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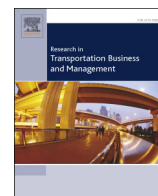


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# The latest trend in Australian port privatisation: Drivers, processes and impacts

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## ABSTRACT

This paper presents the latest trend in Australian port privatisation, long-term leasehold sale, and discusses its impact on port governance structure and port management. Since 2010, Australia has been exercising port privatisation at major capital city ports, driven by the government's policy of recycling capital for funding other infrastructure projects and the budgetary goal of reducing State Governments' debts. Except for land, the State Government transfers major port assets and the port corporation to a state-owned holding company and then sells it to a private winning bidder. Of notice is that the privatisation involves private equity ownership and foreign ownership of Australian ports. Consequently, the governance structure at the privatised ports is a private/public model, with the private port company being the port authority and landlord managing the port. The regulatory function following the privatisation is the public sector's responsibility while operator functions are undertaken by stevedores. Although the Australian port privatisation has positive effects on State Governments' balance sheets in the short term, it may result in a risk of undervaluing port assets, increased port charges, impeded port competition, less port investment, and less concern for the public interest in the long term. In terms of these findings, this paper provides some thoughts for further port privatisation in Australia.

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## 1. Introduction

In past decades, governments in many countries have embarked on port privatisation to pursue different goals. The underlying principle driving port privatisation is that any entity providing port services should operate in a commercial environment under market mechanisms. Full port privatisation refers to the transfer of ownership of assets from the public to the private sector or the application of private capital to fund investments in port facilities, equipment and systems. But in reality this has not been totally adopted. National port authorities have often attempted to devolve selected port services to the private sector by means of leasing facilities, licensing operations and granting concessions (De Monie, 1996; UNCTAD, 1998), a partial adoption of port privatisation.

The UK port privatisation experience during the 1980–1990s demonstrates full port privatisation through the sale of port assets including property rights; most other countries implement a degree of port privatisation through liberalisation, commercialisation, corporatisation, concessions (including lease and Build-Operate-Transfer, (BOT)), joint

ventures and contracting out. The UK experience is not common; additionally, no other UK ports have been sold since 1997, despite a voluntary privatisation application made by the Port of Dover in 2012, which the UK Secretary of State for Transport rejected (Verhoeven, 2014). In contrast, Australian ports have been actively exercising port privatisation since 2010. However, the model adopted in Australia is selling long-term leaseholds over the port assets to the private sector, usually for 99 years; this is effectively an alternative approach to full privatisation. This paper presents recent privatisation in 5 major Australian ports including Port of Brisbane, Port Botany, Port Kembla, Port of Newcastle and Port of Darwin, and discusses its implications for port management and policy.

This paper is structured as follows. The next section explains the evolution of port governance in Australia, followed by the drivers for Australian port privatisation during 2010–2016. Following this background introduction to port governance and privatisation in Australia, Section 4 states the methodology used to derive details of individual port privatisations and subsequent thematic analyses to ascertain impacts and implications of port privatisation. The privatisation process of the individual privatised ports is explained in Section 5, followed by Section 6 which considers its key features. Section 7 analyses the change in the port governance model and management functions from the conceptual perspective. Section 8 discusses the impact of privatisation, and

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Section 9 addresses the implications for future privatisation. Section 10 provides concluding remarks.

## 2. Evolution of port governance in Australia

Australia has three levels of government, Federal, State and local, which impact on port reform processes. Historically, the majority of Australian ports are owned by State Governments; however, there are a few that are privately owned, often bulk ports. Generally, public port authorities are accountable for managing port assets while the private sector mainly operates cargo handling and other business activities within ports. Australian ports have experienced different approaches of institutional reform since the 1980s, including commercialisation and corporatisation (Chen, 2009). Commercialisation allows the public port authority to apply private sector commercial management practices with a high degree of autonomy (World Bank, 2007). Corporatisation involves the transformation of the public port authority to an independent, but government-owned, entity under the Corporation Act, or similar statutory state legislation.

In the 1990s, the government promoted a commercialisation policy to improve the efficiency of port authorities, therefore the continuing reform of corporate structure and ownership of Australian ports has been undertaken since then (Chen & Everett, 2014). In general, the corporatisation model has been widely adopted by State Governments for restructuring port authorities. Everett (2009) identifies two types of corporatisation models that exist in Australian ports. One is the Government-Owned Company (GOC) registered to the Australian Securities and Investment Commission (ASIC), where the State Minister represents the ownership of the port and remains liable to the Corporation Act, thereby being accountable to ASIC. The other is the Statutory State-Owned Corporation (SSOC), the preferred option in most states, subject to the organisation's specific statute with the State Minister

holding the supreme authority and remaining accountable to the State Parliament.

