry – new entry is driving an increased level of automation. HPA has acquired and installed ASCs at its newly commissioned terminals in Brisbane and Sydney and VICTL has indicated that it will install automated technology at its forthcoming terminal at Webb Dock in Melbourne. The business case for using automated technology is likely to be strong when developing a new terminal.
- Increased competition – in response to increased competition in the industry, the incumbent operators may consider further investment in automated technologies as a way to develop a competitive edge and/or improve their performance.
- The relative cost and productivity of labour – the degree to which automation is rolled out in stevedoring, and its timing, may be influenced by the cost and productivity of a stevedore's labour force.

1.5 Risks to future performance

There is much being done to improve the performance of Australia's container stevedoring industry. Significant gains have been made already, and further improvements are expected. There exist, however, two key risks to the future performance of the stevedoring industry—the impact of labour outcomes and the impact of port privatisations.

1.5.1 Labour outcomes

Since 1998, negotiated EBAs have allowed for greater flexibility in the deployment of labour by the stevedores and there has been a significant increase in labour productivity as measured by the elapsed labour rate.

However, while there is now greater competition in container stevedoring, there remains one major organisation representing the industry's labour force, and there is a history of industrial disputation on the waterfront.

The ACCC considers it important that the gains from improved competition and capacity in the Australian stevedoring industry are not constrained by labour outcomes. There are some emerging signs of risks in this respect.

In relation to Patrick's Port Botany⁵⁴ and Fremantle⁵⁵ terminals, the Fair Work Commission issued orders in July 2013 and December 2013 respectively for industrial action to stop, not occur and not be organised. In making a decision in relation to the Fremantle matter, Commissioner Cambridge noted:

The evidence provided in this matter, in terms of both statistical analysis and industrial relations history, has established that the MUA and the Fremantle Employees have engaged in, and or encouraged or otherwise organised, the imposition of a limitation on the performance of work involving a limit to the number of container lifts by a crane gang in a shift to a maximum of roughly 200. This limitation is referred to as "the Cap".⁵⁶

Positively, productivity improved after this – with the elapsed labour rate in Fremantle improving considerably from 33.1 containers per hour (December quarter 2013) to 41.1 (June quarter 2014) and, at Port Botany, from 45.3 (September quarter 2013) to 49.1 (June quarter 2014).

More recently, it was reported that DP World would temporarily close its terminal in Fremantle in response to a planned stoppage of work at that terminal on 31 July 2014, as well as a series of rolling bans on labour.⁵⁷ This dispute was reportedly over negotiations for a new EBA. Positively, however, the parties announced they had reached an agreement to avoid the terminal closure. The ACCC notes there is a reported history of industrial conflict at DP World's Fremantle terminal resulting in previous orders for industrial action to cease.^{58 59}

In September 2014, it was reported that members of the Maritime Union of Australia (MUA) employed by DP World in Melbourne, Sydney and Brisbane would take protected industrial action by stopping work for blocks of four to eight hours in support of enterprise agreement bargaining.^{60 61}

In 2011–12, there was a prolonged period of industrial disputation associated with EBA negotiations between the maritime labour force and major container stevedores. The ACCC monitoring program observed that this coincided with a fall in labour productivity and an increase in unit labour costs that year (in nominal terms by 7.5 per cent, representing the highest annual percentage rise in the history of the ACCC's monitoring program).⁶²

In fact, while unit labour costs in real terms have generally followed a downward trend since the waterfront reforms of 1998, since 2010–11 they have been increasing. In 2011–12, 2012–13 and 2013–14, unit labour costs in real terms increased by 6.3 per cent, 3.4 per cent and 1.4 per cent respectively.

⁵⁴ [2013] FWC 4391 and Order PR538567 of Vice President Watson at Sydney on 4 July 2013 in matter number C2013/4565. The MUA subsequently sought permission to appeal this order. The order was amended on 11 October 2013 on appeal (the amended order is *Patrick Stevedores Holdings Pty Limited – Port Botany – Industrial Action Order No. 1 of 2013*).

⁵⁵ [2013] FWC 9547, Fair Work Commission, Single member decision, 19 December 2013, Patrick Stevedores Holdings Pty Limited v Maritime Union of Australia, Application for an order to stop industrial action.

⁵⁶ [2013] FWC 9547. Appeal against decision [2013] FWC 9547 of Commissioner Cambridge at Sydney on 19 December 2013 in matter number C2013/7531.

⁵⁷ WA Today, 'Fremantle ports dispute sees business handed to rival', <http://www.watoday.com.au/wa-news/fremantle-ports-dispute-sees-business-handed-to-rival-20140730-zyi8q.html>, 30 July 2014.

⁵⁸ On 10 August 2010 it was found that industrial action in the form of a "go-slow" had occurred and an order of limited duration was made that it stop and not be engaged in. On 2 April 2012 a similar finding and order were made. On 12 April 2013, the existence of a 'go-slow' was again found and a further order under s.418 was made.

⁵⁹ [2014] FWC 4094 Fair Work Commission, Single member decision of Vice President Watson on 7 July 2014, matter number C2013/7801.

⁶⁰ Lloyd's List 2014, *BREAKING NEWS: MUA to stop work at DP World terminals*, 26 September 2014.

⁶¹ Lloyd's List 2014, *BREAKING NEWS: MUA to strike in Brisbane on Friday*, 30 September 2014.

⁶² ACCC, *ACCC Container Stevedoring Monitoring Report 2011–12*, p.13.

In 2012–13, labour productivity increased to 44.4 containers per hour from 39.6 in 2011–12, upon a return to a more stable industrial climate following the finalisation of EBAs.

Stevedoring EBAs are being renegotiated and provide valuable opportunities to provide incentives for further productivity gains

EBAs are significant as they set the terms at which higher wages outcomes will be offset against labour-based productivity gains. The ACCC notes that EBAs between the stevedores and their workforces are being renegotiated.

It is not clear to the ACCC that all existing EBAs incorporate appropriate productivity benchmarks. For example, the DP World agreements for each terminal⁶³ were directed towards the achievement of 'a minimum 25 container lifts per hour' and 'average gate to gate turnaround times within 30 minutes'. The 25 net crane rate level was a benchmark set during the 1998 waterfront reforms and, at an industry level, has been consistently met since the December quarter 2000 (see section 2.4.1 of this report). The view has also been expressed in the industry that there has been a poor record of productivity trade-offs in the industry as well as penalty conditions which are above community norms.⁶⁴

The ACCC considers that EBA negotiations between the stevedores and their workforces provide valuable opportunities to provide incentives for further productivity gains in container stevedoring by setting meaningful performance benchmarks as part of the package of rewards and incentives given to employees.

1.5.2 The impact of port privatisations

There has been a trend towards the privatisation of port assets. This trend continues with the Victorian Government's decision to offer a medium-term lease for the operation of Australia's largest container port, the Port of Melbourne.⁶⁵

Three of the remaining four monitored mainland container ports in Australia have been privatised to date – Port Botany, Port of Brisbane and Port of Adelaide. The Port of Fremantle remains government owned. These container ports are subject to different levels of price regulation and monitoring:

- The Port of Melbourne is subject to limited price monitoring by the Essential Services Commission of Victoria. The monitoring applies to certain prescribed services specified under the *Port Management Act 1995* (Vic).⁶⁶
- The Port of Adelaide, operated by Flinders Ports Pty Ltd, is subject to pricing and access regulation by the Essential Services Commission of South Australia (ESCOSA). ESCOSA is authorised to monitor prices and make price determinations relating to essential maritime services.⁶⁷
- In NSW, a price monitoring regime has been established. It includes a requirement by the lessee to publish port service charges and give notice of any proposed change to charges. The regime applies to Port Botany and Port Kembla.⁶⁸

⁶³ Agreement references: AG2012/4588, AG2012/4210, AG2012/5721, AG2012/5838, AG2012/5273.

⁶⁴ Ports Australia Chief Executive, David Anderson quoted in The Australian, <http://www.theaustralian.com.au/national-affairs/wharf-reforms-will-cut-costs/story-fn59niix-1226945044265>, 6 June 2014.

⁶⁵ State Government of Victoria 2014, Media Release, 'Coalition Government confirms plans to lease the Port of Melbourne', 5 May 2014.

⁶⁶ Refer section 46 and section 55 *Port Management Act 1995* (Vic) for details of prescribed services at the Port of Melbourne that are subject to monitoring by the Essential Services Commission of Victoria.

⁶⁷ Essential Services Commission of South Australia, <http://www.escosa.sa.gov.au/ports-overview.aspx>.

⁶⁸ Part 6 *Ports and Maritime Administration Act 1995* (NSW) No 13.

- In Queensland, there is currently no specific prices oversight regime applying to the Port of Brisbane.⁶⁹
- The prices charged by the Port of Fremantle are subject to oversight by the shareholder Minister.⁷⁰

Privatisations to promote efficiency

As a general principle, the ACCC considers that privatisation may increase the efficiency of many businesses, consistent with the overall goals of competition policy. Through competition for capital, private ownership improves a firm's productivity incentive. Privately owned firms have greater incentive and ability to be cost efficient and innovative compared to government owned enterprises. The ACCC considers that governments should not retain ownership of business enterprises unless there is a clearly stated public policy for doing so, and government ownership is the best way to meet this goal.

However, a key concern identified by the National Competition Policy (Hilmer) Review in 1993 was that privatisation may be driven primarily by budgetary goals, at a cost to competition. For example, public monopolies or near monopolies are likely to attract premiums on sale if the rights to operate these assets are not sold in a way that maximises competition. The need to consider competition when privatising a monopoly was recognised in the Competition Principles Agreement⁷¹ which included the requirement that:

4(c) Before a Party introduces competition to a market traditionally supplied by a public monopoly, and before a Party privatises a public monopoly, it will undertake a review into: ...

2. the merits of separating any natural monopoly elements from potentially competitive elements of the public monopoly;

3. the merits of separating potentially competitive elements of the public monopoly; ...

7. the price and service regulations to be applied to the industry.

Experience with government privatisations over recent decades has shown that acting in accordance with these principles promotes competitive outcomes. However, there are concerning signs that, increasingly, Australian governments are privatising assets with a view to maximising the proceeds of sale at the expense of competition.

In addition to considering issues of market structure, governments should consider what, if any, regulatory settings should apply to monopoly assets when privatised. Governments should avoid the temptation to attempt to maximise sale revenue by privatising without appropriate price and access regulation in place. While this may attract a financial benefit upfront, loss of competition effectively imposes a tax on future generations of Australians.

The ACCC has concerns that, at times, governments are not establishing appropriate access mechanisms prior to the sale of such assets, instead relying on contractual arrangements with the successful bidder. These issues are discussed further below.

⁶⁹ However, the Queensland Competition Authority has potential power to monitor prices and report to the Queensland government (under section 10 of the *Queensland Competition Authority Act 1997* (Qld), <https://www.legislation.qld.gov.au/LEGISLTN/CURRENT/Q/QldCompAuthA97.pdf>).

⁷⁰ *Port Authorities Act 1999* (WA).

⁷¹ The Council of Australian Governments' (COAG) Competition Principles Agreement covered: oversight of government business enterprises; competitive neutrality; structural reform of public monopolies; legislation review; access to services provided by means of significant infrastructure facilities; application of the principles to local government; and the operation of the National Competition Council. The Competition Principles Agreement is accessible at <https://www.coag.gov.au/node/52>.

Port privatisations should be carried out with a view to maximising competition, not meeting budgetary goals

The ACCC is aware of concerns voiced by port users regarding assets being privatised in the absence of appropriate access and pricing mechanisms.

For example, Qube's Managing Director, Maurice James, recently raised concerns about the rising costs of port use, and in particular a concern that rental costs at the Port of Melbourne would increase following privatisation. Qube warned that governments' eagerness to sell ports to the highest bidder to maximise sale proceeds could hurt Australia's international competitiveness if the new owners are allowed to push up rents, which may then be passed along the supply chain to importers and exporters.⁷²

Asciano's Managing Director and CEO, John Mullen, has also raised concerns about port privatisations, and in particular the lack of regulatory controls imposed on port operators as part of the sale process, and the likelihood of resulting price increases for port users.⁷³ Asciano further noted:

While as a stevedore we can often pass [price rises] on to customers so we do not feel all the impact ourselves, in effect this becomes an additional tax on the nation's importers and exporters.

It could be argued that the quick financial gain taken by a government upon privatisation risks being offset over time by an increasing lack of competitiveness for Australia's manufacturers and exporters, and higher costs for the consumer."⁷⁴

Leases to operate ports may fetch high prices when sold by governments if bidders anticipate the ability to earn monopoly profits from the asset and recover the price paid from port users, or favour downstream businesses.

In April 2013, the NSW Government announced that the 99-year lease of Port Botany and Port Kembla had been awarded to the NSW Ports Consortium for \$5.07 billion. This was quoted as a figure 25 times earnings.⁷⁵ Further, in November 2013, Canadian pension fund CDPQ purchased a 26.7 per cent stake in the Port of Brisbane from Global Infrastructure Partners (GIP).⁷⁶ The price paid was reportedly about \$1.4 billion, representing a multiple of roughly 27 times earnings.⁷⁷ GIP reportedly paid about \$575 million for the stake less than three years earlier.⁷⁸ These recent sales demonstrate the prices private investors are willing to pay to acquire Australian port assets.

The ACCC considers that, if monopoly port related infrastructure is privatised without appropriate regulatory mechanisms in place, this could impede competition in container stevedoring and/or related markets, and/or lead to greater costs for container stevedores and other port users.

⁷² Australian Financial Review, 'Qube queries Port of Melbourne', 11 September 2014.

⁷³ Australian Financial Review, 'Take care with privatisation: Asciano's Mullen', http://www.afr.com/p/business/sunday/take_care_with_privatisation_asciano_DrwpPLfOUNZymnczYFHZ8Q, 10 November 2013.

⁷⁴ The Australian, 'Asciano sounds alarm on price rises after asset sales', <http://www.theaustralian.com.au/business/asciano-sounds-alarm-on-price-rises-after-asset-sales/story-e6frg8zx-1226909489624?nk=e87fb6ea0ca33aca71b7557801d51a05>, 8 May 2014.

⁷⁵ NSW Ports, 'NSW Ports acquires long-term leases for Port Botany and Port Kembla', <http://www.nswports.com.au/news/article/nsw-ports-acquires-long-term-leases-for-port-botany-and-port-kembla>.

⁷⁶ Reuters, 'Canada's Caisse to buy 26.7 percent of Port of Brisbane', <http://ca.reuters.com/article/businessNews/idCABRE9AR0SE20131128>, 28 November 2014.

⁷⁷ Sydney Morning Herald, 'Mega-funds spark a ports boom', <http://www.smh.com.au/business/megafunds-spark-a-ports-boom-20140306-34a7y.html>, 7 March 2014.

⁷⁸ The Australian, 'IFM in bid to control port with \$900m deal', 26 September 2013.

Principles for ensuring competition and efficiency are promoted through privatisation

There are two key principles that governments should have regard to when privatising assets. These principles, in relation to port sales, are:

(1) The structure and/or conditions of the sale should promote competition

The ACCC considers that the sale of port assets should promote competition where possible, for example by separating rather than integrating potentially competitive facilities and avoiding anti-competitive provisions from agreements with successful bidders.

For instance, once Port Botany and the Port of Newcastle were privatised, it was reported that:

The government has confirmed it leased Botany with a clause that prevented Newcastle from competing against it with a container terminal. And the Newcastle lease is believed to contain a similar undertaking.⁷⁹

The ACCC notes that Port Kembla has been identified by the NSW Government as the location for the development of a future container terminal to augment the capacity of Port Botany when required,⁸⁰ and notes that the NSW Government considers that:

Port Kembla is naturally placed to accommodate Sydney's future container growth when Port Botany reaches capacity, due to its proximity to Sydney as well as existing and planned transport links, including several intermodal facilities planned for south-west Sydney...

Importing containers through the Port of Newcastle is less attractive than importing them through Port Botany or Port Kembla due to the landside transport infrastructure upgrades that would be required and the port's distance from Sydney's logistics centres, which are located primarily in the Botany industrial area and in south-west and western Sydney.⁸¹

While there may be legitimate reasons why a government would want to plan for port development, for example, given the significant investments in road and rail connections required to support a container port, any sale conditions designed to boost asset sale prices by reducing potential competitive pressures on the asset operator would be of concern to the ACCC.

The ACCC encourages early engagement from State governments on any competition issues that may arise in relation to the proposed sale structures or sale conditions for any monopoly or near monopoly assets, including any restrictions on competition proposed in the arrangements. Such restrictions may be unlawful and could be unenforceable.

(2) Governments must consider the need for up-front economic regulation of monopoly or near monopoly assets

Major container ports are generally monopoly or near monopoly assets, so their public or private operators tend to have market power.⁸² Privatisation of such assets transfers this market power to private hands.

Regulation is likely to be required where there is only one port in a particular market or the operator of a port operates in, or may enter, a downstream market. This may involve the regulation of third party access to a monopoly service which is needed by businesses to compete in upstream or downstream markets. Access regulation may be based on a negotiate-arbitrate model, where this is appropriate, rather than *ex ante* price regulation.

⁷⁹ Newcastle Herald, 'Interesting times for container terminal plans', May 11 2014.

⁸⁰ State of New South Wales 2013, *NSW Freight and Ports Strategy*, p. 117.

⁸¹ The Hon. Duncan Gay, then Minister for Roads and Ports, Legislative Council debate following Second Reading Speech for the *Ports Assets (Authorised Transactions) Bill* 2012.

⁸² Port managers will likely have a commercial incentive to encourage trade as they collect charges from shipping lines. Port managers may therefore be somewhat constrained in the level of charges they set to the degree that these reduce trade volumes.

When governments are contemplating the privatisation of monopoly or near monopoly port-related assets, this is a timely opportunity to assess and, if necessary, alter the applicable regulatory framework. There should be no presumption that any regulation applying at that time will be 'fit for purpose' once the asset is sold.

When privatising monopoly or near monopoly assets, regulatory arrangements should be determined before the sale, to provide greater regulatory certainty to the purchaser. Governments must also carefully consider the form of regulation that is appropriate. A price monitoring regime may be favoured by a government seeking to maximise the sale price. However, in the ACCC's experience, price monitoring does not provide an effective constraint on the exercise of market power, including monopoly pricing.

Where access regulation is appropriate, the ACCC considers that competition issues, including in relation to pricing, are best addressed through Part IIIA of the CCA – the primary legislative provisions governing Australia's National Access Regime.

Where potential competition issues arising from the privatisation of monopoly assets have not been dealt with up-front by governments, complications can arise while the ACCC is assessing proposed acquisitions of the assets under section 50 of the CCA. Section 50 prohibits acquisitions of assets or shares that would have the effect, or be likely to have the effect, of substantially lessening competition in a market. The ACCC is responsible for enforcing section 50 of the CCA.

A particular bidder for assets might raise competition issues because they hold an interest in competing assets (i.e. horizontal aggregation) and/or businesses at other levels of the supply chain (i.e. vertical integration). For instance, vertical integration will result where the long-term lease of a port is sold to a container stevedore or a shipping line. Vertically integrated port operators may have an incentive to favour their related businesses when providing port services, to the detriment of other port users and competitors.

If the ACCC forms the view that a proposed acquisition is likely to contravene section 50, merger remedies may be available to deal with those concerns. Such remedies could involve the divestment of other assets owned by the bidder or, particularly where there is vertical integration, a behavioural undertaking from the acquirer pursuant to section 87B of the CCA requiring it to provide third parties with access to the monopoly or near monopoly assets on non-discriminatory terms.

However, the ACCC considers that reliance on merger remedies is generally an inadequate means of dealing with complex issues of access to monopoly or near monopoly infrastructure. In contrast to regulated access regimes under Part IIIA, it is uncertain whether arrangements in section 87B undertakings can be effectively reviewed, amended or renewed. In addition, using merger remedies to address competition concerns relating to long-term leases of infrastructure would generally involve long-term behavioural undertakings which are not preferred by the ACCC due to the inherent risks in terms of ensuring their effectiveness and compliance with the remedy over such a long time horizon.

It is important to note that merger remedies do not extend to addressing competition issues that arise from the monopoly characteristics of infrastructure regardless of who owns it. In other words, where privatisation represents a bare transfer of a monopoly asset from the public sector to the private sector, the acquisition in and of itself is not likely to lead to a substantial lessening of competition in a market under section 50, and therefore merger remedies would not be available. A further limitation of the use of a section 87B merger remedy is that once accepted, it is uncertain whether it will continue to meet its objectives over its longer term or address future competition issues such as a non-integrated purchaser at the time of sale vertically integrating into related markets at a later time and discriminating against upstream or downstream rivals. Merger remedies can only address competition concerns arising from an acquisition by a particular bidder. This is why governments must ensure that appropriate regulation exists before monopoly or near monopoly assets are offered for sale.

While governments have often sought to address pricing and access issues through contracts, the ACCC considers it insufficient to rely on such arrangements to address potential competition concerns arising from privatisation. This is primarily because a contract can be varied at any time and any breaches of the contract may be waived or insufficiently enforced. Significantly, the ACCC, as Australia's national competition regulator, cannot enforce the contract despite the fact that non-compliance can have significant negative effects on competition.

1.6 Opportunities to improve landside connections to container ports

While significant productivity improvements have been seen in container stevedoring, for these improvements to flow through to increases in performance across the whole supply chain, and in order for those chains to be able to handle the projected increases in freight flows, reform beyond the stevedoring gates is needed.

Growth in container trade is expected to result in a doubling of Australia's freight task over the next 20 years.

As container volumes grow, there is general acceptance that greater adoption of off-peak usage will be needed along the container supply chain. This has been recognised by Fremantle Ports in its Truck Productivity Study, which notes that while Fremantle has historically been a port that relies on peak weekday operating periods, this will not be sustainable as volumes grow.⁸³

There are a number of avenues available for encouraging greater out of hours port operations – for example: through reform to road pricing and provision (see section 1.6.1); price signals for access to other landside infrastructure (e.g. container terminals) (see section 1.6.2); and through more cooperative arrangements to improve the alignment of supply chain participants (see section 1.6.3).

1.6.1 Road reform can help to drive a more efficient freight system

Road transport is a critical factor in the efficiency of container supply chains. In 2013–14, at the five major ports around 86 per cent of containers were moved via road. Despite policies to get more freight on rail, trucks are expected to remain the dominant form of container transport over coming decades. The road network therefore needs to be efficiently invested in and funded, and signals need to be in place to encourage efficient use.

The problem: impediments to efficiency

The ACCC considers that the structures underpinning Australia's current road transport services are inefficient for three reasons:⁸⁴

Prices faced by road users do not reflect the economic costs of using roads

The charges currently applied to vehicles are either fixed (registration) or indirect (fuel excise). Consequently, truck operators face the same charges regardless of which roads they use and the time they are used. By contrast, rail charges are generally more related to costs and location. The ACCC considers that the more that costs and prices can be specifically identified with location, the better the signals for usage across both road and rail networks.

⁸³ Refer to Fremantle Ports website:

<http://www.fremantleports.com.au/Operations/Landside/Pages/Container-Movement-Study.aspx>.

⁸⁴ For more detail on the ACCC's views on road reform, refer to the ACCC's Submission to the Competition Policy Review at: <http://www.accc.gov.au/about-us/consultations-submissions/accc-submissions>.

There is no direct link between the prices charged to road users and the revenues received by road providers

Revenue from registration and fuel excise does not flow directly to the entities responsible for investing in roads. Consequently, the road owner does not have strong incentives to invest in increased road capacity even where there may be strong demand. This is likely to result in sub-optimal investment decisions. Furthermore, investment decisions in infrastructure for alternative modes of transport, such as rail, will be less than optimal.

Decisions about funding for investment in roads can reflect political priorities rather than an independent assessment of the relative costs and benefits of a proposed investment

This may lead to investment not being directed to those projects that have the highest economic value, leading to inefficient freight flows where roads may not be designed to support heavy vehicles. This can lead to higher maintenance costs and transport costs.

A better system for road charging and investment

A considerable amount of work has been carried out to date on road pricing reform in Australia, particularly in relation to user charges for heavy vehicles. Until June 2014, the Council of Australian Governments facilitated the Heavy Vehicle Charging and Investment Reform initiative. Responsibility to 'implement initial heavy vehicle investment and access reform measures' now rests with the individual state and territory governments, as well as the Australian Government through the Transport and Infrastructure Council.⁸⁵

In July 2014, the Productivity Commission's (PC's) final report on Public Infrastructure⁸⁶ recommended funding for investment and maintenance decisions be directly linked to road user preferences, and that studies be made into charging vehicles according to travelling distance and location.⁸⁷

The Australian Government's response did not directly address this recommendation, though it noted that the Government had re-introduced the indexation of fuel excise to provide a stable, secure source of funding for road infrastructure.⁸⁸

More recently, the Competition Policy Review panel showed support for road pricing and investment reform in its draft report released in September 2014. The draft report highlighted that roads are the least reformed of all infrastructure sectors in Australia, and that even small changes in productivity in this sector can cascade through the economy, boosting productivity and output in other sectors.⁸⁹

Experience overseas

As noted by the PC, other jurisdictions are using vehicle telematics to charge for road use by distance, especially for heavy vehicles. These include New Zealand, and European countries such as Germany and Austria, while the US state of Oregon has run pilot studies charging cars by distance instead of paying fuel tax.

The ongoing need for reform

Australian governments have an opportunity to realise considerable productivity benefits to the national economy by engaging in structural reform of road provision and charging. Such reform

⁸⁵ Transport and Infrastructure Council, Communique, http://www.transportinfrastructurecouncil.gov.au/communique/files/Council_1st_Communique_23_May_2014_V1.pdf, 23 May 2014.

⁸⁶ The Productivity Commission's report is at: <http://www.pc.gov.au/projects/inquiry/infrastructure/report>.

⁸⁷ The PC recommended using vehicle telematics, which use global navigation satellite systems and wireless communication to monitor a vehicle's location and distances travelled.

⁸⁸ The Hon Joe Hockey MP, Federal Treasurer, Media Release, 'Productivity Commission's Final Report on Public Infrastructure released', <http://jbh.ministers.treasury.gov.au/media-release/032-2014>, 14 July 2014.

⁸⁹ Competition Policy Review, *Draft Report*, September 2014, p. 28.

would particularly support greater productivity in container port supply chains and assist the industry with meeting continuing growth. The experience with heavy vehicle reforms suggests that the understanding and support of the community will be an important factor in implementing future reforms. To this end, the ACCC supports the use of pilot studies and trials that could demonstrate the value to the community of future supply side and pricing reforms.

1.6.2 Using price as a signal to drive efficient infrastructure use and investment

Price signals can minimise overall infrastructure costs

The most efficient way to allocate limited capacity, and for businesses and governments to receive the right signals about the need for new infrastructure, is for users to face prices that vary according to the supply and demand conditions at their time and location of use.

Where facilities are in high demand at particular times of day or week, industry should consider the merits in adjusting prices charged for access to infrastructure to smooth demand to off-peak times. If demand is responsive to pricing, price signals can be used to encourage more intensive use of existing facilities and minimise the overall costs of infrastructure, which can potentially result in savings for users and suppliers of infrastructure.

Peak pricing for access to terminals may be needed as volumes grow

Because most container ports are located in high density urban areas, building more roads and expanding facilities is not always a feasible option to reduce congestion. It is also not always the most efficient option.

Pricing signals could be an effective tool for managing truck access to container terminals particularly in the future as container volumes grow and land in and around ports becomes even more constrained and port facilities become scarcer.

Currently, the stevedores' vehicle booking systems (VBS) are used to manage the flow of containers into and out of the landside of Australia's major container ports. These systems can be used to manage congestion by limiting the number of slots made available to reflect physical capacity. VBS slots are generally allocated on a first-come-first-served basis. Weekday truck access is the most intensely used, with just over 50 per cent of truck activity occurring on weekdays between 6am and 6pm. The degree to which truck access makes use of off-peak capacity will depend on the level of demand and the volume of slots made available during peak and off-peak times.

However, pricing signals are likely to be a more efficient tool to allocate peak capacity to its highest value use and encourage out of hours use by truck operators who value peak slots less.

Using pricing signals to shift truck access patterns is yet to be tested in Australian stevedoring. However, overseas experience suggests peak period pricing can assist in managing traffic congestion by reducing truck turnaround times and by spreading peak demand usage of port roads to off-peak times.

In 2011, the BITRE published a paper examining overseas approaches to managing scarce capacity in landside stevedoring services.⁹⁰ The BITRE found that improvements were achieved overseas in three areas using well-designed pricing instruments:

- the management of peak demand for container pick up and drop off
- truck turnaround times
- congestion at the port and in the port's hinterland.

⁹⁰ Godfrey Lubulwa, Adam Malarz, Shun Peng Wang, 'An investigation of best practice landside efficiency at Australian container ports', http://www.bitre.gov.au/publications/2011/sp_003.aspx, September 2011.

Terminal access is only one component of containerised freight flows. The ACCC notes there may be bottlenecks to greater out of hours use beyond the terminal gate – for example, the operating hours of empty container parks (ECPs) and shippers' premises. Aside from price signals, cooperative arrangements (discussed below) may be an option for dealing with such issues.

1.6.3 Cooperative arrangements to drive landside efficiency

Many parties have a role in container freight supply chains – governments, ports, stevedores, above and below rail operators, shippers, freight forwarders, ECP operators and warehouse operators. With so many parties involved in container supply chains, sometimes cooperation may be necessary to improve landside container flows – for example, to improve communication, increase truck productivity, and align the incentives and operating hours of supply chain participants.

Cooperation can sometimes raise concerns under the competition provisions in Part IV of the CCA, especially where they involve arrangements between competitors on prices, or impose restrictions on participants' freedoms with whom they deal. In some cases, potential competition concerns can be avoided through the design of the proposed arrangement.

Where industry-based arrangements cannot be structured in a way that alleviates competition concerns, but the public benefits are considered to outweigh any detriment to competition, in certain circumstances the ACCC can approve such arrangements under Part VII of the CCA.

Part VII of the CCA sets out the authorisation and notification processes which provide a means for parties to obtain protection against legal action for conduct that is at risk of breaching the competition provisions of the CCA but which is likely to deliver a net benefit to the public. In considering applications for authorisation and notifications, the ACCC takes a supply chain-wide view to assist industry to achieve more efficient outcomes.

Where industry-initiated solutions are being considered, parties must be mindful of their legal obligations in the CCA. Whether or not authorisation may be required will depend on the nature of the particular arrangements and parties may wish to consider getting their own legal advice (before an arrangement is implemented). Where authorisation may be required, the ACCC is available to discuss the process and the issues that may arise prior to an application being lodged.

Past examples where parties involved in container supply chains have had cooperative arrangements approved by the ACCC under Part VII demonstrate that potential issues under the CCA are not necessarily a barrier to industry collaboration to achieve efficiencies in container supply chains. For example, in Fremantle, the process of authorisation was used in 2010 after Patrick and DP World sought, and were granted, authorisation for a system to facilitate and promote dual runs by truck operators (where a truck both delivers and collects a container in the same trip).^{91 92}

The text box below outlines a study undertaken in Fremantle recently to improve road transport efficiency at and around the port.⁹³ While Australian container ports are not identical, this is a useful snapshot of some of the issues in the industry today and the opportunities that exist for improving landside container flows.

Some initiatives to improve landside efficiency may require cooperation amongst competitors or participants along a supply chain. To the extent such conduct raises concerns under the CCA,

⁹¹ Authorisation is granted until 2 December 2015. The ACCC's final determination is available on its public register at www.accc.gov.au; Authorisation Nos A91238, A91239 and A91240.

⁹² Another example relates to empty container park operators lodging notifications with the ACCC to implement arrangements whereby truck operators would be required to use an online booking system provided by Containerchain. See section below for more information.

⁹³ Refer to the Fremantle Ports website at: <http://www.fremantleports.com.au/Operations/Landside/Pages/Container-Movement-Study.aspx>.

it can be authorised by the ACCC where it results in public benefits that outweigh any detriments.

Fremantle Ports Truck Productivity Study

In July 2014, Fremantle Ports released its Truck Productivity Study – a study aimed at developing an agreed approach with industry to improving road transport efficiency.

The study sought to identify key issues impacting on trucking productivity and strategies to improve this in the future. The study was conducted by Fremantle Ports with the Freight and Logistics Council of Western Australia and the Western Australian Port Operations Task Force.

Some key findings and issues identified by the study include:

- pressure on peak day periods, with carriers mainly accessing the container terminals between 06:00 and 18:00, Monday to Friday
- mismatch in operating hours of stakeholders across the whole supply chain, with container terminals and some larger transport operators capable of operating 24 hours/7 days, but many importers having more restrictive hours
- restrictive operating hours along the supply chain have resulted in extensive use of container staging activities, where containers are collected from terminals and taken to a transport depot before final delivery. Staging allows carriers to overcome issues such as opening hours of clients or ECPs, but adds some time and cost to the transport task
- difficulty coordinating two way movements in and out of the port precinct, due to unbalanced levels of import and export volumes as well as a mismatch of operating hours along the supply chain
- limited access to slots in the VBS and Containerchain⁹⁴ due to bulk runs, hoarding and not enough containers being released by container terminals
- futile trips due to poor communication
- the existence of a ‘mad minute’⁹⁵ in the VBS and large number of carriers in the industry.

The study identified a range of solutions to deal with these issues. A sample of these include modifying the stevedores’ VBS to promote off-peak operations, facilitating two-way loading, eliminating the mad minute and promoting bulk runs; and extending operating hours to match container terminals, through for example industry agreement and lease conditions for new ECP and logistics sites.

Source: Fremantle Ports, July 2014, *Fremantle Ports Truck Productivity Study*.

Information sharing technologies

In some situations, the adoption of technologies that facilitate better engagement between parties involved in container freight flows can be used to deal with particular problems and/or enhance landside efficiency.

⁹⁴ See section below this textbox for more information about Containerchain technology.

⁹⁵ The study identifies that ‘[o]ne of the long-standing issues with the VBS has been the ‘slot drop’ process which releases slots for carriers to select on a first-come-first-served basis each morning. This has created significant competition and stress for carriers as often these slots are taken up within a few moments, preventing a coordinated approach to fleet scheduling and managing container movements’.

Technology provided by Containerchain Pty Ltd is one initiative that the ACCC understands is in use at ports across Australia and having some positive results in encouraging landside efficiency.

In 2011 and 2012, a number of ECP operators lodged notifications with the ACCC to implement arrangements whereby truck operators would be required to use an online booking system provided by Containerchain in order to notify of their intention to collect or deposit containers at an ECP.⁹⁶

The ECP operators lodged notifications under Part VII of the CCA to obtain legal protection from the third line forcing prohibitions of the CCA. The notifications were allowed to stand by the ACCC because the ACCC was satisfied that the conduct was likely to result in a public benefit that would outweigh the detriment to the public from a lessening of competition.

These arrangements are reportedly showing positive results, including reduced truck queuing times and road congestion outside the parks, as well as better overall management of ECP facilities. The ACCC understands that these arrangements may also support off-peak container movements by allowing better visibility of demand, and allowing ECPs to stay open when there is sufficient demand by trucking operators.

More intensive use of existing facilities

In other instances, better use of existing infrastructure may help ease congestion and minimise investment costs. In particular, more intensive use of trucks and trains could result in less congestion at and around port precincts and promote better use of existing transport infrastructure. Promoting more intensive use of existing infrastructure may require cooperation amongst industry.

For example, as noted above, in 2010, Patrick and DP World sought, and were granted, authorisation under Part VII of the CCA for a system to facilitate and promote dual runs by truck operators (where a truck both delivers and collects a container in the same trip) in Fremantle. The intention was that a system that encouraged dual runs would reduce road congestion around the port. While the ACCC understands that this system has not been advanced to the implementation stage, there are merits in considering further initiatives that can encourage more intensive use of trucks.

1.7 Conclusion

Australian stevedoring has come a long way since reforms to the industry in 1998. Today, further gains are being driven by greater competition resulting from ports' and state governments' decisions to tender for third terminal leases to provide capacity for Australia's future.

In 2013–14, productivity improved, unit revenues decreased, there was more throughput handled and considerable investment in terminal facilities continued. While rates of return fell, industry profitability remained positive and above the relevant ASX benchmark despite considerable investment in terminal facilities over the past two years.

Looking ahead, the adoption of automated equipment by the stevedores is expected to play a key role in driving further improvements. Patrick's experience in Brisbane has shown that automation can drive productivity gains.

There are risks, however, to future stevedoring performance, and the extent to which steps being taken now to improve the industry will translate into efficiency gains for the Australian community. One risk is the impact of port privatisations, if adequate regard is not given to promoting competition and/or the need for appropriate access and pricing regulation. Another

⁹⁶ Refer, for example, to ACCC, 'Decision on Victorian Container Management Pty Ltd & Ors, Notifications - N95450 - N95456', and Decision on Qube Logistics (Vic) Pty Ltd & Ors, Notifications - Notification no. N96205 & N96886 – N96892'.

risk is the impact of labour outcomes on stevedoring productivity and the extent to which gains from improved stevedoring performance are shared with other parties such as service users.

Landside connections to container ports have generally not been subject to the level of reform that has taken place in the stevedoring industry. Australia has the opportunity to realise considerable efficiencies from reform to the way roads are funded and invested in. As container volumes grow, initiatives to improve connections to ports will become all the more important - some of these may involve the adoption by industry of peak pricing models; others may involve industry working together to solve particular problems by aligning the incentives of supply chain participants.

2 Main monitoring results

2.1 Introduction

The ACCC monitors prices, costs and profits of the container stevedores at the ports of Adelaide, Brisbane, Burnie,⁹⁷ Fremantle, Melbourne and Sydney. This role is conducted pursuant to a ministerial direction under Part VIIA of the CCA.

The ACCC's monitoring program provides information to the government and community about developments in Australian container stevedoring. The program particularly focuses on the operating performance of the container stevedoring companies, and degree of competition at the monitored ports. The program also highlights issues affecting road and rail connections to container terminals.

The monitoring program commenced in 1998–99. This is the ACCC's 16th container stevedoring monitoring report.

This chapter presents the main results of the ACCC's container stevedoring monitoring program for 2013–14.

2.2 Supply of container stevedoring services

2.2.1 The stevedores

In 2013–14, container stevedoring services were supplied at the monitored container ports by one or more of the following stevedores: DP World, Patrick, HPA and FACT.

In Melbourne and Fremantle, container stevedoring services were supplied by a duopoly consisting of DP World and Patrick. In Brisbane and Sydney, container stevedoring services were supplied by DP World, Patrick and new entrant HPA, which commenced operating in Brisbane in 2012–13 and Sydney in 2013–14. In Adelaide, services were supplied by the sole container stevedore – FACT.⁹⁸

For the two dominant stevedores, market shares have varied over time, but generally fluctuate between 45 and 55 per cent at each port. In 2013–14, DP World lost a significant customer, “K” Line, to Patrick at the Port of Fremantle, which has ramifications for market shares at that port. Additionally, as noted in section 1.3, HPA picked up a number of contracts in Sydney and Brisbane over 2013–14.

2.2.2 Size and characteristics of the market

As outlined in section 1.3.2, a key characteristic of Australia's shipping trade is that there tends not to be a single point of call for ships servicing Australia. Rather, vessels operate across a number of ports that are separated by long distances. Shipping lines therefore need to establish a service network and secure a sequence of suitable berthing windows to service ports within their shipping schedule.⁹⁹

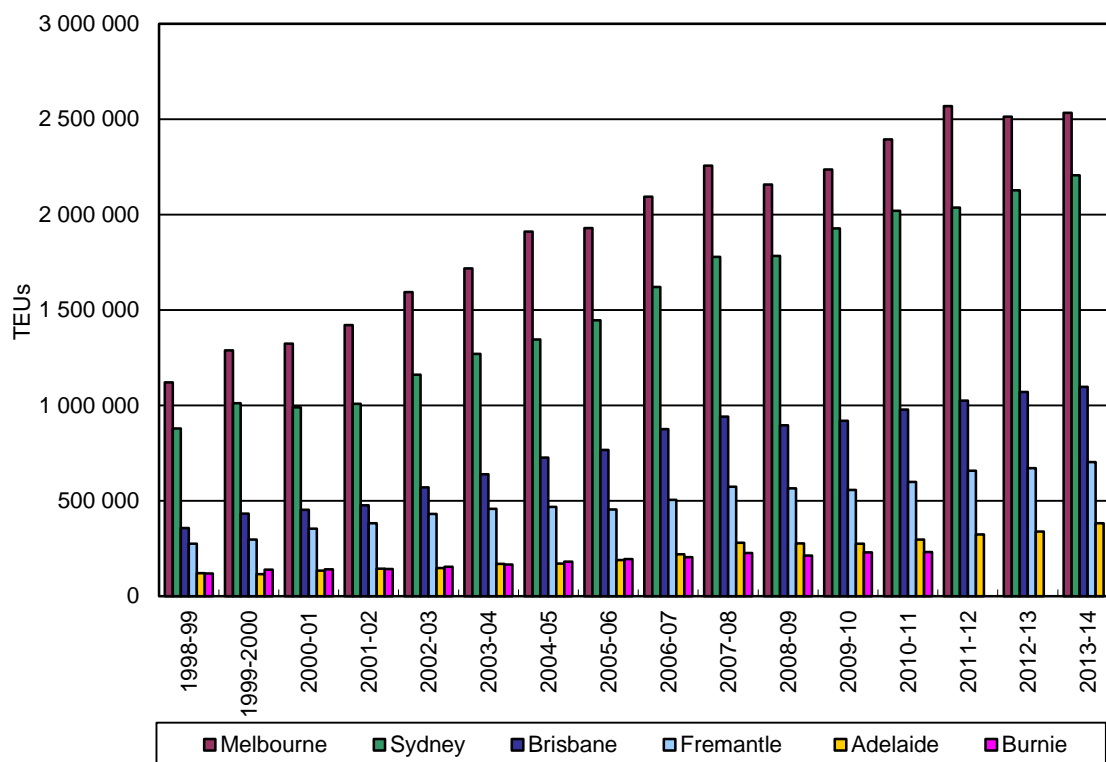
⁹⁷ Between 2011–12 and 2013–14, the ACCC's monitoring program recorded no container stevedoring activity at Burnie because the sole stevedore at that port, Patrick, advised the ACCC that it had closed its operations in May 2011.

⁹⁸ FACT is the only port at which the port manager has an ownership interest in the container stevedoring business. This container stevedoring business is wholly owned by Flinders Ports – the port manager of the Port of Adelaide. Previously this business was owned under a joint venture between Flinders Ports and DP World Australia.

⁹⁹ Further information on the characteristics of the Australian stevedoring industry is presented in appendix D of this report.

In 2013–14, total throughput at Australian container ports was 6.9 million TEUs (figure 2.1), which is low by international standards. By comparison, volumes in Singapore, the world's largest container port, were 32.6 million TEUs in 2013.

Figure 2.1: Container throughput trends at designated ports, 1998-99 to 2013-14¹⁰⁰



Source: Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Waterline* (2013–14 from forthcoming publication no 55); TasPorts (Port of Burnie)
 Note: data in *Waterline* includes international and domestic cargo.

The major points about trends in throughput from figure 2.1 are:

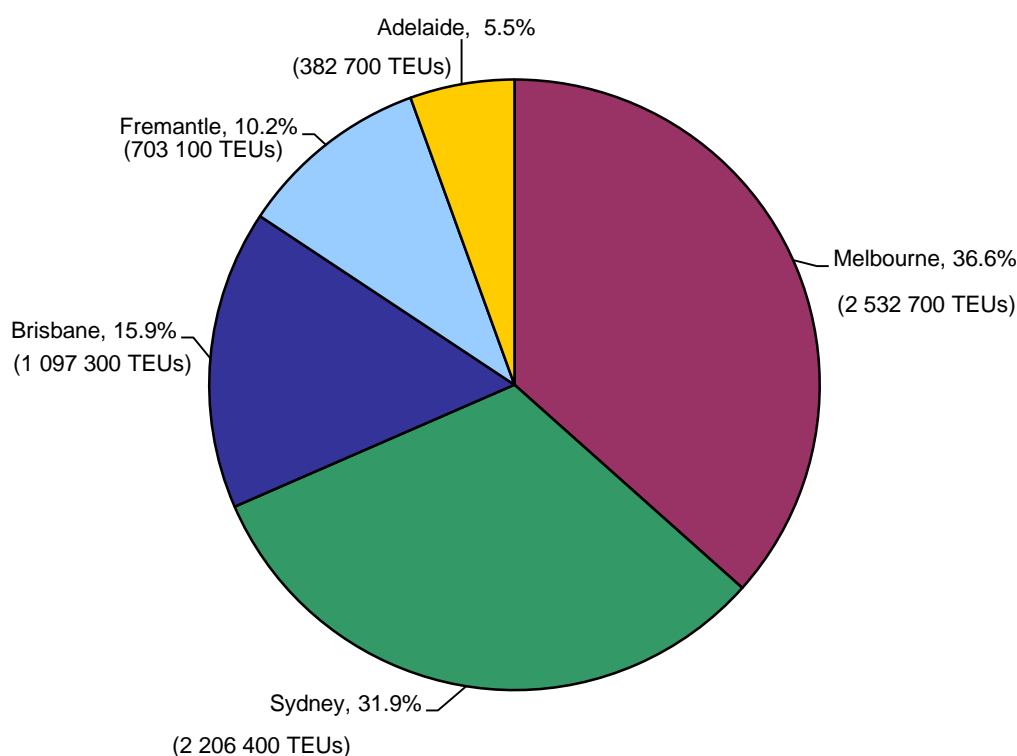
- Total throughput volumes have increased every year since 1998–99, with the exception of 2008–09. The overall decline in throughput in that year was mostly due to the effects and subsequent recovery from the GFC.
- Between 1998–99 and 2007–08 average annual growth in throughput was 8.6 per cent. Between 2008–09 and 2013–14, the national average growth rate in throughput has been substantially lower, at 3.3 per cent.
- In 2013–14, national throughput increased by 3.0 per cent, which was broadly consistent with the national average growth rate in throughput since 2008–09. During 2013–14, throughput increased at all ports. The largest increase was in Adelaide (12.9 per cent). Increases in throughput in the other ports were lower: Fremantle (4.9 per cent), followed by Sydney (3.8 per cent), Brisbane (2.6 per cent) and Melbourne (0.8 per cent).
- Melbourne's share of national TEUs declined from 39.0 per cent in 1998–99 to 36.6 in 2013–14. Relative to 1998–99, Sydney's share of national TEUs increased from 30.6 per

¹⁰⁰ National volumes between 1998–99 and 2010–11 are provided for the six container ports included in the ACCC's monitoring program, including the Port of Burnie. From 2011–12, no throughput of international containers for Burnie was recorded because Patrick closed its operations at Burnie in May 2011.

cent to 31.9 per cent in 2013–14 (its highest share in the history of the monitoring program). Brisbane's share of national TEUs increased over that period from 12.5 per cent to 15.9 per cent.

Figure 2.2 below shows details of volumes handled at Australia's major ports in 2013–14.

Figure 2.2: Container throughput volumes and shares by port, 2013-14



Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55)
 Note: data in *Waterline* includes international and domestic cargo.

As demonstrated in figure 2.2 above:

- The Port of Melbourne continued to be Australia's largest national container port in 2013–14, processing 2.5 million TEUs (36.6 per cent of total TEUs handled at the nation's major container ports).
- Sydney was the second-largest container port, with 2.2 million TEUs processed (31.9 per cent of national TEUs), followed by Brisbane, which processed 1.1 million TEUs (15.9 per cent).

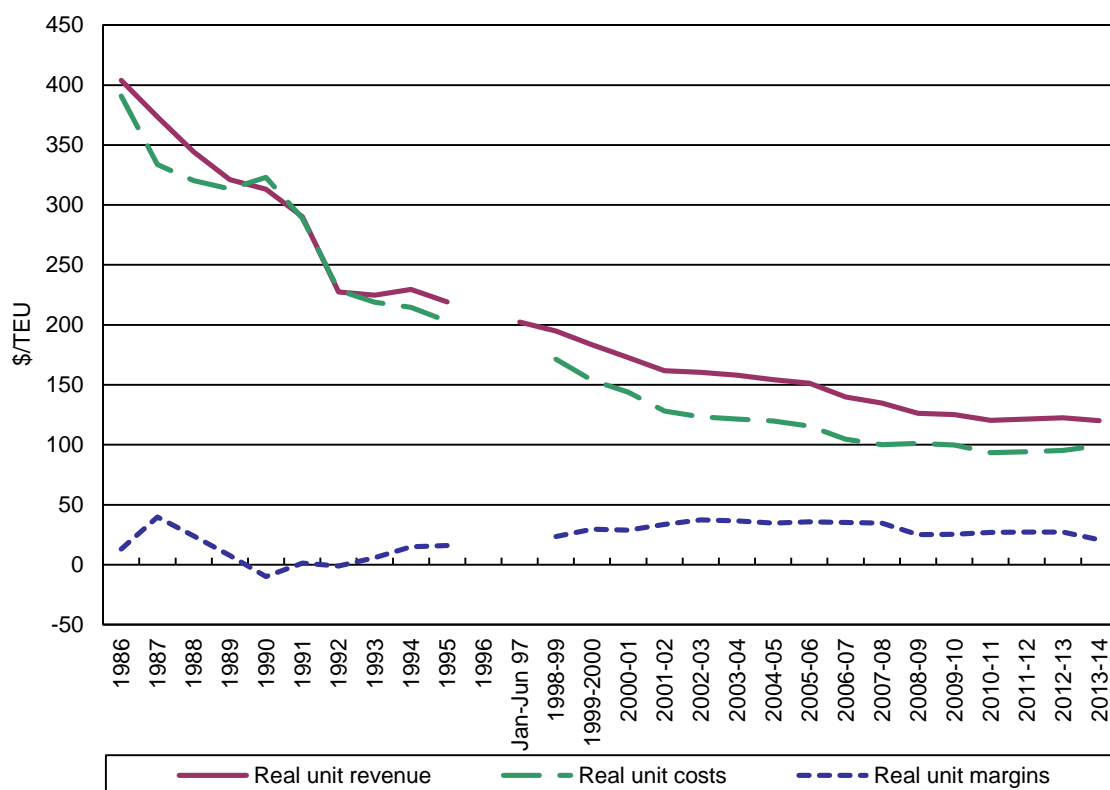
2.3 Average revenue, costs and margins for stevedoring and other services

The ACCC collects data on revenue, costs and margins from the four container stevedores. This data, which includes revenues, costs and margins for stevedoring services as well as for other services that are provided at container terminals, such as storage, maintenance and

repositioning,¹⁰¹ is aggregated to provide financial results at an industry level. This data is presented on a per unit (per TEU) basis in figure 2.3 below.

An indicator of the average prices charged for container stevedoring terminal services is total revenue expressed on a per unit basis. This measure is important because the ACCC does not collect information on actual prices charged for stevedoring services, which are privately negotiated between shipping lines and stevedores.

Figure 2.3: Real unit revenues, costs and margins, 1986 to 2013-14



Sources: 1986 to 1996 - *Monitoring of stevedoring costs and charges and terminal handling charges 1995*, ACCC 1996; Jan-Jun 1997 – estimate derived by BITRE, *Waterline*; 1998–99 to 2013–14 – data provided by the stevedoring companies as part of the ACCC’s monitoring program. Data converted to real terms using Australian Bureau of Statistics’ gross domestic product (GDP) deflator series (cat. no. 5206.0, Table 4. Expenditure on Gross Domestic Product (GDP) Chain price indexes, Series ID A2303862V). Base year for ACCC deflator series: 2000–01.

Figure 2.3 above shows the significant overall downward trend in both unit costs and unit revenues in real terms between 1986 and 2013–14.¹⁰²

Since 1998–99 (when ACCC monitoring commenced):

- real unit costs have fallen by 42.1 per cent; from \$171.47 (expressed in 2000–01 dollar terms) to \$99.34 in 2013–14;

¹⁰¹ Stevedores also provide services that facilitate the movement of containers from the terminals to road and rail transport links.

¹⁰² In this chapter, where the ACCC refers to ‘real terms’, the data is in 2000–01 dollar levels. It should be noted that the gross domestic product (GDP) deflator, not the consumer price index (CPI), has been used to express nominal unit data in real terms. The GDP deflator has increased at a faster rate than the CPI in the last ten years. Since June 2002, the CPI rose 38.3 per cent, while the GDP deflator rose 43.5 per cent. See ABS cat. no 6401.0. Consumer Price Index, and cat. no. 5206.0, Table 4. Expenditure on Gross Domestic Product (GDP) Chain price indexes, Series ID A2303862V.

- real unit revenues have also fallen during the period by 38.4 per cent, from \$194.96 to \$120.01.
- Real unit margins fluctuated between \$23.49 and \$37.27 per TEU in real terms between 1998–99 and 2012–13. In 2013–14, however, real unit margins fell significantly to \$20.67, a level 12.0 per cent lower than in 1998–99.

In 2013–14:

- Real unit revenue declined by 2.1 per cent from \$122.56 in 2012–13 to \$120.01.
- Real unit costs, however, increased by 4.2 per cent from \$95.36 in 2012–13 to \$99.34.
- Because of the effect of an increase in real unit costs and decrease in real unit revenues, real unit margins fell significantly (by 24.0 per cent) to \$20.67 in 2013–14, from \$27.20 in 2012–13. This was the lowest industry unit margin since the ACCC monitoring commenced.

The longer-term downward trend in real unit costs most likely represents a combination of factors, including the benefits of past reforms as well as the presence of economies of scale in Australian stevedoring. The cost increase in 2013–14 was mainly driven by HPA's entry due to its relatively high fixed costs without accompanying volumes, as well as the depreciation of lumpy investment by Patrick, DP World and HPA.

The long-term downward trend in real unit revenues, which continued in 2013–14, suggests that the benefits of lower real unit costs have been shared with users of stevedoring services. It also reflects a change in product shift from 20-foot containers to 40-foot containers (refer section 3.2.2). Pricing pressure may indicate greater competition as stevedores try to maintain market share and win new business, and greater bargaining power on the part of shipping lines due to the increased number of stevedores and greater capacity at certain ports.

2.4 Productivity

Changes in productivity are an important indicator of industry performance, as well as the quality of service provided to customers. For container stevedoring, indicators are based on the productivity of both labour and capital, which partly reflects the quality of management and investment decisions being made by the stevedores to offer a more efficient service.

This section examines changes in two key areas of productivity: servicing ships (quayside); and servicing trucks (landside). The ACCC's analysis of productivity is based on data collected by the BITRE.

2.4.1 Productivity trends in quayside stevedoring services

The BITRE reports on changes in capital and labour productivity in container stevedoring operations in the five mainland ports. The three key indicators of quayside productivity are: net crane rate; elapsed labour rate; and ship rate. These are defined below:

- Net crane rate – this is a broad indicator of capital productivity and reflects the intensity to which quay cranes are worked and measures the number of containers/TEUs exchanged per crane hour while that quay crane is operating.¹⁰³

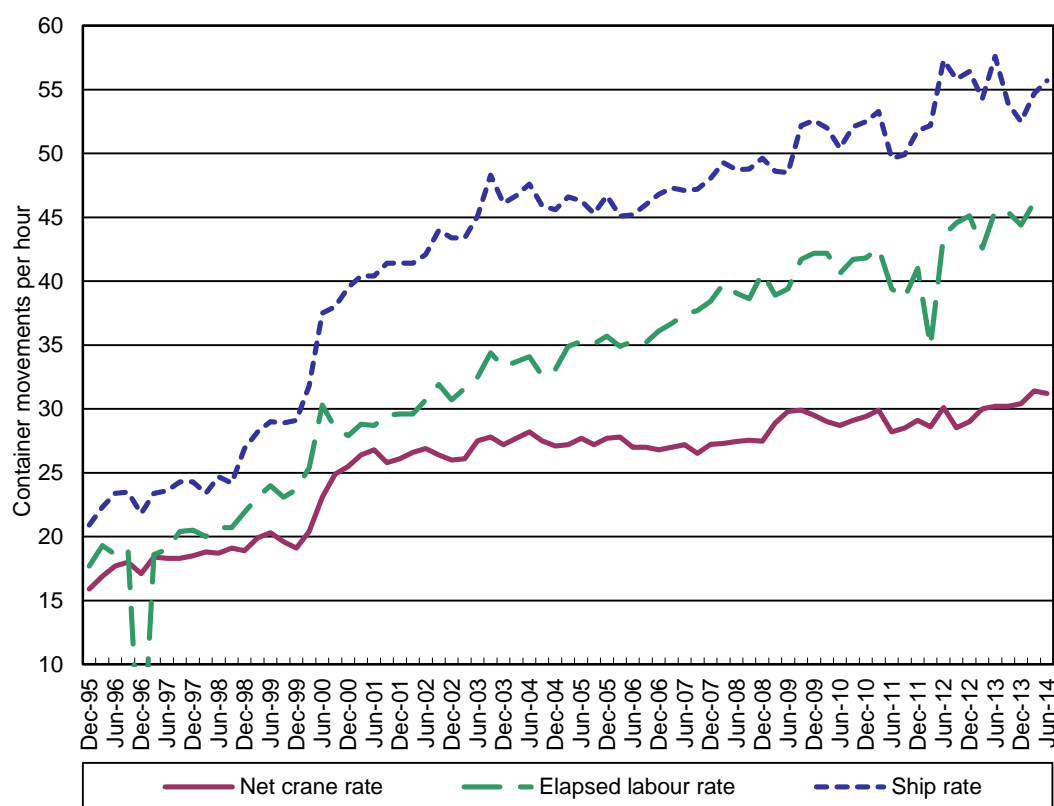
¹⁰³ The net crane rate is measured by dividing total number of containers/TEUs handled by the elapsed crane time. The elapsed crane time is the crane time allocated by the stevedores. It is computed as the total allocated crane hours less operational and non-operational delays. See BITRE, *Waterline*, issue no. 54.

- Elapsed labour rate – this is a broad indicator of labour productivity and measures the number of containers/TEUs exchanged for the period of time that labour is aboard the ship.¹⁰⁴
- Ship rate – this reflects the productivity of labour and capital while the ship is being worked by measuring the number of containers/TEUs exchanged based on crane intensity as well as the time taken by labour to work a ship.¹⁰⁵

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

Quayside productivity trends measuring containers per hour and TEUs per hour are shown in figures 2.4 and 2.5 respectively.

Figure 2.4: Productivity indicators (containers/hour), quarterly five-port average, Dec 1995 to Jun 2014



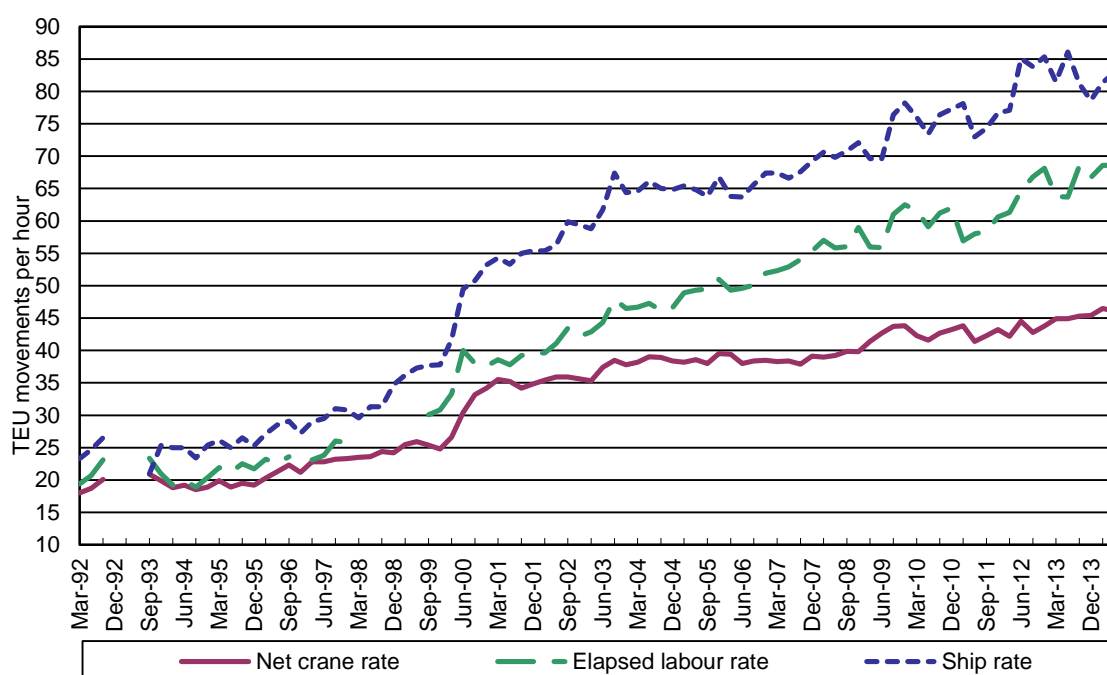
Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55), 'Averages for ports of Brisbane, Sydney, Melbourne, Adelaide and Fremantle'.

Note: Data in the above chart has been revised for the March and June quarters of 2012–13 and therefore differs from what was reported in the ACCC's 2012–13 container stevedoring monitoring report (CSMR).

¹⁰⁴ The elapsed labour rate is computed as the number of containers handled divided by the elapsed labour time. The elapsed labour time is the elapsed time between labour first boarding the ship and labour last leaving the ship, less any time when the labour has not worked for whatever reasons including non-operational delays. See BITRE, *Waterline*, issue no. 54.

¹⁰⁵ 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* publications.

Figure 2.5: Productivity indicators (TEUs/hour), quarterly five-port average, Mar 1992 to Jun 2014



Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55), 'Averages for ports of Brisbane, Sydney, Melbourne, Adelaide and Fremantle'.

Note: Data in the above chart has been revised for the March and June quarters of 2012–13 and therefore differs from what was reported in the ACCC's 2012–13 CSMR.

Movements in the key productivity indicators shown in figures 2.4 and 2.5 show that:

- The five-port average annualised **net crane rate**, measured in terms of containers per hour, increased in 2013–14 compared to the previous year, by 4.6 per cent. Measured on the basis of TEUs per hour it increased by 4.0 per cent. This measure of productivity has been improving consistently over time.
- The five-port average **elapsed labour rate** measured on the basis of containers and TEUs per hour, also increased in 2013–14. These measures declined by around 2–3 per cent in the December 2013 quarter, but despite that, over 2013–14 this measure was at its highest level since the ACCC's monitoring began. The decline in the measure coincided with allegations of industrial action at Patrick's Fremantle terminal.¹⁰⁶ The Fair Work Commission issued an order in December 2013 for industrial action to stop, not occur and not be organised.¹⁰⁷ This measure of productivity has improved over the period since the ACCC's monitoring commenced, partly due to EBAs since 1998 allowing greater flexibility in the deployment of labour.
- The five-port average **ship rate**, in contrast to the elapsed labour rate and the average net crane rate, was on average lower in 2013–14 when compared to 2012–13.

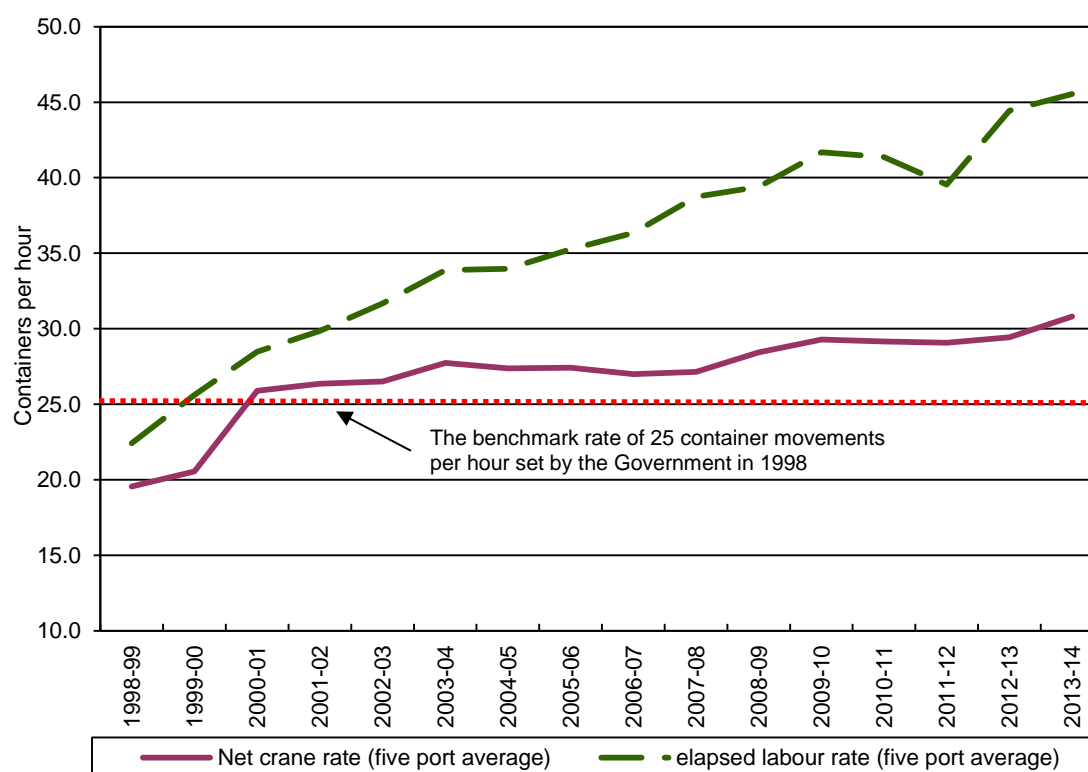
¹⁰⁶ [2013] FWC 9547, Fair Work Commission, Single member decision, 19 December 2013, Patrick Stevedores Holdings Pty Limited v Maritime Union of Australia, Application for an order to stop industrial action.

¹⁰⁷ [2013] FWC 9547. Appeal against decision [2013] FWC 9547 of Commissioner Cambridge at Sydney on 19 December 2013 in matter number C2013/7531.

ACCC observations about long-term quayside stevedoring productivity

Australian stevedoring productivity levels, in terms of both labour intensity and capital intensity, have vastly improved since the waterfront reforms of 1998 (figure 2.6).

Figure 2.6: Net crane rate and elapsed labour rate (containers/hour), annual five-port average, 1998-99 to 2013-14



Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55), 'Averages for ports of Brisbane, Sydney, Melbourne, Adelaide and Fremantle', converted to annual average by the ACCC.

Note: Data in the above chart has been revised for 2012–13 and therefore differs from what was reported in the ACCC's 2012–13 CSMR.

In 1998–99, the average elapsed labour rate was 22.4 containers per hour. In 2013–14, this had increased to 45.6. There was some deterioration in the elapsed labour rate during 2011–12 which coincided with industrial action during EBA negotiations affecting some terminals, but since then the elapsed labour rate has continued to increase in 2012–13 and 2013–14.

Figure 2.6 also shows the five-port average net crane rate has generally increased since 1998–99. There have been a number of 'step-ups' in crane productivity – the biggest one occurred in 2000–01, but other smaller increases occurred in 1999–00, 2003–04, 2008–09, 2009–10, and in the current monitoring period. The monitoring program shows that the incumbent stevedores have invested in new equipment and undertaken productivity-enhancing initiatives since the commencement of the ACCC's monitoring program. A significant increment of new investment occurred in 2004–05 with capital replacement and over 2012–13 and 2013–14 with investment in new terminals and automation.

During the four-year period of 2009–10 to 2012–13 the five-port average net crane rate plateaued (in year-average terms) at just below 30 containers per hour. However, in 2013–14, the five-port average net crane rate increased from 29.4 to 30.8, suggesting that the

implementation of new equipment and reconfiguration of existing terminals is beginning to drive further improvements in quayside productivity.

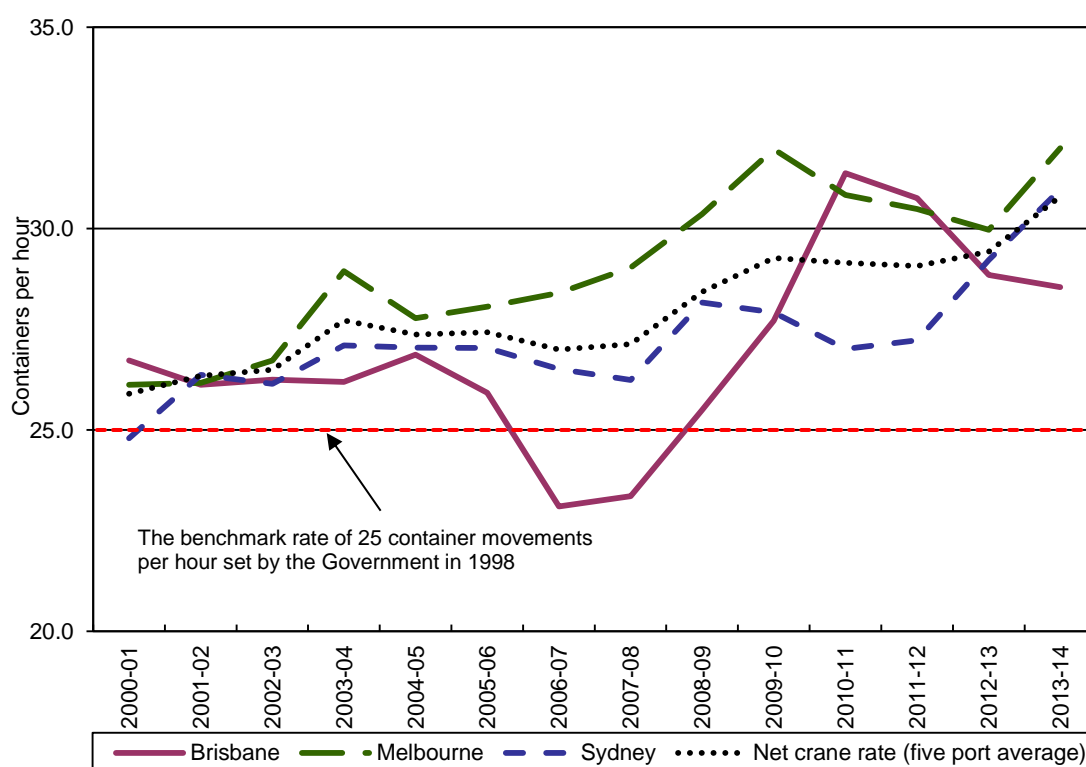
The improvement in quayside productivity can also potentially be explained by the move away from the long-held duopoly in Australian stevedoring. As outlined in section 1.3, new entry in Brisbane, Sydney (and soon Melbourne) has delivered increased capacity, and promoted competitive rivalry between container stevedores. This is likely to have in turn increased pressure on prices, productivity and service levels provided by container stevedores.

Competition for the supply of stevedoring services is expected to increase as new terminal operators (such as HPA in Sydney and Brisbane) capture greater market share. This is expected to drive further improvements in productivity.

Sustained improvement in capital productivity is expected with increased competition

Disaggregating net crane rates at container ports demonstrates the levels of productivity at each port. Figure 2.7 below shows trends in the net crane rate (expressed as containers per hour in year average terms) for each of the three largest container ports and the five-port average between 2000–01 and 2013–14.

Figure 2.7: Net crane rates (containers per hour) – Melbourne, Sydney, Brisbane and five-port average, 2000-01 to 2013-14



Source: BITRE, *Waterline*, forthcoming publication no. 55. Year average data has been calculated by the ACCC based on quarterly data available in *Waterline*.

Note: Data in the above chart has been revised for 2012–13 and 2011–12 and therefore differs from what was reported in the ACCC's 2012–13 and 2011–12 CSMRs.

Key observations from Figure 2.7 are:

On an individual port basis:

- *Melbourne*—Of the three largest container ports, Melbourne has generally recorded the highest net crane rates. However, between 2010–11 and 2012–13, average net crane rates declined. In 2013–14, average annual net crane rates at Melbourne improved significantly when compared to the previous year, from 30.0 to 32.0.
- *Sydney*—Productivity levels have historically been below the five-port average since 2000–01. This suggests that the gains associated with increased capital productivity following waterfront reforms and capital investment did not materialise at Sydney to the same extent that they did for other ports. However, over the last two years, average annual net crane rates at Sydney have increased significantly from 27.2 in 2011–12 to 31.0 in 2013–14.
 - This may be in part due to the commissioning of new cranes and equipment at the port.
 - The improvement may also be an early indication that the emergence of HPA as the third terminal operator in Sydney is driving stevedores to offer a more efficient quayside service.
 - Patrick's decision to introduce automation to its Port Botany facility (expected to be implemented in the third quarter of 2014–15) is also significant as it is expected to further improve productivity once the technology is embedded.¹⁰⁸
- *Brisbane*—The largest improvement in productivity levels of any of the largest container ports in Australia occurred in Brisbane after Patrick's introduction of Autostrad technology in 2005–06. While capital productivity temporarily fell below the benchmark rate throughout 2006–07 and 2007–08 as the technology took some time to be embedded, there were significant gains in productivity levels between 2007–08 and 2010–11.
 - However, over the last two years net crane rates in Brisbane have been below the five-port average. DP World has implemented a mode change to a semi-automated operation in Brisbane in 2014, which DP World expects will drive further improvements in productivity in Brisbane.¹⁰⁹
 - The emergence of HPA as the third terminal operator in Brisbane should drive further productivity improvements by all players.

Actions taken by the stevedores to improve crane intensity rates remain important to providing a more productive quayside service.

2.4.2 Productivity in landside stevedoring services

The BITRE publishes a range of landside performance indicators. There are three groups of indicators published; (1) indicators of the size of the landside task at port terminals; (2) performance indicators and (3) indicators of activity in VBS.

¹⁰⁸ This is based on Patrick's experience in Brisbane, in relation to the introduction of its Autostrad technology in 2005–06.

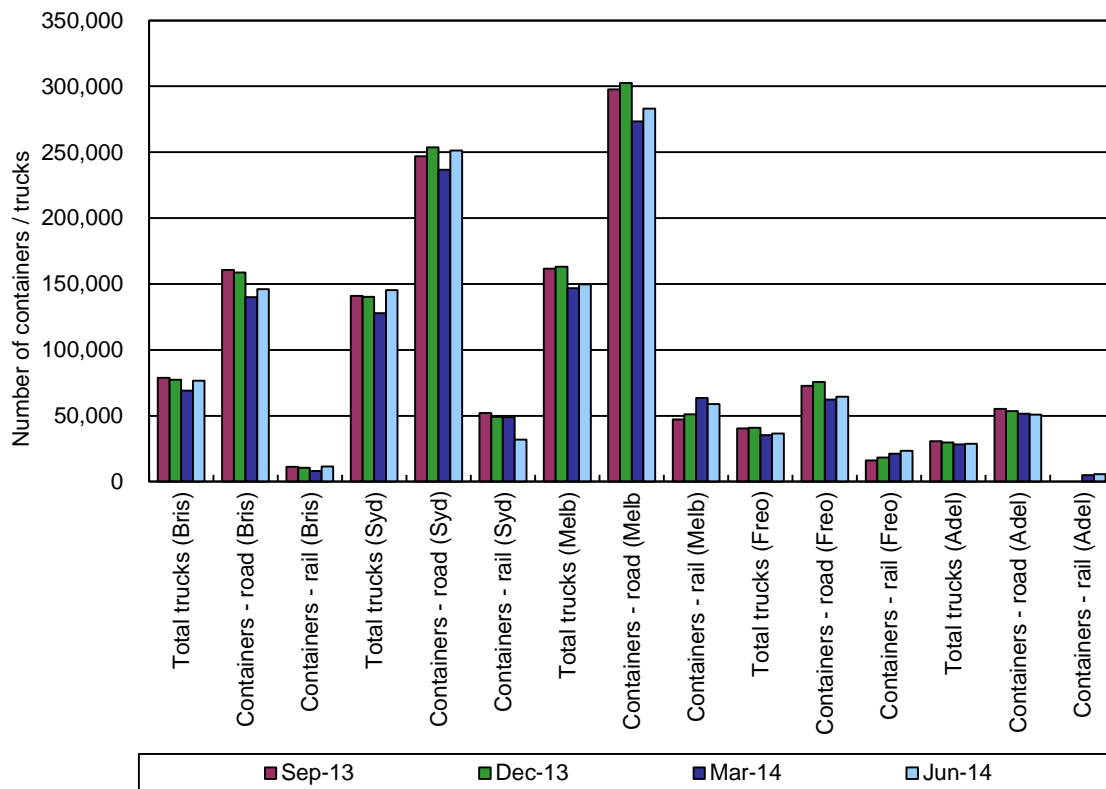
¹⁰⁹ Port of Brisbane, Media Release, '*Port of Brisbane achieves full stevedoring automation*', <http://www.portbris.com.au/news-media/item/?release=/News-and-Media/Port-of-Brisbane-achieves-full-stevedoring-automat>, 16 April 2014.

Size of the landside freight task

Figure 2.8 shows the size of the landside task across the five mainland container ports between the September quarter 2013 and the June quarter 2014. Three indicators are used:

- total number of trucks
- total number of containers transported to and from a port by road
- total number of containers transported via rail.

Figure 2.8: Size of the landside task by major container port, 2013-14



Source: BITRE, *Waterline*, forthcoming publication no 55.

Note: The current data provided by the BITRE is not exactly comparable to previous ACCC CSMRs as there has been a change in the methodology for calculating the throughput data. The current data incorporates rail throughput data from port authorities. Previous editions of *Waterline* have reported rail throughput data captured by stevedoring companies, while the remaining containers transported by rail from the port precinct have been captured in the truck throughput figures. Detail on the changes is provided in the BITRE's most recent publication, *Waterline* 54, p. vi-vii: http://www.bitre.gov.au/publications/2014/water_054.aspx.

Figure 2.8 shows:

- The size of the landside task follows container throughput patterns. This is expected as the amount of transport activity at a container terminal is ultimately a function of the number of containers being exchanged. The size of the landside task is greatest in Melbourne and Sydney, Australia's two largest container ports.
- For all of the ports, the movement of containers is dominated by road.

While the number of containers transported by rail is currently low, rail freight use is becoming an increasingly important issue for managing container flows in and around Australia's major ports, most notably in Sydney.

It is expected that the availability of the Southern Sydney Freight Line (SSFL), a dedicated freight line, will help facilitate the transfer of containers from road to rail in the medium to longer term. Rail access rules that improve coordination of freight paths and windows as well as rail pricing solutions are also important to maximising the use of rail infrastructure and offering a viable substitute in some cases to road transport. Construction of new intermodal terminals around Sydney (Enfield and Moorebank) should also contribute to better utilisation of rail port shuttle services.¹¹⁰

In Melbourne, there appears to be an appetite amongst private business to invest in rail freight to and from the Port of Melbourne. Qube and Salta Properties have established an alliance to invest in rail intermodal terminals and run freight trains connecting the port with greater Melbourne. Although a number of intermodal rail terminals have recently been established, it has been reported that the key to promoting rail connections to the Port of Melbourne is upgrading the rail connection between the Port of Melbourne and the main rail network.¹¹¹ The Victorian government has pledged \$58 million to establish port rail shuttle services.¹¹²

Truck turnaround times

Truck turnaround times are an indicator of landside productivity and show how fast a stevedore processes trucks within a terminal.¹¹³ Figure 2.9 shows average truck turnaround times for each of the mainland container ports and the five-port average between 2007–08 and 2013–14.

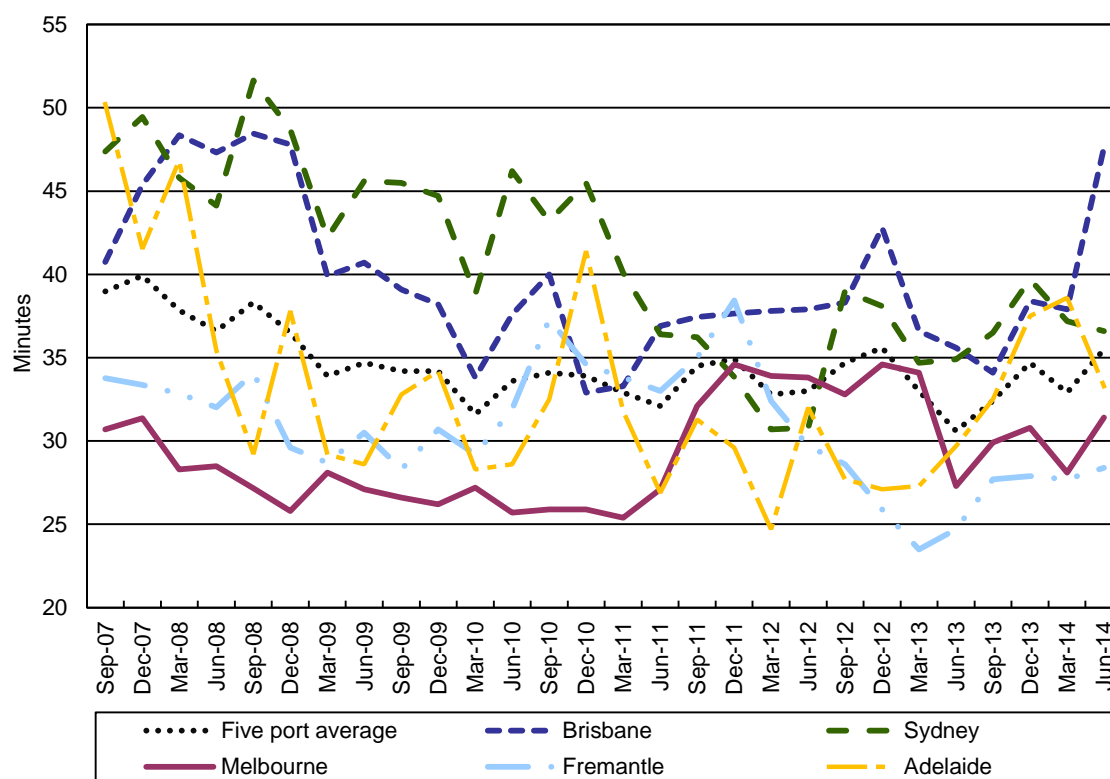
¹¹⁰ More discussion about land-side efficiency involving road and rail usage is presented in section 1.6.

¹¹¹ Sydney Morning Herald, *Rail links to revolutionise 'inland port' operators*, 6 August 2014, <http://www.smh.com.au/business/rail-links-to-revolutionise-inland-port-operators-20140805-100lvy.html>.

¹¹² *ibid.*

¹¹³ This indicator measures the length of time from when a truck enters a port terminal to the time it exits. It does not include waiting time outside the gate of the port terminal. For more information, see *Waterline* at www.bitre.gov.au.

Figure 2.9: Average truck turnaround times, major ports and five-port average, 2007–08 to 2013–14



Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55).

Figure 2.9 shows:

- While average truck turnaround times increased at most ports in 2013–14, they have fluctuated significantly over the seven years since 2007–08.
- The five-port average has had a downward trend, from around 38 minutes in 2007–08 to around 34 minutes in 2013–14 (an 11.6 per cent improvement).
 - Most of this occurred in the earlier years, largely before 2010–11, and appears to have subsequently plateaued on a five-port basis, but with significant variability by port.
- The greatest improvement in truck turnaround times since 2007–08 has occurred in Sydney (19.7 per cent), particularly since the December quarter 2010. At that time, an average turnaround time of 45.5 minutes was recorded. This fell to 30.8 minutes in the June quarter 2012 but increased to an average of 37.5 minutes over 2013–14.
 - Much of this improvement in Sydney over the last four years is likely to be due to the introduction of the Port Botany Landside Improvement Strategy (PBLIS) by the NSW Government and Sydney Ports in February 2011. There was a 20.4 per cent improvement in average turnaround time in 2011–12.
 - Under PBLIS, the NSW Government and Sydney Ports have set a benchmark rate indicator for turnaround times of 50 minutes. Where the stevedore exceeds the benchmark, it is required to pay financial penalties to the transport operator. Where a transport operator arrives early or late or fails to arrive, it is required to pay financial penalties to the stevedore.

- Information supplied to the ACCC as part of the monitoring program indicates that the flows of penalties between the stevedores and the transport operators are substantial. When PBLIS was first introduced, the net flow of revenues was from the stevedores to the transport operators (suggesting that the stevedores were the ones mostly failing to meet their benchmark). However, more recently, the net flow of revenues has been to the stevedores.
- Truck turnaround times in Melbourne have tended to be the lowest of the three largest container ports. However, average times increased between the March 2011 quarter and the March 2013 quarter (from 25.4 minutes to 34.1 minutes), which coincided with periods of congestion at one of the terminals. Average truck turnaround time in 2013–14 in Melbourne was around 30.1 minutes.
 - Average truck turnaround times in Melbourne appear to have improved, falling from a high of 34.6 minutes in the December 2012 quarter to 31.4 minutes in the June quarter 2014 (after increasing from 28.1 in the March 2014 quarter).
- Significantly, truck turnaround times in Brisbane deteriorated significantly in the most recent quarter of 2013–14, to 47.6 minutes, from 37.9 minutes in the previous quarter. This was the slowest turnaround time in Brisbane since the December quarter of 2008. This was largely due to technical issues involving the implementation of DP World's mode change in May 2014.¹¹⁴

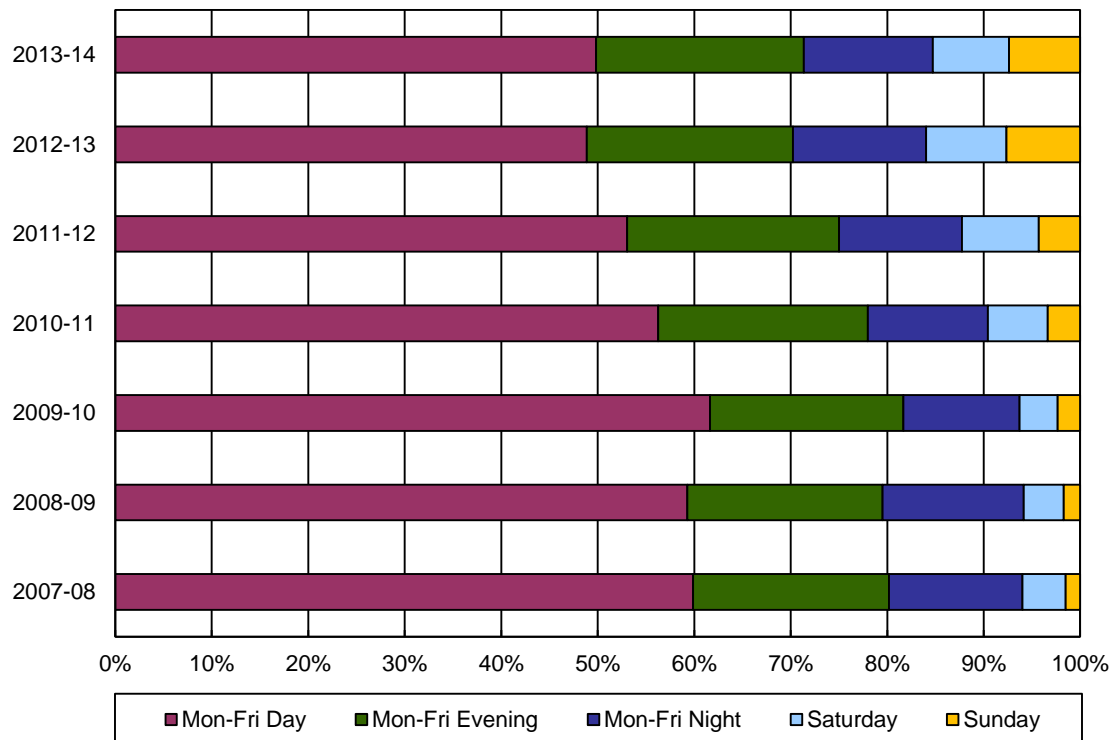
Demand for access to container terminals

VBS revenues are small in terms of the proportion of overall revenues earned by the stevedores. In 2013–14, VBS revenues represented 2.6 per cent of total industry revenues. However, VBS are significant as they provide the terms and conditions of access by a truck operator to a container terminal. They also provide an organised system for stevedores to manage truck movements inside the terminal gate and allocate labour and equipment resources.

Figure 2.10 shows, in percentage terms, the use pattern of VBSs across the five container ports between 2007–08 and 2013–14.

¹¹⁴ Transport and Logistics News, 'DP World opens \$250 million semi-automated terminal in Brisbane', <http://www.tandlnews.com.au/2014/05/22/article/dp-world-opens-250-million-semi-automated-terminal-in-brisbane/>, 22 May 2014; Lloyds List, *LOCAL: 'Automation fails at DP World Brisbane'*, 18 September 2014.

Figure 2.10: Adjusted vehicle booking system usage, five-port average, 2007-08 to 2013-14



Source: BITRE, *Waterline* (2013–14 from forthcoming publication no 55).
 Note: The Monday to Friday time windows are defined as follows: Day (0600–1800), Evening (1800–2400), Night (2400–0600).

Figure 2.10 shows:

- Despite most container terminals offering 24 hour/7 day operations, daytime weekday access is the mostly intensely used.
- Weekday VBS activity is consistently the highest during the daytime. In 2013–14, 50 per cent of VBS usage occurred during Monday to Friday between 6am and 6pm. 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 Monday to Friday are the next most popular times for container movements by truck.
- Weekend access remains a small proportion, although it has increased in recent years. In 2013–14, weekend access represented 15 per cent of total VBS usage, considerably higher than 6 per cent which was recorded in 2007–08.

Greater out of hours use will be important for encouraging more intensive use of existing facilities, thereby minimising investment costs.

According to the Victorian government, VICTL will concentrate on promoting off-peak truck movements to improve the efficiency of Victoria's transport logistics at its new Melbourne

terminal.¹¹⁵ Once Patrick's and DP World's leases at Melbourne's Swanson Dock expire, it is foreseeable that lease conditions requiring the prioritisation of off-peak movements could also be set to apply as a way of managing truck congestion on local roads through the CBD and inner city areas. At ports or terminals where no such lease conditions exist, other incentives, such as pricing mechanisms, may be used to encourage the transport industry to better use landside facilities in order to reduce congestion and maximise use of the existing infrastructure.

2.4.3 Concluding ACCC observations about stevedoring productivity

Long-term trends of stevedoring productivity show that significant improvements have been made in labour productivity. There are likely to be several contributing factors to this, including the waterfront reforms of 1998 as well as subsequent moves to more flexible labour arrangements.

After EBAs were finalised in 2011–12, there was a return to a more stable industrial climate and productivity improved. However, there was some disputation in the first half of 2013–14, and more recently associated with EBA negotiations. The impact of labour outcomes could affect future container stevedoring performance (refer section 1.5.1).

Long-term capital productivity, as measured by the crane rate, has also generally improved, with the greatest gains being made at Brisbane after automation was introduced and embedded.¹¹⁶ Plans by the existing stevedores to increase the level of automation are therefore likely to be significant. New entry is also expected to drive further improvements in industry productivity as competition increases and new equipment is commissioned.

Landside productivity remains an ongoing challenge for all Australian container ports, particularly as container volumes are expected to more than double between now and 2030. Pressures of increasing volumes as well as continued reliance on major road networks to complete Australia's freight task will require all stakeholders in the landside supply chain – not just the stevedores – to play their part and develop more innovative solutions.

Peak period pricing as well as other incentives to shift demand for terminal access towards off-peak times that have worked well overseas are worth considering in Australia.¹¹⁷

¹¹⁵ Premier of Victoria, Media Release, 'Winning bidder announced for Australia's premier container port', <http://www.premier.vic.gov.au/media-centre/media-releases/9813-winning-bidder-announced-for-australia-s-premier-container-port-operator.html>, 2 May 2014.

¹¹⁶ However, over the last two years net crane rates in Brisbane have been below the five-port average.

¹¹⁷ Refer to section 1.6.2. Also, see, for example, BITRE paper examining overseas approaches to managing scarce capacity in landside stevedoring services: Godfrey Lubulwa, Adam Malarz, Shun Peng Wang, 'An investigation of best practice landside efficiency at Australian container ports', September 2011.

3 Detailed monitoring results

3.1 Introduction

This section provides detailed information obtained through the ACCC's 2013–14 monitoring program, including an assessment of revenues, costs, margins and industry returns.

For 2013–14, the monitoring program includes information supplied by the four container stevedoring companies – Patrick, DP World, FACT and HPA.

The ACCC's monitoring results for 2013–14 show that the commencement of a third stevedore at the ports of Sydney and Brisbane has had an impact on the margins of the industry. The industry's rate of return in 2013–14 was the lowest industry return since 1999–2000, primarily due to operating and capital costs associated with new terminals.

A significant level of costs associated with new terminal development were capitalised¹¹⁸ in 2012–13 and 2013–14 by HPA, in recognition of a firm in start-up mode whereby costs associated with building life-long assets are expected to generate future economic returns. In addition, Patrick and DP World have both invested significantly in existing terminal infrastructure in Sydney and Brisbane respectively.

The impact of new terminal development and related equipment (e.g. cranes and straddles) over the past two years has been an expansion of the industry's (average tangible) asset base, and consequently a decline in the rate of return.

While the expansion in the industry's asset base over the last two years had the largest downward impact on the industry's rate of return, the decline in margins was also significant. In 2013–14, total margins in the industry deteriorated significantly, due to industry costs rising faster than revenues. HPA recorded relatively small revenues in line with its small volume of stevedoring activity in Brisbane and Sydney.

These issues are discussed more fully throughout the following sections.

3.2 Revenues

Unit total revenue is defined as total revenue divided by total volume. It is an average measure of all unit revenues earned by the stevedores. Total revenue is earned from the company's complete range of services, including stevedoring.

Unit stevedoring revenue is revenue from stevedoring services (i.e. from lifting containers onto and from ships) divided by total volume. It is an average measure of revenue earned on all containers. This chapter also presents data on unit stevedoring revenue for 20- and 40-foot containers.

Unit other revenue is revenue earned from services other than stevedoring divided by total volume.

¹¹⁸ Capitalising costs is an attempt to follow the Matching Principle of accounting. The Matching Principle seeks to match expenses with revenues. In other words, match the cost of an item to the period in which it is used, as opposed to when the cost was incurred. As some assets have long lives and will be generating revenue during that useful life, their costs may be amortized over a long period. An example of this would be costs associated with constructing a new terminal. The costs associated with building the asset (including labour costs) can be added to the carrying value of the fixed asset on the balance sheet. These capitalised costs will be recognised in future periods, when revenues generated from the plant output are recognised.

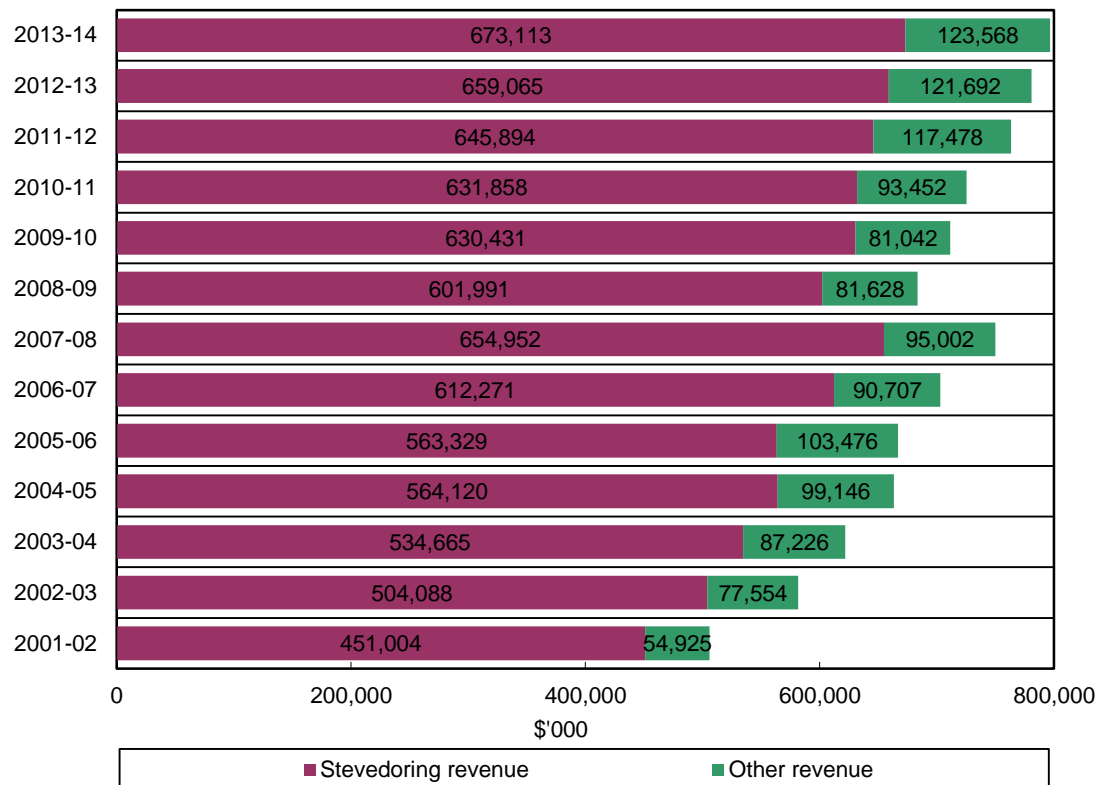
3.2.1 Sources of revenue

The main sources of revenue reported to the ACCC by stevedores are:

- revenues from the stevedoring function
- revenues from other or ancillary activities.

Figure 3.1 shows the changes in the components of total revenues (expressed in real terms) from 2001–02 to 2013–14.

Figure 3.1: Components of total revenue in real terms, 2001-02 to 2013-14



Source: data provided by the stevedoring companies as part of the ACCC's monitoring program. Data converted to real terms using Australian Bureau of Statistics' (ABS) GDP deflator series (cat. no. 5206.0, Table 4. Expenditure on Gross Domestic Product (GDP), Chain price indexes, Series ID A2303862V). Base year for ACCC deflator series: 2000–01.

Figure 3.1 shows that stevedoring revenue is the most significant source of revenue for the monitored companies. Since 2001–02 stevedoring revenue has grown by nearly 50 per cent in real terms. Over the same period throughput has nearly doubled.

Revenue from non-stevedoring sources increased by 125.0 per cent between 2001–02 and 2013–14 in real terms; though it remains a small component of total revenue (15.5 per cent) (refer section 3.2.3 for more information on other revenue).

Figure 3.2 shows the changes in the components of total revenue on a TEU basis in real terms from 1998–99 to 2013–14.

Figure 3.2: Components of total revenue per TEU in real terms, 1998-99 to 2013-14



Source: data provided by the stevedoring companies as part of the ACCC's monitoring program. Data converted to real terms using ABS GDP deflator series. Base year: 2000–01.

Figure 3.2 shows that, in real terms:

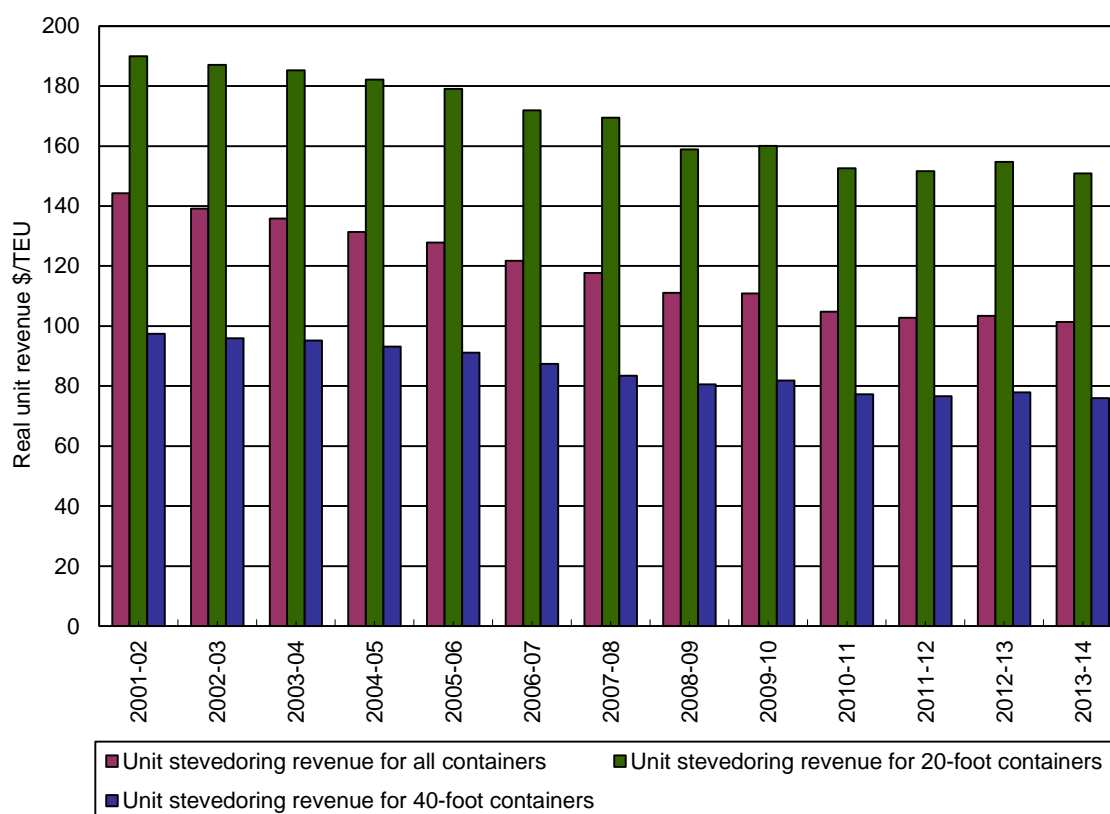
- from 1998–99 to 2013–14 per unit total revenue fell from \$194.96/TEU to \$120.01/TEU.
- per unit revenue from stevedoring activities declined by 41.0 per cent, from \$171.95/TEU to \$101.40/TEU in 2013–14.
- per unit revenue from non-stevedoring activities was \$18.61/TEU, a 19.1 per cent decrease from \$23.00/TEU in 1998–99.

3.2.2 Unit stevedoring revenue—by type of container

Unit stevedoring revenue is a weighted average measure of stevedoring revenue earned on all containers. The proportion of containers represented by 20- and 40-foot containers, as well as relative changes in these proportions, can affect the average measure of unit stevedoring revenue. For example, 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.

To isolate the effects of product mix changes in broad average measures, the ACCC analyses separate data on unit revenue allocated among 20- and 40-foot containers. These provide a more accurate indication of changes in prices actually paid by users for each type of container.

Figure 3.3: Unit stevedoring revenue by type of container (20- and 40-foot containers) in real terms, 2001-02 to 2013-14



Source: data provided by the stevedoring companies as part of the ACCC's monitoring program. Data converted to real terms using ABS GDP deflator series. Base year: 2000-01.
Note: 2001-02 was the first year in which the ACCC collected data by type of container.

The key points arising from figure 3.3 are:

- For 20-foot containers, real unit stevedoring revenue has decreased by 20.6 per cent from \$189.92 in 2001-02 to \$150.86 in 2013-14. This has been the result of a decrease in almost all of the years over the period.
- For 40-foot containers, real unit stevedoring revenue has decreased by 22.0 per cent from \$97.47 in 2001-02 to \$75.99 in 2013-14. As for 20-foot containers, the real unit stevedoring revenues have been declining as volumes have been increasing.
- In average terms, real unit stevedoring revenues earned on all containers has declined by 29.7 per cent from \$144.24 in 2001-02 to \$101.40 in 2013-14.

Long-term trends that show lower real average revenues are indicative of lower stevedoring charges. However, the change in product mix over time is also relevant – the ACCC understands that stevedoring tariffs typically include charges related to the discharge, loading or re-stowing of a container which are set on the basis of per container lift and are not differentiated on the basis of the size of the container. It follows that from a stevedore's perspective, a proportionate increase in the use of 40-foot containers will result in lower average stevedoring unit revenues.

Volume information based on container type provided to the ACCC as part of its monitoring indicates that the number of TEUs carried in 40-foot containers was 183.8 per cent greater in 2013-14 than in 2001-02. The use of 20-foot containers has increased by substantially less – only 42.4 per cent – over the same period. The significant shift in usage patterns from 20-foot

containers towards 40-foot containers results in relatively lower real unit stevedoring revenues (compared to the hypothetical scenario where there is no change in product mix).

3.2.3 Other revenue—revenue from ancillary services

Other (non-stevedoring) revenue, including berth hire, storage, container repositioning, asset sales, VBS and other non-defined or unspecified activities, has become an increasingly important source of income. Between 2001–02 and 2013–14, these revenues have increased by 125.0 per cent in real terms. As a proportion of real total revenue, these revenues have increased from 10.9 per cent to 15.5 per cent over that period.

A brief discussion of broad trends in some of these other revenues is presented below.

Storage revenue

Storage of containers has raised a significant component of other revenues in recent years. While storage is generally free for a certain period, fees are then applied if containers are not collected from the terminals.

Total storage revenue was 15.4 per cent higher in real terms in 2013–14 than in 2001–02. However, on a per TEU basis, storage revenue in 2013–14 was at its lowest level of the 12 year period (45.7 per cent lower than in 2001–02 in real terms).

Decreases in real per unit storage revenues over time can reflect a combination of factors, including decreases in the number of containers remaining in terminals beyond the fee-free period and the move to larger containers.

Vehicle booking systems

Automated VBS are used to manage the road-based flow of containers in and out of Australia's major container ports. Revenue from this activity represented 16.5 per cent of total other revenue in 2013–14.

Since 2001–02, VBS revenues have grown significantly, from \$1.7 million to \$20.4 million in real terms in 2013–14. On a per unit basis, it has also increased, from \$0.56 to \$3.07 in real terms over the same period.

Long-term trends of increasing VBS revenues, in overall terms and on a per unit basis, are likely to reflect a number of factors. They could, for example, represent higher VBS charges by the stevedores.

In terms of vehicle volumes, BITRE data indicates that since the September quarter 2006, the total number of trucks has not changed significantly. The number of TEUs per truck has also generally remained largely unchanged since 2009 (around 2.5 TEUs).

Unspecified sources of revenue

In previous monitoring reports the ACCC has drawn attention to increases in revenue from activities not specified or otherwise defined within the 'other revenue' category.

Since 2001–02 revenue from unspecified sources has increased significantly. In 2013–14 it was \$43.9 million, an increase of over 1000 per cent in real terms from \$4.0 million. On a per TEU basis, revenue from unspecified sources has increased from \$1.26/TEU in 2001–02 to \$6.62 in 2013–14, which represents a rise of 423 per cent in real terms.

It is understood from information previously provided by the stevedoring companies that most of the growth in 'other' unspecified revenue in recent years is from services provided to the Australian Customs and Border Protection Service (ACS) as part of the container examination facilities (CEFs) program. Between 2003–04 and 2012–13, the number of TEUs inspected

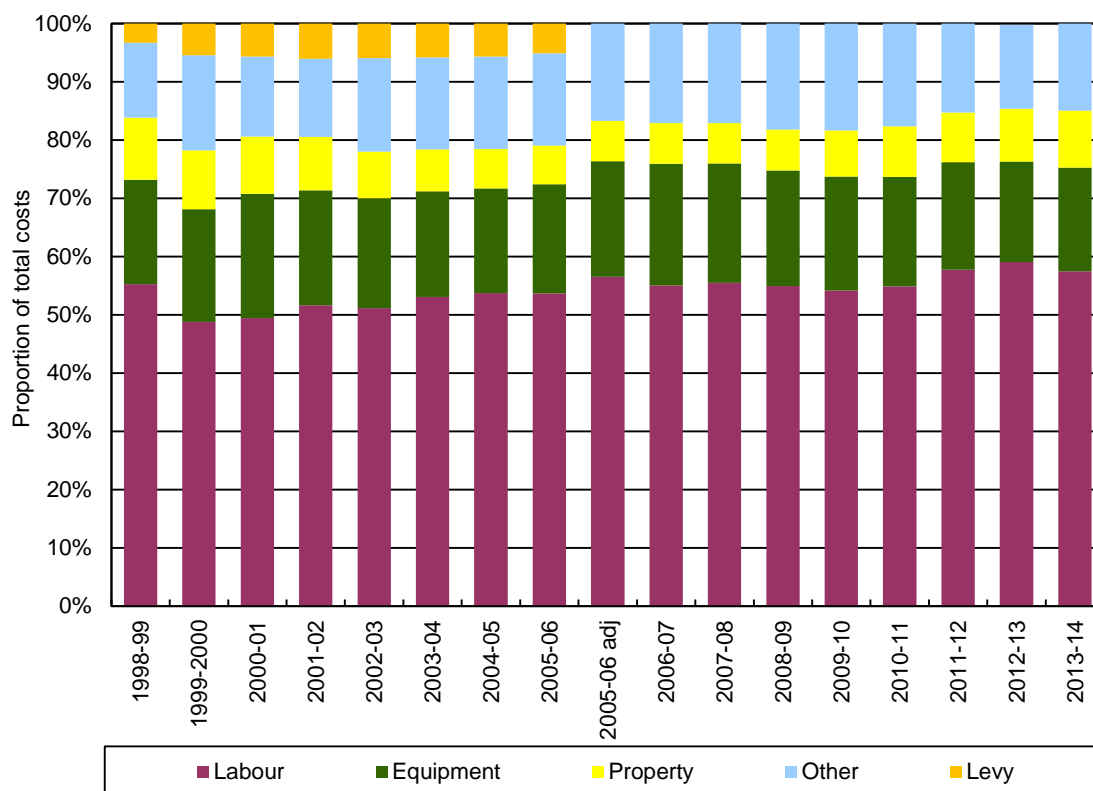
(x-rayed) at CEFs by the ACS increased by 13.6 per cent from 89 687 TEUs to 101 842 TEUs. This exceeded the government's target of 101 500 TEUs.¹¹⁹

3.3 Costs

3.3.1 Relative cost shares

Figure 3.4 shows changes in the share of total costs held by key cost components.

Figure 3.4: Cost components as a percentage of total costs, 1998–99 to 2013–14



Source: nominal data provided by the stevedoring companies as part of the ACCC's monitoring program.

Note: other costs include port management costs and other overhead costs. Costs between 1998–99 and 2005–06 are not directly comparable with the following years due to the cessation of the stevedoring levy from May 2006. To allow some comparability of 2005–06 with the following years, the '2005–06 adj' column excludes the stevedoring levy.

The following observations can be made from figure 3.4 on the composition of costs:

- Labour has been the most significant component of total costs in each year since 1998–99.
- Labour costs decreased from 59.1 per cent of total costs in 2012–13 to 57.5 per cent in 2013–14.

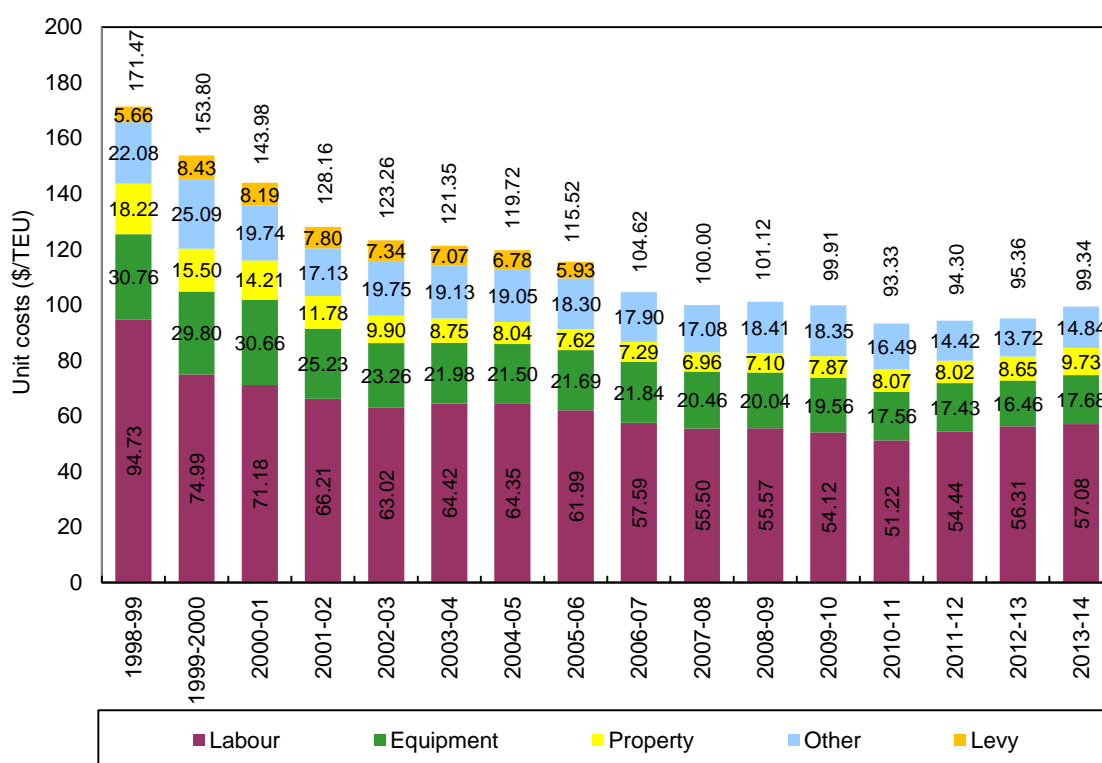
¹¹⁹ The ACCC understands that the first ACS CEF began in November 2002. A published breakdown of the number of TEUs examined by the ACS through the CEF system is publicly available from its annual reports published from 2003–04 onwards. ACS annual reports can be downloaded from www.customs.gov.au. At the time the ACCC finalised this monitoring report, the ACS annual report for 2013–14 was not publicly available.

- Equipment costs (including depreciation), the largest component after labour, increased marginally from 17.3 per cent of total costs in 2012–13 to 17.8 per cent in 2013–14.
- Property costs increased from 9.1 per cent of total costs in 2012–13 to 9.8 per cent in 2013–14. Property costs have been generally increasing as a proportion of total costs since 2005–06.
- The 'other' category increased marginally from 14.4 per cent of total costs in 2012–13 to 14.9 per cent in 2013–14.

3.3.2 Variations in unit cost components

Figure 3.5 shows changes in the various cost components per TEU in real terms.

Figure 3.5: Cost components per unit in real terms, 1998-99 to 2013-14



Source: nominal data provided by the stevedoring companies as part of the ACCC's monitoring program. Data converted to real terms using ABS GDP deflator series. Base year: 2000–01.

Some observations drawn from figure 3.5 are:

- *Labour*—Labour costs per TEU have decreased since 1998–99. In real terms, per unit labour costs have fallen by 39.7 per cent, from \$94.73 in 1998–99 to \$57.08 in 2013–14.
 - Waterfront reform, reduced over-manning and broader workplace flexibility are all likely contributing factors to lower real unit labour costs over time.
- However, per unit labour costs have increased (both in real and in nominal terms) in every year since 2010–11.

- In 2011–12, real per unit labour costs increased by 6.3 per cent, which corresponded with industrial action associated with enterprise bargaining at some terminals.
- In 2012–13 and 2013–14, real per unit labour costs have continued to increase, albeit by less (3.4 per cent and 1.4 per cent in real terms respectively).
- *Equipment*—Unit equipment costs (including depreciation) decreased by 42.5 per cent in real terms between 1998–99 and 2013–14. This is likely to have been associated with economies of scale as well as newer, more efficient equipment being installed at several terminals over time, resulting in lower running and maintenance costs.
- However, in 2013–14, per TEU equipment costs increased by 7.4 per cent in real terms. This was in part due to the impact of DP World’s higher equipment costs per TEU (due to depreciation associated with the yard automation undertaken in Brisbane and increases in equipment cost arising from the purchase of a new quay crane in Fremantle. Unit equipment costs were also impacted by depreciation and the recognition of other equipment costs by HPA (which being a new player had relatively low TEU volumes, and thus high unit equipment costs).
- *Other*—Other unit costs decreased by 32.8 per cent in real terms from \$22.08 in 1998–99 to \$14.84 in 2013–14. This trend largely reflects lower real port management and overhead costs, and the abolition of the industry levy in 2006. However, in 2013–14 other unit costs increased on a per unit basis by 8.1 per cent in real terms from the previous year.
- *Property*—Property costs in real terms are 46.6 per cent lower than in 1998–99.
- In 2013–14, per unit property costs increased significantly in both real and nominal terms. However, this was largely due to the impact of HPA’s relatively high property costs (due to its relatively low TEU volumes), as well as increased unit property costs at each of DP World’s terminals.

3.4 Major capital investments in terminal capacity

As outlined in chapter 1, Patrick, DP World and HPA reported significant investment in terminal capacity in 2013–14, building on the significant investment in the previous year. See section 1.3.2 for details of the stevedores’ recent and planned investments. The total industry tangible asset base has increased significantly, more than doubling over the past two years:

- From 2012–13 to 2013–14, the industry asset base increased by 27.3 per cent.
- Over the two years since 2011–12, it rose by 104.1 per cent.

3.5 Rates of return

Rate of return is the ACCC’s key measure of profitability for the container stevedoring industry. The ACCC considers that the appropriate measure of rate of return for monitoring purposes is the ratio of EBITA to the average value (of opening and closing balances) of tangible assets. ‘Tangible assets’ refers to the physical infrastructure used by the stevedores to provide container stevedoring services.

EBITA is used as it is not affected by management decisions regarding financial capital structures which can significantly affect interest expenses and tax payable (and thus post-tax returns) but do not reflect the operating profitability of providing container stevedoring services.

Similarly, by using assets as the basis for comparing those returns, the investment base represents the assets employed rather than the shareholders' investment. The ACCC excludes intangible assets from the industry's asset base because of concerns that the intangible assets reported by the stevedores may reflect an expectation of earning monopoly rents at the time they purchased the businesses.

The value of intangible assets reported by the stevedores as part of the ACCC's monitoring program is significant and reflects goodwill and, for one of the major stevedores, long-term and exclusive berth licenses. Based on publicly available information, the ACCC notes that around \$1.5 billion of goodwill was allocated to Patrick's container ports for the year ending 30 June 2014. This represents 60 per cent of the total value of Patrick's assets for its Terminal and Logistics division.¹²⁰

Table 3.1 shows annualised EBITA for the Australian stevedores since 1998–99 expressed as a percentage of average tangible assets. From 2012–13, the data includes HPA as a new entrant to the industry.

¹²⁰ ACCC calculation based on Asciano's Full Year Report for the year ended 30 June 2014, p. 80 and p. 95.

Table 3.1: Rates of return—EBITA on average assets (%)—1998-99 to 2013-14

Year	Australian stevedores (tangible assets excluding revaluations)	Australian stevedores (including revaluations and intangibles)^a
1998-99	10.57	
1999-00	13.20	
2000-01	15.20	
2001-02	19.29	
2002-03	25.80	
2003-04	27.75	
2004-05	23.06	
2005-06	21.70	
2006-07 ^b	22.37	11.49
2007-08	24.86	8.51
2008-09	17.63	6.11
2009-10	18.39	7.18
2010-11	24.24	9.85
2011-12	29.23	8.03
2012-13	21.86	5.34
2013-14	13.25	4.63

Source: data supplied by the stevedoring companies.

Notes: (a) Data re-stated on an AIFRS basis ('Australian Equivalents of International Financial Reporting Standards') using asset values supplied by the stevedores that include revaluations and recognition of intangible assets.

(b) From 2006-07 onwards data excludes intangible assets from the calculation of the average asset base and EBIT has been adjusted to add back in amortisation and impairment losses (which are both associated with the recognition of intangible assets) for the period.

Table 3.1 shows that:

- There was a significant decline in the rate of return on average tangible assets for the container stevedoring industry in each of 2012-13 and 2013-14. In the 12 months to June 2014, rates of return on average tangible assets decreased from 21.86 per cent in 2011-12 to 13.25 per cent.
- The rate of return on average tangible assets in 2013-14 was the lowest industry return since 1999-2000.

- While the fall in rate of return since 2011–12 was primarily due to the more than doubling of tangible assets over the two years, the fall in EBITA in 2013–14 also had a significant impact.

In 2013–14, both the increase in industry assets and the decline in EBITA had similar impacts on the fall in the rate of return.

Asset expansion is a significant and welcome industry development and is critical for ensuring Australian container ports have adequate long-term stevedoring capacity to meet future demand. In the medium to long term the new and upgraded assets would be expected to increase productivity.

The expansion in the industry's asset base over the past year reflects new terminal development in Brisbane and Sydney by HPA. However, it also reflects substantial new investment in existing terminal infrastructure by DP World in Brisbane and Patrick in Sydney.

The resulting measure **should not** be interpreted as a return on the funds invested by shareholders in the respective stevedoring businesses, as such investment would include the price that those owners paid to gain control of those business (which would include goodwill) as well as the market value of existing assets (which would include the effect of revaluations). An estimate based on the asset values provided by the stevedores that includes intangible assets (including goodwill and berth licenses) and asset revaluations would result in an industry rate of return of 4.63 per cent in 2013–14.

Since 2012–13, the ACCC has compared the stevedores' rate of return with the average of the companies in the S&P/ASX 200 Industrials Index:

- Information available to the ACCC through Bloomberg indicates that the average rate of return (expressed as EBITA/average tangible assets) for the S&P/ASX 200 Industrials Index was 7.9 per cent in 2013–14. This is lower than the result of 13.25 per cent reported for the Australian stevedores in the ACCC's monitoring program.
- Asset values for the S&P/ASX 200 Industrials Index include the effect of asset revaluations and so are not directly comparable to the asset base for the Australian stevedores derived by the ACCC because tangible assets are measured at historic cost. However, the effect of asset revaluations would not be expected to account for all of the difference between the stevedoring industry's figure of 13.25 per cent and the index figure of 7.9 per cent. Even if asset revaluations reported by the stevedores were to be included, the stevedoring industry is above the rate of return of the Industrials Index.

More information on the ACCC's approach to estimating rates of return for the container stevedoring industry is presented in appendix E.

3.5.1 Concluding ACCC observations about industry profitability

Industry profitability (as measured by returns on average tangible assets) declined significantly in 2013–14 to the lowest level seen since 1999–2000. Relatively low industry rates of return are expected to continue in future years, for a number of reasons:

- The expansion of terminals in Brisbane and Sydney, and the establishment of a new terminal in Melbourne are expected to take some time. During this phase, investment in capital equipment will result in continued expansions in the industry's asset base. In the medium to long term the new and upgraded assets would be expected to increase productivity and ensure that container ports have adequate long-term stevedoring capacity to meet future demand.
- As demand growth is relatively consistent, it follows that average rates of return across the industry as a whole could be expected to remain relatively low during and for the short to medium term.
- As an increased number of players provides the opportunity for more aggressive competition, it is less likely that high profits, to the extent that they might have previously reflected economic rents in an industry with low contestability, will continue.

A Company-specific data

A.1 Introduction

This appendix presents company-specific data received from the four stevedore companies involved in the monitoring program. Where appropriate, the data is presented in the form of index numbers to protect commercially sensitive information.

A.2 Asciano (Patrick)

A.2.1 Container volumes

In 2013–14, the number of TEUs handled by Patrick across all ports increased by 2.4 per cent, following a slight decrease of 0.3 per cent in 2012–13. Patrick's handling of 20-foot containers increased by 8.2 per cent nationally, while 40-foot containers decreased by 0.6 per cent. A key factor in the increase in the number of TEUs was the commencement of the "K" Line service at Fremantle on 1 January 2014, as well as the contribution from expanded and upsized services run by existing customers.

A.2.2 Revenue and margins

- Patrick's total revenue increased across all ports by 4.5 per cent in 2013–14. On a per TEU basis, total revenue increased by 2.1 per cent nationally. Unit total revenues increased in Brisbane, Fremantle and Melbourne but decreased in Sydney.
- Total costs increased by 3.3 per cent across all ports. On a per TEU basis, costs increased by 1.0 per cent nationally. Unit total costs per TEU in Brisbane, Melbourne and Fremantle increased, but decreased in Sydney.
- In 2013–14, Patrick's total margin¹²¹ increased by 7.6 per cent nationally. On a per unit basis,¹²² Patrick's margin increased by 5.1 per cent as increases in unit revenues were greater than increases in unit costs.
- In Sydney, Melbourne and Fremantle, margins per TEU increased by 13.7 per cent, 7.6 per cent and 5.5 per cent respectively. In Sydney, decreases in unit revenues were proportionately less than decreases in unit costs. In Melbourne and Fremantle, unit revenues increased by a higher proportion than unit costs. In Brisbane margins per TEU decreased by 9.0 per cent. This was the result of unit costs increasing by a higher proportion than unit revenues.
- Stevedoring revenue per TEU increased by 2.5 per cent across all ports. Other revenue per TEU decreased marginally by 0.5 per cent.
- Patrick earned slightly higher unit stevedoring revenue on 20-foot containers and 40-foot containers than it did in 2012–13.

A.2.3 Changes in cost components

The ACCC collects unit cost data for specific cost categories including stevedoring, labour, equipment and property. Table C.1 in appendix C sets out the data relating to these cost categories for Patrick.

¹²¹ Total margin represents the difference between total revenues and total costs.

¹²² Unit measures in the ACCC's monitoring report are expressed in terms of per TEU measures.

- Total costs per TEU increased across all ports by 1.0 per cent in 2013–14. This increase was largely driven by higher costs in Brisbane and Melbourne, although costs in Sydney were lower.
- Stevedoring costs per TEU increased by 1.3 per cent in 2013–14 across all ports. Stevedoring costs per TEU increased in Brisbane, Melbourne and Fremantle by 6.3 per cent, 4.1 per cent and 3.9 per cent respectively, and decreased in Sydney by 3.9 per cent.
- Labour costs per TEU increased for the fourth consecutive year, by 2.9 per cent in 2013–14. Unit labour costs increased in both Fremantle and Melbourne by 6.1 per cent and Brisbane by 8.4 per cent, but decreased in Sydney by 3.5 per cent.
- Equipment costs per TEU decreased across all ports by 1.9 per cent in 2013–14. Unit equipment costs decreased in Melbourne and Fremantle by 3.6 per cent and 3.7 per cent respectively. These decreases offset higher unit equipment costs recorded in Sydney (1.0 per cent) and Brisbane (0.4 per cent).
- Property costs per TEU decreased marginally, by 0.4 per cent, nationally in 2013–14. For individual ports, property costs per TEU increased in Brisbane by 6.9 per cent and at Melbourne by 6.3 per cent. These increases were offset by lower per unit property costs in Sydney (which decreased by 6.6 per cent) and in Fremantle (which decreased by 1.9 per cent).
- Patrick's other costs per TEU decreased by 2.8 per cent in 2013–14. Other costs consist of other overheads, port management and other direct costs.¹²³

A.3 DP World Australia

A.3.1 Container volumes

In 2013–14, the number of TEUs handled by DP World across all ports increased marginally by 0.9 per cent, following an increase of 2.9 per cent in 2012–13. Increases in the number of TEUs handled by DP World in 2013–14 occurred at Sydney and Melbourne while volumes declined at Fremantle and Brisbane. TEU volumes in Fremantle have been declining since 2007–08, but the decline in 2013–14 was the most significant decline in that period. The decline in TEU volumes in Fremantle during the period is largely due to the loss of the “K” Line service in Fremantle effective 1 January 2014.

At a national level, the use of 20-foot containers decreased by 2.1 per cent in 2013–14 while the use of 40-foot containers increased by 2.4 per cent.

A.3.2 Revenue and margins

- DP World's total revenue across all ports decreased by 1.9 per cent in 2013–14. On a per TEU basis, revenue decreased by 2.8 per cent across all ports. Total unit revenues declined at each of its ports: Brisbane (4.2 per cent); Sydney (3.3 per cent); Fremantle (2.5 per cent); and Melbourne (1.3 per cent).
- Total costs across all ports increased by 7.1 per cent in 2013–14. On per TEU basis, costs increased by 6.1 per cent across all ports.
- In 2013–14, DP World's total margin decreased by 37.5 per cent nationally. On a per unit basis, DP World's margin decreased by 38.1 per cent. Margins per TEU decreased

¹²³ Other costs are not shown separately in table C.1 in appendix C, but are included in the total cost index and also in industry-wide data presented in figures 3.4 and 3.5.

significantly at all of DP World's ports. Each of DP World's ports experienced higher unit costs and lower unit revenues in 2013–14 compared to the previous year. At Brisbane, Sydney and Melbourne, margins per TEU decreased by 51.5 per cent, 27.4 per cent and 23.2 per cent respectively. In Fremantle, margins per TEU decreased by 1045.9 per cent.

- Stevedoring revenue per TEU decreased by 3.3 per cent in 2013–14. Other revenue per TEU decreased by 0.4 per cent in 2013–14. DP World earned lower unit stevedoring revenue for both 20-foot containers and 40-foot containers in 2013–14 than it did in the preceding year.

A.3.3 Changes in cost components¹²⁴

The ACCC collects unit cost data for specific cost categories including stevedoring, labour, equipment and property. Table C.2 in appendix C sets out the data relating to these cost categories for DP World.

- In 2013–14, total costs per TEU across all ports increased by 6.1 per cent. Each of DP World's ports experienced higher total unit costs in 2013–14 compared to 2012–13. The largest increases in unit costs were in Fremantle (20.5 per cent) and Brisbane (10.6 per cent), while unit costs in Melbourne (5.2 per cent) and Sydney (2.9 per cent) also increased.
- Labour costs per TEU increased marginally across all ports by 0.2 per cent in 2013–14. Unit labour costs increased at Fremantle (8.5 per cent), Melbourne (0.9 per cent) and Sydney (0.6 per cent) but decreased at Brisbane (2.9 per cent). DP World indicated to the ACCC in its monitoring program that the current EBA between DP World and the Maritime Union of Australia expired on 30 June 2014. The company is currently in negotiations with the MUA to establish a new agreement and until this is finalised the previous agreement stands. DP World has undertaken yard automation in Brisbane, and the reduction in the labour costs per TEU has been as a result of the associated reduction of the labour force.
- Equipment costs per TEU increased by 18.9 per cent in 2013–14. Increases were recorded at each individual port, with the largest increases in per unit equipment costs occurring at Fremantle (77.3 per cent) and Brisbane (54.0 per cent). The increase in Brisbane is largely due to depreciation associated with the yard automation undertaken by DP World during the year. The increase in Fremantle is due to increases in equipment cost arising from the purchase of a new quay crane and the significant decrease in TEU volumes. At Melbourne, unit equipment costs increased by 6.9 per cent, while at Sydney unit equipment costs increased by 2.4 per cent.
- Property costs per TEU increased by 6.1 per cent on average across all ports in 2013–14. Unit property costs increased at all DP World's terminals. Fremantle, Melbourne, Sydney and Brisbane recorded increases of 19.7 per cent, 11.3 per cent, 3.6 per cent and 3.2 per cent respectively.
- DP World's other costs per TEU increased by 15.4 per cent in 2013–14. Other costs consist of other overheads, port management costs and other direct costs.¹²⁵

¹²⁴ DP World Australia's accounting practices are such that, while revenues are broken down on the basis of container-specific activity at its terminals, costs are not. Therefore, DP World Australia's general cost data relates to stevedoring and other activities at its respective terminals.

¹²⁵ Other costs are not shown separately in table C.2 in appendix C, but are included in the total cost index and also in industry-wide data presented in figures 3.4 and 3.5.

A.4 Flinders Adelaide Container Terminal Pty Ltd

A.4.1 Container volumes

In 2013–14, the number of TEUs handled by Flinders Adelaide Container Terminal (FACT) at the Port of Adelaide increased by 13.9 per cent, following an increase of 2.4 per cent in 2012–13. The use of 20-foot and 40-foot containers increased by 15.7 per cent and 12.4 per cent respectively.

A.4.2 Revenue and margins

- FACT's total revenue increased by 11.0 per cent in 2013–14. On a per unit basis, total revenues decreased by 2.5 per cent.
- Total costs increased by 6.0 per cent for FACT. On a per unit basis, costs decreased by 6.9 per cent.
- In 2013–14, FACT's total margin increased by 30.1 per cent. On a per unit basis FACT's margin increased by 14.3 per cent.
- Stevedoring revenue per TEU increased by 1.0 per cent in 2013–14. Other revenue per TEU decreased by 11.9 per cent. In recent years, revenue from break-bulk activities (which is classified as 'other revenue' for monitoring purposes) has become increasingly important at the Port of Adelaide. The decrease in other revenue per TEU was largely due to an increase in the number of total TEUs handled.
- In 2013–14, FACT earned marginally lower unit stevedoring revenue for 20-foot containers and marginally higher unit stevedoring revenue for 40-foot containers compared to 2012–13.

A.4.3 Changes in cost components

Table C.3 in appendix C sets out the data relating to specific cost categories for FACT including stevedoring, labour, equipment and property.

- In 2013–14, FACT's total costs increased by 6.0 per cent. On a per unit basis, total costs decreased by 6.9 per cent.
- Stevedoring costs per TEU decreased by 12.2 per cent in 2013–14, following an increase of 11.0 per cent in 2012–13.
- Labour costs per TEU decreased by 1.4 per cent in 2013–14.
- Equipment costs per TEU decreased by 10.7 per cent in 2013–14.
- Property costs per TEU decreased by 38.3 per cent in 2013–14.
- Other costs per TEU decreased by 15.3 per cent. Other costs consist of overheads, port management costs and other direct costs.¹²⁶

¹²⁶ Other costs are not shown separately in table C.3 in appendix C, but are included in the total cost index and also in industry-wide data presented in figures 3.4 and 3.5.

A.5 Hutchison Ports Australia

HPA was first included in the ACCC's monitoring program in 2012–13. Information on revenues, costs and volumes is limited in this report because it is only available for two years (i.e. 2012–13 and 2013–14).

A.5.1 Container volumes

HPA commenced operations at its Brisbane facility in early 2013. In Sydney, no container volumes were recorded in 2012–13 because the terminal was under construction. Given that up to 30 June 2013, HPA processed a very small number of containers in Brisbane only, comparison between 2012–13 and 2013–14 is of limited explanatory value.

A.5.2 Revenue and margins

HPA reported small revenues in line with processing a small amount of volume in Brisbane and Sydney up to 30 June 2014. Stevedoring margins reflected a company in start-up mode; small revenues were outweighed by costs incurred in terminal developments.

HPA reported to the ACCC that the industry is characterised by a small number of suppliers, relatively few customers and a low turnover of service agreements. While shipping lines do occasionally create new services, the net result is that only some four to six agreements come up a year, and not all are taken to market, which limits HPA's ability to secure business and raise revenue.

A.5.3 Changes in cost components

The major influences on costs reported by HPA are associated with new terminal developments. There has been substantial investment at both HPA's Brisbane Container Terminals and Sydney International Container Terminals during 2013–14.

HPA reported that its terminals must have the equipment and the workforce to provide a competitive service to shipping lines; to ensure their turnaround is within the scheduled windows. HPA's capital investments during 2013–14 continued to be significant. In addition, both of HPA's terminals have had to increase the level of labour to meet ship service requirements.

HPA noted in 2012–13 that the enterprise agreement it had negotiated with the MUA provides the opportunity to reduce costs by establishing flexibility in work arrangements, needed for a start-up stevedoring operation, where work initially is intermittent. The agreement was negotiated on the basis that HPA was introducing automation to achieve efficiencies. Notwithstanding this, HPA reported that until it secures enough business to provide near continuous work for that workforce, its handling unit costs will be higher.

B Selected industry data

Table B.1: Nominal unit data, 1998-99 to 2013-14

	Total rev/TEU (\$/TEU)	Total cost/TEU (\$/TEU)	Total margin/TEU (\$/TEU)	Stevedoring rev/TEU* (\$/TEU)	Stevedoring cost/TEU* (\$/TEU)	Stevedoring margin/TEU* (\$/TEU)	Other rev/TEU (\$/TEU)	Other rev/Total rev (%)
1998-99	182.58	160.57	22.00	161.03	150.88	10.15	21.54	11.8
1999-00	175.01	146.88	28.14	153.16	138.32	14.84	21.85	12.5
2000-01	172.77	143.97	28.80	151.08	134.53	16.55	21.69	12.6
2001-02	165.66	131.14	34.43	147.59	124.12	23.47	17.97	10.9
2002-03	169.00	129.76	39.23	146.46	122.79	23.67	22.53	13.3
2003-04	171.49	131.75	39.74	147.44	124.62	22.82	24.05	14.0
2004-05	175.24	135.89	39.35	149.05	128.09	20.96	26.20	14.9
2005-06	180.08	137.49	42.59	152.14	128.66	23.48	27.95	15.5
2006-07	173.27	129.73	43.54	150.91	121.41	29.50	22.36	12.9
2007-08	173.24	128.59	44.65	151.30	120.41	30.88	21.95	12.7
2008-09	171.44	137.41	34.03	150.97	129.23	21.73	20.47	11.9

Table B.1: Nominal unit data—continued

	Total rev/TEU (\$/TEU)	Total cost/TEU (\$/TEU)	Total margin/TEU (\$/TEU)	Stevedoring rev/TEU* (\$/TEU)	Stevedoring cost/TEU* (\$/TEU)	Stevedoring margin/TEU* (\$/TEU)	Other rev/TEU (\$/TEU)	Other rev/Total rev (%)
2009-10	170.94	136.43	34.51	151.47	132.12	19.35	19.47	11.4
2010-11	173.49	134.62	38.87	151.14	128.95	22.19	22.35	12.9
2011-12	177.27	137.58	39.69	149.99	129.05	20.94	27.28	15.4
2012-13	177.42	138.05	39.38	149.77	128.38	21.39	27.65	15.6
2013-14	176.19	145.85	30.34	148.86	132.83	16.04	27.33	15.5
% change 2012-13 to 2013-14	-0.69	+5.65	-22.94	-0.60	+3.46	-25.02	-1.18	n/a

Sources: the stevedoring companies, as part of the monitoring program, supplied figures for 1998–2014.

* Data on revenue was supplied by Asciano, FACT and HPA on the basis of container-specific activity in their respective terminals. DP World's accounting practices are slightly different and while revenue figures are broken down in this way, costs are not. Given this, Asciano, FACT and HPA's container-specific data are combined in the above with DP World's stevedoring revenue and general cost data to provide national aggregates.

Table B.2: Real unit revenue, cost and margins, 1986 to 2013-14

	Unit revenue \$/TEU	Unit cost \$/TEU	Unit margin \$/TEU	Deflator \$/TEU	Real unit revenue \$/TEU	Real unit cost \$/TEU	Real unit margin \$/TEU
1986	247.00	239.00	8.00	61.15	403.92	390.84	13.08
1987	244.00	218.00	26.00	65.33	373.52	333.72	39.80
1988	244.00	227.00	17.00	70.85	344.39	320.40	23.99
1989	247.00	241.00	6.00	76.93	321.09	313.29	7.80
1990	254.00	262.00	-8.00	81.10	313.19	323.06	-9.86
1991	244.00	243.00	1.00	84.10	290.13	288.94	1.19
1992	195.00	196.00	-1.00	85.73	227.47	228.64	-1.17
1993	195.00	190.00	5.00	86.78	224.72	218.96	5.76
1994	201.00	188.00	13.00	87.55	229.58	214.73	14.85
1995	206.00	191.00	15.00	94.00	219.15	203.19	15.96
1996	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Jan-Jun 1997	188.00	n/a	n/a	92.90	202.37	n/a	n/a
1998-99	182.58	160.57	22.00	93.65	194.96	171.46	23.50
1999-2000	175.01	146.88	28.14	95.50	183.26	153.80	29.46
2000-01	172.77	143.97	28.80	100.00	172.77	143.97	28.80
2001-02	165.56	131.14	34.43	102.33	161.80	128.16	33.65
2002-03	169.00	129.76	39.23	105.27	160.53	123.26	37.27

Table B.2: Real unit revenue, cost and margins—continued

	Unit revenue \$/TEU	Unit cost \$/TEU	Unit margin \$/TEU	Deflator \$/TEU	Real unit revenue \$/TEU	Real unit cost \$/TEU	Real unit margin \$/TEU
2003-04	171.49	131.75	39.74	108.57	157.95	121.35	36.61
2004-05	175.24	135.89	39.35	113.51	154.39	119.72	34.67
2005-06	180.08	137.49	42.59	119.02	151.31	115.52	35.79
2006-07	173.27	129.73	43.54	124.00	139.74	104.62	35.11
2007-08	173.24	128.59	44.65	128.60	134.72	100.00	34.72
2008-09	171.44	137.41	34.03	135.88	126.17	101.12	25.04
2009-10	170.94	136.43	34.51	136.56	125.18	99.91	25.27
2010-11	173.49	134.62	38.87	144.24	120.28	93.33	26.95
2011-12	177.27	137.58	39.69	145.90	121.50	94.30	27.20
2012-13	177.42	138.05	39.38	144.76	122.56	95.36	27.20
2013-14	176.19	145.85	30.34	146.82	120.01	99.34	20.67
% change							
2012-13 to 2013-14	-0.69	+5.65	-22.94	+1.42	-2.08	+4.17	-24.02
1998-99 to 2013-14	-3.5	-9.2	+37.9	+56.8	-38.4	-42.1	-12.0

Sources and notes: ACCC 1996, Monitoring of stevedoring costs and charges and terminal handling charges 1995. Figures for January–June 1997 are an estimate derived from the Bureau of Infrastructure, Transport and Regional Economics publication series *Waterline*. The stevedoring companies, as part of the monitoring program, supplied figures for 1998–2014. Data converted to real terms using Australian Bureau of Statistics' (ABS) gross domestic product (GDP) deflator series (cat. no. 5206.0, Table 4. Expenditure on Gross Domestic Product (GDP), Chain price indexes, Series ID A2303862V).
Base year for ACCC deflator series: 2000–01.

C Company trends in cost components

Table C.1: Asciano (Patrick) trends in nominal cost components (per TEU) index, 2002-03 to 2013-14

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Brisbane												
Stevedoring cost index	89.0	86.0	84.0	85.9	82.0	76.8	85.7	89.7	95.1	86.6	79.7	84.7
Total labour cost index	87.4	92.7	89.3	91.1	75.2	70.1	76.9	65.1	68.7	70.2	69.4	75.3
Total equipment cost index	62.0	49.1	46.0	54.4	76.4	78.9	86.9	105.0	118.0	109.8	94.3	94.6
Total property cost index	59.2	55.0	48.6	41.7	35.1	32.8	42.3	66.3	82.2	104.3	103.0	110.1
Port Botany												
Stevedoring cost index	78.1	78.1	79.2	81.6	81.1	79.8	85.0	89.2	84.6	94.3	90.6	87.0
Total labour cost index	79.3	84.2	88.3	89.7	92.8	94.7	101.2	101.0	103.9	119.9	121.0	116.8
Total equipment cost index	73.2	67.6	71.4	78.5	87.6	73.4	76.4	72.9	65.8	67.8	66.7	67.3
Total property cost index	49.9	47.4	44.5	54.2	52.7	53.5	55.2	54.8	58.2	66.2	73.5	68.6

Asciano (Patrick) trends in nominal cost components (per TEU) index—continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Melbourne												
Stevedoring cost index	80.6	80.1	81.7	79.0	74.2	73.5	75.9	79.6	79.4	74.4	73.4	76.3
Total labour cost index	79.8	86.1	92.8	88.9	89.8	88.5	87.5	90.2	94.2	92.0	94.6	100.4
Total equipment cost index	78.8	68.7	67.1	69.6	67.6	65.4	68.0	61.8	63.6	60.4	62.3	60.0
Total property cost index	47.1	38.6	35.4	32.9	37.5	32.9	37.3	38.1	39.4	36.8	42.0	44.7
Fremantle												
Stevedoring cost index	68.7	73.7	83.0	86.1	78.3	80.6	90.1	90.3	83.3	77.7	78.1	81.1
Total labour cost index	60.5	70.3	85.7	89.4	84.5	84.9	93.5	94.6	87.8	85.2	92.9	98.5
Total equipment cost index	53.2	51.6	52.7	52.0	54.8	67.4	76.7	62.3	62.5	56.3	56.6	54.5
Total property cost index	90.5	101.5	115.4	133.6	147.4	149.5	149.0	142.6	120.6	102.1	99.4	97.5

Asciano (Patrick) trends in nominal cost components (per TEU) index—continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Burnie #												
Stevedoring cost index	92.9	82.5	96.1	109.7	100.4	101.8	117.9	119.5	159.8	NA	NA	NA
Total labour cost index	84.3	79.1	107.3	117.7	109.8	116.2	135.8	122.0	195.9	NA	NA	NA
Total equipment cost index	111.1	103.7	112.2	147.4	130.7	134.4	140.4	135.3	210.1	NA	NA	NA
Total property cost index	75.0	52.5	76.7	109.4	103.2	225.3	455.3	576.0	872.8	NA	NA	NA
National												
Stevedoring cost index	79.1	79.2	81.2	81.8	78.5	77.2	83.2	86.9	85.2	84.1	81.1	82.1
Total labour cost index	77.7	83.9	89.6	89.5	87.3	86.8	92.1	90.2	93.3	96.2	98.2	101.0
Total equipment cost index	73.5	65.9	66.1	72.4	79.0	74.7	79.6	78.5	78.0	73.3	70.6	69.2
Total property cost index	53.2	48.6	46.1	47.7	48.7	47.0	52.3	57.4	61.2	66.0	70.4	70.1
Total cost* index	77.7	78.2	80.6	82.7	79.0	77.4	82.9	82.6	83.8	85.3	83.0	83.8

Base year is 1998–99 = 100. Index estimates for 1999–00, 2000–01 and 2001–02 are publicly available in ACCC Monitoring Report No. 14.

Patrick closed its Burnie operations in May 2011. * Other costs are included in the total cost index but not shown as a separate cost category.

Table C.2: DP World Australia trends in nominal cost components (per TEU) index, 2002-03 to 2013-14

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Brisbane												
Total labour cost index	80.6	86.8	89.4	93.4	93.4	91.8	92.6	88.1	81.3	86.5	88.3	85.8
Total equipment cost index	94.9	100.4	101.6	109.4	125.2	133.1	129.5	140.0	116.0	112.1	103.2	159.0
Total property cost index	62.8	56.4	52.4	48.6	52.7	55.5	51.8	57.0	66.3	84.0	87.8	90.6
Total cost index	86.3	92.4	92.6	97.4	95.5	94.2	96.1	97.6	86.6	88.3	91.0	100.6
Port Botany												
Total labour cost index	78.8	80.9	81.1	80.7	79.0	84.6	93.5	90.4	83.2	91.0	86.9	87.4
Total equipment cost index	107.2	107.1	105.9	117.4	117.2	112.4	120.1	114.7	97.0	111.5	93.4	95.6
Total property cost index	101.9	98.6	94.5	95.2	98.6	95.7	106.0	113.9	122.2	109.1	104.1	107.8
Total cost index	85.7	88.7	89.4	90.5	84.9	86.0	95.1	93.5	85.3	89.9	84.3	86.7

DP World Australia trends in nominal cost components (per TEU) index—continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Melbourne												
Total labour cost index	71.1	73.2	79.3	81.2	77.2	76.7	78.0	73.7	71.7	81.5	87.2	88.0
Total equipment cost index	106.2	123.6	123.1	133.1	124.5	131.0	128.2	115.4	102.2	107.6	102.3	109.3
Total property cost index	69.0	59.7	59.1	52.1	43.9	49.6	49.7	46.7	50.4	56.8	61.2	68.1
Total cost index	90.2	92.1	97.6	95.1	87.3	91.2	96.5	90.6	85.8	86.5	89.5	94.2
Fremantle												
Total labour cost index	74.0	78.7	76.7	75.4	75.0	74.1	79.9	82.3	89.3	110.8	101.8	110.4
Total equipment cost index	73.0	67.0	101.5	64.2	65.5	58.7	61.6	71.3	86.5	84.2	82.4	146.1
Total property cost index	80.1	75.4	70.3	76.4	68.1	64.8	72.5	73.2	83.7	89.2	92.0	110.2
Total cost index	80.6	80.1	84.3	78.2	74.7	71.0	76.2	78.2	88.6	96.2	92.7	111.7

DP World Australia trends in nominal cost components (per TEU) index—continued

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
National												
Total labour cost index	75.4	78.9	81.2	82.6	80.6	81.8	85.7	82.4	78.7	87.7	88.0	88.2
Total equipment cost index	99.5	105.5	110.3	113.2	113.6	114.2	115.4	112.4	100.2	105.9	96.2	114.4
Total property cost index	76.8	70.1	67.3	64.6	62.4	64.1	66.1	67.9	75.4	79.1	81.6	86.5
Total cost* index	86.2	89.0	91.8	91.5	86.1	86.9	92.6	90.3	85.1	87.8	87.2	92.5

Base year is 1998–99 = 100. Index estimates for 1999–00, 2000–01 and 2001–02 are publicly available in ACCC Monitoring Report No. 14.

* Other costs are included in the total cost index but not shown as a separate cost category.

Table C.3: Flinders Adelaide Container Terminal trends in nominal cost components (per TEU) index, 2002-03 to 2013-14

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Adelaide												
Stevedoring cost index	88.5	86.3	86.5	84.6	75.7	69.9	72.9	90.9	97.5	91.7	101.7	89.3
Total labour cost index	85.5	80.5	79.3	79.2	68.6	62.9	67.8	72.4	74.8	83.6	95.3	94.0
Total equipment cost index	109.7	110.6	107.2	105.2	121.6	112.2	107.7	103.1	116.1	125.7	120.3	107.4
Total property cost index	17.2	18.8	28.1	22.0	22.5	26.0	33.3	119.6	134.4	22.7	46.0	28.3
National												
Stevedoring cost index	75.1	73.3	73.4	71.8	64.3	59.4	61.9	77.2	82.8	77.9	86.4	75.8
Total labour cost index	74.1	69.8	68.8	68.7	59.4	54.6	58.8	62.8	64.8	72.5	82.7	81.5
Total equipment cost index	85.7	86.5	83.8	82.2	95.1	87.7	84.2	80.6	90.7	98.2	94.0	83.9
Total property cost index	11.6	12.6	18.7	14.7	15.1	17.3	22.2	80.0	89.8	15.2	30.7	19.0
Total cost* index	76.2	71.2	73.9	72.4	65.4	61.2	63.7	67.2	72.0	74.8	85.3	79.5

Base year is 1998–99 = 100. Index estimates for 1999–00, 2000–01 and 2001–02 are publicly available in ACCC Monitoring Report No. 14.

National index for 1998–99, 1999–00 and 2000–01 recognises joint ownership arrangements of container terminal facilities at that time for Brisbane and Adelaide by CSX World Terminals. Operations at Brisbane were terminated in August 2001. * Other costs are included in the total cost index but not shown as a separate cost category.

D Characteristics of the stevedoring industry

D.1 Supply of stevedoring services

Container stevedoring services involves the lifting of containerised cargo on and off ships. Stevedoring companies provide other related services such as storage, maintenance and repositioning of containers. Stevedores also provide services that facilitate the movement of containers from the terminals to road and rail transport links. Arrangements between shipping companies and other port service providers (e.g. towage) can also often be arranged through the stevedore.

D.1.1 Structural arrangements

In Australia, stevedoring services are provided by specialist firms that own container-handling equipment (i.e. cranes and straddles). These stevedoring firms lease berthing and terminal space from the relevant port managers. Typically, these lease arrangements provide exclusive use of terminal and berthing space and are long term, ranging from 20 to 40 years. These long-term arrangements between stevedores and port managers may affect contestability in the industry.

Overseas, stevedoring services are provided under different types of arrangements, such as those with greater integration between the port management and stevedoring functions. For example, at some overseas ports, port managers not only own and manage the port precinct, but supply stevedoring services at the port.¹²⁷ At other ports, port managers own container handling equipment but subcontract the use of this equipment to third-party firms to supply stevedoring services.

D.1.2 Market participants

At the Port of Brisbane and Port Botany there are three providers of container stevedoring services: DP World Ltd,¹²⁸ Patrick¹²⁹ and a new entrant, Hutchison Ports Australia Pty Ltd (HPA).¹³⁰ HPA commenced operations in Brisbane in 2012–13 and in Sydney in 2013–14.

At the Port of Melbourne, there are currently two providers of container stevedoring services, DP World and Patrick. A third provider, Victorian International Container Terminal Ltd¹³¹, has been appointed to operate the new container terminal at Webb Dock. Work on phase one of the new terminal is expected to be completed in December 2016.

At the Port of Fremantle, DP World and Patrick are the two providers of container stevedoring services.

At the Port of Adelaide, there is one container stevedore, FACT (a subsidiary of Flinders Ports). Previously, DP World Adelaide supplied stevedoring services, under a joint venture arrangement between DP World and Flinders Ports. However, in July 2012, Flinders Ports acquired DP World's 60 per cent share of the business and became sole owner.

¹²⁷ In Australia, the Port of Adelaide is the only port at which the port manager has an ownership interest in the container stevedoring business – Adelaide Container Terminal Pty Ltd. This container stevedoring business is wholly owned by Flinders Ports – the port manager of the Port of Adelaide. Previously this business was owned under a joint venture between Flinders Ports and DP World Australia.

¹²⁸ In January 2011, Citi Infrastructure and DP World Australia entered into a strategic partnership in which Citi holds a 75 per cent interest in DP World's Australian container terminal operations.

¹²⁹ Patrick Terminals and Logistics is a division of Asciano Limited.

¹³⁰ HPA covers Brisbane Container Terminals Pty Ltd and Sydney International Container Terminals Pty Ltd. HPA is a member of the Hutchison Port Holdings Group.

¹³¹ VICTL is a consortium comprised of International Container Terminal Services Inc. and Anglo Ports Pty Ltd.

At the Port of Burnie, Patrick previously operated a terminal. However, in May 2011, this facility was decommissioned.

D.1.3 Size of the market

Total throughput at Australian ports in 2013–14 was about 6.9 million TEUs.¹³²

Melbourne is Australia's largest port, with container throughput of around 2.5 million TEUs in 2013–14. Sydney is Australia's second largest port, processing about 2.2 million TEUs in 2013–14. The third largest monitored port in 2013–14 was Brisbane (1.1 million TEUs), followed by Fremantle (around 700,000 TEUs) and then Adelaide (around 380,000 TEUs).

D.1.4 Capacity in stevedoring

In recent years there has been a focus on increasing the capacity of ports and container terminals to cope with expected growth in containerised trade.

Managing stevedoring capacity is the responsibility of both stevedores and port managers. Capacity is determined by a number of factors, which vary in terms of the ease with which they can be manipulated to increase capacity at a port. These factors include:

- quay length
- berth utilisation
- total number and size of cranes
- size and use of the container storage (yard) space
- size and skill of the labour force
- application of new technologies relating to the use of terminal space.

It is important that the above factors are managed and utilised efficiently to ensure that capacity at a port is sufficient to meet demand.

Quay length is likely to be the most significant factor because it provides an absolute constraint on the number of ships that can berth at any one time. While quay length is fixed in the short term and acts as a physical restraint on capacity, port managers control the quay length available and allocated to the stevedores as part of their overall land management responsibilities.

The utilisation rate of shipping berths is likely to be influenced by several factors. These may include the arrival pattern of ships, whether they are part of a regular service or arrive at random, and the regularity with which ships arrive within or outside of their allocated windows. The time stevedores spend servicing the ship at the berth may also influence berth utilisation rates.

Stevedores have direct control over the number, size and type of equipment used in the provision of stevedoring services. The number of cranes is fixed in the short term and therefore sets a ceiling on the level of throughput in any given period of time. Whether this ceiling is reached is determined by the productivity of the cranes.

While port managers determine the size of yard space allocated to the stevedores, the stevedores are responsible for managing the efficiency of this yard space. The amount of yard space available for container storage has been limited by continued growth of other port

¹³² BITRE, *Waterline*, forthcoming publication no. 55.

activities and encroachment of surrounding residential areas in metropolitan ports like Melbourne and Sydney. Consequently, some container storage facilities have been moved away from the immediate port area to locations in close proximity. It has also forced stevedores to consider the ways in which they manage their yard capacity, including the layout of the yard, the container dwell time and optimal stacking heights.

Finally, stevedores have control over the size and skills of the labour force as well as the degree to which new technologies are employed at their terminals.

Because of the unpredictable nature of shipping services, infrastructure to provide stevedoring services must be sufficiently large and flexible to process irregular and fluctuating levels of throughput. As volumes increase, periods of peak activity become more frequent and intense. It is likely that in an efficiently configured stevedoring operation there will be some surplus capacity, in terms of both quay crane capacity and yard capacity.

D.1.5 Expansion of ancillary services

The role of stevedoring in the overall transport logistics chain appears to be changing as stevedores are increasingly expanding their operations in related services. There seem to be two main areas where change is manifesting. One is in services that are ancillary to the stevedoring function. These are services that facilitate a more effective interface with land transport by allowing shippers to move containers more quickly and efficiently from the wharf into their preferred land transport link. Examples of these ancillary services are short stay container storage and interface with the Australian Customs and Border Protection Service on container examination activities. The other is coordination of stevedoring with road and rail transport to create a more seamless freight logistics chain. A good example of this is the stevedores' membership in the Port Botany Rail Team which meets every month and is designed to enhance rail operational performance, transport supply chain visibility and more effective rail interface with the container terminals.

Stevedores have exclusive access to container terminals and therefore earn revenue from, and have arrangements with, road and rail transport operators for access to the port. These arrangements are facilitated by vehicle booking systems and rail 'windows' (i.e. timeslots during which the train is able to exchange cargo at the port) in an effort to reduce landside bottlenecks.

Unlike in the provision of quayside services, stevedores do not have contractual obligations with trucking operators. This may affect the incentive of the stevedores to allocate resources to process trucking movements through their terminals.

D.1.6 Barriers to entry and exit

Entry and exit costs are important determinants of the degree of contestability in an industry. The higher the entry and exit costs, the lower the potential for new entrants to constrain the behaviour of incumbents. If entry and exit barriers are low, the ability of incumbents, or even an existing monopolist, to charge high prices and earn above normal profits is limited.

In 1998 the Productivity Commission considered evidence suggesting that the cost of establishing a presence in the stevedoring industry may not represent a significant obstacle to entry.¹³³ However, other features of the industry may make entry difficult.

The ACCC has not formed a view about the height of barriers to entry in the container stevedoring industry. However, there are features of the industry that may form barriers to entry in certain circumstances – for example, the presence of economies of scale and the exclusive and long-term nature of lease arrangements between stevedores and port managers. However, the entry of HPA at the Port of Brisbane and Port Botany suggests that such barriers can be overcome under certain circumstances – for example, where leases to operate terminals are made available for lease by ports and state governments. Furthermore, with new entry at the

¹³³ The Productivity Commission, *Work arrangements in container stevedoring*, 1998, p.140.

Port of Melbourne, it appears that the stevedoring industry in Australia is increasingly contestable.

D.2 Demand for stevedoring services

The users of stevedoring services are most commonly foreign shipping lines. Some shipping lines that service Australian ports are part of consortia arrangements in which several lines participate to share space on vessels.

The demand for stevedoring services is a derived demand. The absolute size of the market is determined by the volume of shipping transport, which in turn is strongly influenced by general economic activity and competition from other forms of transport such as air, road and rail. Stevedores are not able to significantly influence the overall size of the shipping transport market.

The total amount of demand for stevedoring services is also influenced by the trading route decisions of shipping lines, in particular whether they will call into a certain port. Some locations may not be suitably situated for shipping lines—for example, a location may constitute too much of a diversion from the shipping line's trade route, a direct shipping route may not be available to that location or the sea channel may not allow the passage of a particular size of vessel.

While it appears that shipping lines regularly change shipping routes and regularity of cargo services, the largest Australian ports are not generally considered substitutable. However, shipping lines do consider a number of other factors when determining whether to call into a port. These include their customers' demands and charges incurred by the shipping line to reach that port (e.g. fuel costs).

D.2.1 20- and 40-foot containers

The ACCC has been collecting product differentiated data since 2001–02. The data indicates that the use of 40-foot containers has increased at a faster rate than 20-foot containers. The data also suggests that stevedores charge less for 40-foot containers on a per TEU basis than for 20-foot containers. This could be one of the reasons why shippers (importers/exporters) are increasing their relative demand for 40-foot containers.

The impact of 40-foot containers on the stevedores' average costs is not clear. While the costs of lifting 20- and 40-foot containers may be reasonably similar, the ACCC understands from market inquiries that there may be higher costs involved in storing and re-positioning 40-foot containers. According to one stevedore, the difference in cost can be enough to justify differential pricing when 40-foot containers constitute a substantial proportion of a customer's business.

D.2.2 Potential countervailing power: threat of moving business elsewhere

An important determinant of competition between incumbent stevedores is the extent to which their customers are able to exercise countervailing power.

Some Australian ports may be used by a small number of liner groupings. Each can represent a substantial proportion of throughput at a given port. This means that the loss of a particular line's business can potentially have significant financial consequences for a stevedore. It might therefore be argued that by threatening to shift their business, shipping lines have the ability to exert countervailing power against stevedores.

The extent to which shipping lines can switch stevedores and exert countervailing power may be restricted by contractual obligations with their current provider of stevedoring services. The ACCC understands that this countervailing power may also be constrained in the short term because the stevedores have limited capacity to service significantly higher levels of business

(especially during periods of peak demand). While most terminals currently appear to have some spare capacity, it may not be sufficient to service a substantially larger proportion of the market. Furthermore, where a shipping line seeks a national contract, capacity constraints at only one terminal may effectively preclude that line being accommodated. That said, there are now more opportunities for shipping lines with a third stevedore operating in Brisbane and Sydney.

Inter-port competition may be limited in Australia due to the large distances between major ports. A shipping line's ability to switch to a stevedore in a different port will be influenced by any additional costs of steaming between ports as well as the land transport costs of moving the cargo to its ultimate destination. These costs may reduce the scope for shipping lines to switch easily to different ports, and so reduce their potential countervailing power.

D.2.3 Sensitivity to prices and quality of service

The extent of demand sensitivity to prices and service levels can have an important bearing on the competitive discipline faced by firms. Generally, the more sensitive consumers are to prices, the greater is a firm's potential loss of revenue in response to a price rise. Firms that face a relatively price sensitive demand are likely to have less discretion in setting prices.

The evidence on price sensitivity in the stevedoring industry is mixed. The ACCC is aware that shipping lines switch stevedores from time to time. One recent and notable example is "K" Line switching from DP World to Patrick in early 2014.¹³⁴ Asciano's announcement in July 2011 that it had signed an agreement with Maersk to use Patrick as its sole service provider is another example.

On the other hand, it may be that shipping lines may be more sensitive to quality of service than to cost. Shipping lines are particularly sensitive to the cost of waiting idly at a port or adjusting port visit times. A stevedore's ability to provide efficient and reliable services within specified time windows, minimising waiting costs, is important in facilitating faster transit times for shipping lines.

D.3 Regulation of ports and port services

The approach taken by state governments to regulating ports and port services varies across states. Generally speaking, the states and territories control the port precincts, adjacent land uses and in most cases the connecting transport systems. They can own and finance port related lands and assets, and have environmental and safety regulatory responsibilities. There has been a recent trend towards state governments privatising their port interests (e.g. Adelaide, Brisbane and Sydney) and the ACCC notes the Victorian Government's intention to offer a medium-term lease of the Port of Melbourne.¹³⁵

Local government may also make decisions affecting ports, including on matters such as land development and road uses.

The Australian Government has key port related functions including navigation, defence, security, environment, border control and competition policy. It owns infrastructure assets, including certain railways and roads, as well as lands suitable for freight activities. The Australian Government has interests in national economic performance, international trade and interstate trade and commerce.

Some issues regarding the economic regulation of ports were covered in the Competition and Infrastructure Reform Agreement (CIRA) reviews conducted in 2007–08. These reviews examined the organisational structure of functions at port precincts, and the economic

¹³⁴ "K" Line Australia Pty. Ltd. 2014, 'Important Notice to "K" Line Container Trade Customers To / From Fremantle', 1 January 2014.

¹³⁵ State Government of Victoria, Media Release, 'Coalition Government confirms plans to lease the Port of Melbourne', 5 May 2014.

regulation that applies to the organisations undertaking these functions. The CIRA reviews were conducted on behalf of the states which owned the port managers. The reviews generally found existing arrangements to be satisfactory from a competition policy perspective.

E ACCC monitoring methodology

E.1 Introduction

This appendix provides a detailed explanation of the ACCC's monitoring methodology. In particular, it outlines the ACCC's approach to assessing the profitability of container stevedoring terminal operations in Australia.

E.2 Background to the ACCC's monitoring role

E.2.1 Legislative background

On 20 January 1999 the (then) federal Treasurer directed the ACCC under s. 27A of the *Prices Surveillance Act 1983* (PSA) to monitor prices, costs and profits of container terminal operator companies at the ports of Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney.¹³⁶ A copy of the ministerial instrument is in appendix F. The PSA has since been repealed; with the prices surveillance provisions 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. Prior to this, the Prices Surveillance Authority had monitored stevedoring prices and costs from March 1991 to November 1995. Relevant sections of Part VIIA are reproduced in appendix G.

In performing its monitoring function, the ACCC must, under subsection 95G(7) of the CCA, 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.

E.2.2 Reasons for ACCC monitoring

The ACCC's monitoring program provides information to the government and wider community about the development of Australia's container stevedoring industry; in particular, the operating performance of, and investment in, container stevedoring terminals, and degree of competition at the monitored ports. The monitoring program also highlights issues affecting road and rail connections to container terminals.

The ACCC's monitoring program began following the (then) Australian Government's decision in 1998 to support reform of the Australian waterfront.

As part of the reform strategy, the government provided funds to ensure that all stevedoring employees made redundant as part of the reform process received full redundancy entitlements. A levy on the loading and unloading of cargo was applied in order for the stevedores to repay the funds. The levy ceased at the end of May 2006 with the repayment of the government funding.

¹³⁶ Between 2011-12 and 2013-14, the ACCC's monitoring program recorded no container stevedoring activity in Burnie because the sole stevedores at the port, Patrick, advised the ACCC that it had closed its operations in May 2011.

E.3 Description of methodology

E.3.1 Monitoring data

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. In undertaking this role, the ACCC does not collect data on actual prices charged for stevedoring services as these are negotiated privately between stevedores and users. Instead, unit revenues are used as indicators of average stevedoring charges.

Individual company data have been aggregated to obtain national average revenue, costs and margins, expressed on a per unit basis. Units are expressed in terms of the size of the container boxes. There are typically two container sizes, 20-foot (one 20-foot equivalent unit (TEU)) and 40-foot (two TEUs).¹³⁷ Stevedoring charges are normally calculated per lift and are not generally differentiated in terms of container size. As such, the per TEU rate will typically be lower for 40-foot containers than for 20-foot containers. This means that the expected mix of 20-foot and 40-foot containers can be a significant factor for stevedoring companies when they are determining the actual per lift stevedoring rate to charge a shipping line. A trend towards 40-foot containers may contribute to a lowering of broad measures of average stevedoring revenue expressed per TEU.

The ACCC receives data on revenue and costs, for total terminal activities and separated for the container stevedoring function only. Stevedoring revenue is defined as the revenue attributable to the loading and unloading of cargo. It includes any rebates offered by the container stevedores to shipping lines, as well as any penalties for non-performance imposed by the liner company on the stevedore. Most of the revenue generated by container terminals comes from stevedoring services. However, terminals may also conduct some break-bulk work (e.g. non-containerised cargo such as bags, crates, barrels) and provide other ancillary services related to the lifting of containers, such as storing and maintaining containers.

The former Prices Surveillance Authority (PSA) conducted the initial monitoring function (1991 to 1995) using total revenue and cost data (including break-bulk revenue and costs) to derive national average revenue and cost indicators. To establish long-term trends, this report presents the results of the ACCC's recent monitoring program, as well as the PSA's monitoring program and data from its earlier public inquiry.¹³⁸

The ACCC has derived its data on average revenue and costs from the total revenue and expenses of the major container terminals in Australia, in a similar way to those in the PSA's reports.

E.3.2 Coverage of monitoring data

The container terminals included in the monitoring program are in Adelaide, Brisbane, Burnie, Fremantle, Melbourne and Sydney.

These terminals are:

- DP World and Patrick, Swanson Dock, Melbourne
- DP World, Patrick and HPA, Fisherman Islands, Brisbane
- DP World, Patrick and HPA, Port Botany, Sydney

¹³⁷ The ACCC is provided with information to enable separate calculations of revenue per TEU on both 20-foot and 40-foot containers.

¹³⁸ In 1990, the Prices Surveillance Authority conducted a public inquiry into charges by the stevedoring and container depot industries.

- DP World and Patrick, Fremantle
- FACT,¹³⁹ Adelaide.

Patrick closed its stevedoring operations at the Port of Burnie in May 2011 and recorded no volumes for this port in 2011–12, 2012–13 and 2013–14.

Some terminals are not included in the data and analysis because a substantial proportion of their revenue was/is from non-container cargoes:

- Patrick's previous terminal at Darling Harbour in Sydney and terminal at Webb Dock in Melbourne
- DP World's previous terminal at White Bay in Sydney.

In addition to using quantitative data provided by the stevedores, the ACCC sought other information through informal contacts with stevedoring companies. Where relevant, this information has been taken into account when assessing the results of the monitoring program.

E.4 Measures of industry profitability

Different measures of industry profitability are appropriate depending on the perspective from which performance is assessed. Where performance is assessed from a perspective of returns on assets employed in producing a good or service, rates of return on operating (or tangible) assets are relevant. Alternatively, rates of return measures including both operating and non-operating (e.g. intangible) assets are more appropriate where performance is assessed from the perspective of the opportunity cost of capital invested in a business.

As noted in section 3.5, the ACCC considers that the most appropriate measure of industry profitability is the EBITA on the average value (of opening and closing balances) of tangible assets.

E.4.1 Treatment of intangible assets

The ACCC excludes intangibles (which, for stevedoring, include mostly goodwill and berth licensing agreements) from the industry's asset base when assessing operating performance. Although the recognition of intangible assets is permissible under the Australian equivalent of the International Financial Reporting Standards (AIFRS), it does not necessarily follow that this is appropriate for monitoring purposes. This is because of concerns that such intangibles may reflect an expectation at the time of purchase or acquisition of assets for a business to earn economic rents, which may obscure changes in the profitability of providing services.

The ACCC's approach to exclude intangible assets will create a difference between the stevedore's statutory and regulatory reports. However, such divergences are not unusual where prices oversight of infrastructure services is involved and is consistent with the ACCC's approach in other industries (e.g. airport services).

E.4.2 Consistency in asset valuation over time

One limitation of this approach is that the return on assets is affected by changes in asset values arising from asset revaluations, transfers or sales. Some businesses use different asset valuation methods, depending on the type of assets. Reported asset values may vary significantly for a given business over time, which reduces comparability. This raises issues for monitoring purposes, where consistency in reporting over time assists with meaningful

¹³⁹ On 2 July 2012, Flinders Ports announced that it had acquired 60 per cent of the Adelaide Container Terminal business from DP World South Australia. Three years prior, Flinders Ports had acquired a 40 per cent stake in the business.

analysis. The ACCC has not attempted to evaluate the appropriateness of stevedores' asset valuations, which would be necessary if prices were regulated. However, it does require, for monitoring purposes, stevedores to report asset values on a consistent basis over time so that the ACCC can assess trends in the profitability of operating the stevedoring terminals.

For monitoring periods up to 2006–07, the asset values supplied by the Australian stevedores to the ACCC were valued on a consistent basis—on a depreciated historical cost basis. The ACCC has previously used this asset information to approximate changes in the value of the industry's asset base with investments in container terminals over that time. It represents an effective, relatively low-cost tool to examine changes in operating profitability.

However, as reported in the ACCC's 2007 monitoring report, data supplied by Patrick to the ACCC's 2006–07 monitoring program showed an abnormally large increase in reported asset values between 30 June 2006 and 30 June 2007. Additional information obtained by the ACCC at that time indicated that the higher closing balance asset values were affected by the accounting treatment of the acquisition of Patrick by Toll in 2006 and the subsequent purchase of the Patrick business by Asciano Ltd from Toll prior to 30 June 2007. The increase in the asset values reported by Patrick to the ACCC between 30 June 2006 and 30 June 2007 reflected the allocation of the purchase price of Patrick across the company's asset base, including for identifiable intangible assets (primarily goodwill).

According to Asciano's published financial statements for the period ending 30 June 2014, the carrying amount of goodwill allocated to Patrick's container ports was \$1.5 billion, which represented 60 per cent of the total value of Patrick's assets for the Terminals and Logistics division. While this accords with relevant accounting standards, it represents a material change to the basis on which the Patrick assets were previously valued (i.e. prior to 2006–07). This is significantly above the proportion of goodwill for companies on the S&P/ASX 200 Industrials Index (15 per cent of total assets in 2013–14).

Therefore it was necessary for the ACCC to adjust the opening balance of assets employed by Patrick as at 1 July 2006 to exclude the effect of the acquisition by Toll. The result of this adjustment is that Patrick's asset base remained valued on a basis consistent with previous years for the ACCC's monitoring purposes.

In 2006–07, it was not necessary for the ACCC to adjust the value of assets employed by DP World following its acquisition of P&O Ports in 2006. This is because these assets continued to be valued on a basis consistent with previous years. In effect, the goodwill associated with the P&O acquisition was not allocated to the assets employed data previously supplied to the ACCC.

In March 2011, Citi Infrastructure Investors acquired a 75 per cent interest in DP World Australia (the remaining 25 per cent continues to be held by DP World). The ACCC understands that the purchase price paid by Citi Infrastructure recognises the value of intangible assets comprising goodwill and long-term berth licenses. The ACCC understands that such licenses were not previously recognised as assets prior to changes in corporate ownership. For consistency with the approach taken with Patrick, the ACCC requires asset values to be reported on a consistent basis over time and considers that asset valuations that arise from changes in corporate ownership that potentially recognise capitalisation of future economic rents should be excluded.

While asset revaluations are permitted under international accounting standards, for the purposes of the ACCC's monitoring program, it was necessary for the ACCC to continue to exclude the effect of any upward revaluations made in 2013–14. The asset information provided by the stevedores for the period ending 30 June 2014 reflected the opening value of tangible assets as at 30 June 2013, plus additions to assets, less depreciation expenses and disposal of assets and write-downs of tangible assets that occurred in the 12 months to 30 June 2014.

E.4.3 Comparisons of Australian stevedoring with the S&P/ASX200 Industrials Index

One way of assessing whether the rates of return in Australian stevedoring are consistent with those expected in a competitive industry is to compare them to an appropriate benchmark.

The ACCC used the S&P/ASX 200 Industrials Index to compare the profitability of the stevedoring industry with other infrastructure businesses (refer section 3.5).

The S&P/ASX 200 Industrials Index represents a subset of publicly listed companies in Australia's industrial sector, including infrastructure and transport companies. The S&P/ASX 200 Industrials Index is published by the ASX and the ACCC sources company information through Bloomberg.

The S&P/ASX 200 Industrials Index includes companies whose businesses are dominated by one of the following activities: the manufacture and distribution of capital goods, including aerospace & defence, construction, engineering & building products, electrical equipment and industrial machinery; or the provision of commercial services and supplies, including printing, employment, environmental and office services; or the provision of transportation services, including airlines, couriers, marine, road & rail and transportation infrastructure.

For the period ending 30 June 2014, there were 30 S&P/ASX 200 companies listed in the Industrials Index. Among the companies included were:

- Asciano Ltd
- Aurizon Holdings Ltd
- Brambles Ltd
- Mermaid Marine Australia Ltd
- Qantas Airways Ltd
- Qube Holdings Ltd
- Sydney Airport
- Transurban Group
- Toll Holdings Ltd
- Transpacific Industries Group Ltd
- Transfield Services Ltd

The ACCC considers this index provides a better comparator than the top 200 companies listed on the ASX (which the ACCC has included as a broad comparator in previous monitoring reports). It should be noted, however, that although the S&P/ASX 200 Industrials Index separately reports the value of tangible assets and total assets (which removes the value of intangible assets from each company's asset base), the index does not disclose data on asset revaluations of the individual companies in the index.

The results of the ACCC's benchmark analysis should be used as a broad comparator when assessing the level of returns in Australian stevedoring.

F 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

January 1999

Federal Register of Legislative Instruments F2008B00402

G 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.

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Callers who are deaf or have a hearing or speech impairment can contact the ACCC through the National Relay Service, www.relayservice.com.au

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