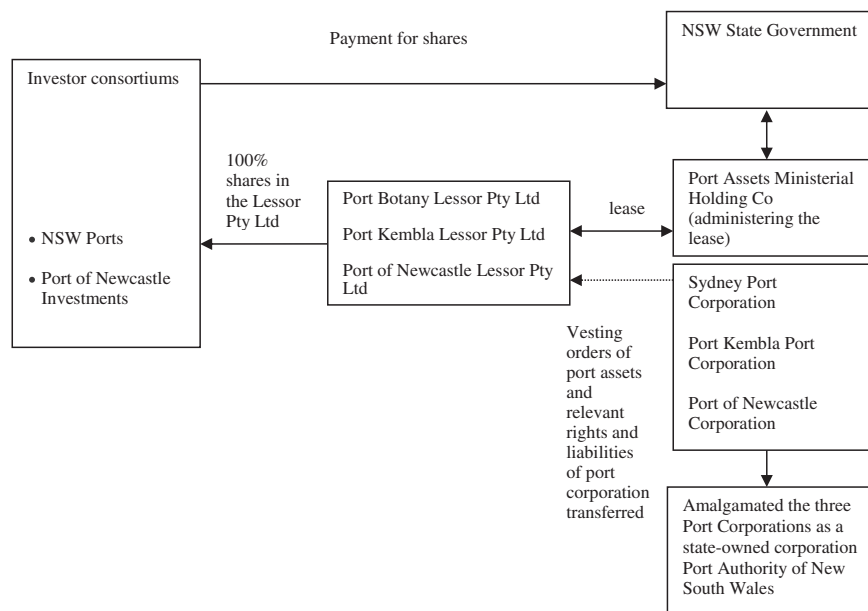
It is noticeable that the major port corporatisation in each state was undertaken through an individual port authority or the amalgamation of several port authorities, such as South Australian ports and Tasmanian ports. In 2014, the Government of Western Australia consolidated eight WA port authorities into five to ensure better safety, planning, port development coordination, economies of scale and resourcing for smaller regional ports. The consolidation may be a pre-cursor to the corporatisation of the port group, following the examples of South Australia and Tasmania. The location of the majority of Australian ports is shown in Fig. 1.

In Australian corporatisation models, government control remains with most commercial activities given to the private sector. In both corporatisation models, sometimes government or political influences and interests may not match with commercial objectives. In some Australian states, port corporatisation is a precursor to privatisation, which was not the case in the past. Those states that have adopted an SSOC model when first corporatising their ports have subsequently introduced further reform, enacting ports as GOCs for privatisation (Chen & Everett, 2014). For example, the Port of Brisbane has followed these stages.

Port privatisation is not new in Australia, for example the Port of Portland and Geelong Port were respectively privatised in 1995 and 1996. In November 2001, the South Australian Port Corporation managing the Port of Adelaide and another six regional ports of Port Lincoln, Port Pirie, Port Giles, Klein Port, Thevenard and Wallaroo was acquired by the private company Flinders Ports Pty Ltd with a 99-year land lease and an operating licence. However, in recent years there has been increasing privatisation of ports in Australia through the sale of long term leases over port land and associated assets by State Governments (Australian Competition & Consumer Commission, ACCC, 2014). The latest trend of port privatisation started at the Port of



Fig. 1. Australian ports.  
Source: adapted from Ports Australia website.



**Fig. 2.** The privatisation transaction structure of Port Botany, Port Kembla and the Port of Newcastle.  
Source: Drawn by authors.

Brisbane in November 2010 with a 99-year lease. The trend has continued and spread into significant Australian State and Territories capital city ports. Recently Port Botany, Port Kembla, the Port of Newcastle and the Port of Darwin were privatised with a 98 or 99-year lease; the Port of Melbourne, Australia's largest container port, is in the transition process of privatisation after it was successfully leased to QIC led consortium for 50 years on 16 September 2016; and the Western Australian Government has recently announced that Fremantle port will be privatised, but the privatisation process is currently on hold due to opposition from The Nationals, a key political party.

Infrastructure Australia, formed in 2008, provides advice on prioritising and progressing nationally significant infrastructure. It recommends further ports for privatisation including the Ports of Townsville and Gladstone in Queensland, and Port Hedland in Western Australia (Infrastructure Australia, 2013). Such recommendations add further impetus to the emerging privatisation trend. The continuation of port reform through privatisation has further devolved the port governance structure in Australia.

### 3. Drivers for recent privatisation

Different to the driver for Australian port reform in the 1990s, which aimed at improving efficiency and effectiveness, the recent privatisation of Australian ports is mainly driven by each State Government's budgetary goal of reducing debts to assure high debt ratings, and the Federal Government's policy of recycling assets intended to raise funds for other much needed infrastructure investments.

In recent years Australia has a growing infrastructure deficit (Infrastructure Australia, 2013). Given the governments' budgetary constraints, there is limited capacity to fund new infrastructure. Therefore, the Federal Government encouraged State Governments to consider transferring existing publicly owned infrastructure to the private sector and use the net proceeds to fund the development of the new infrastructure. Infrastructure Australia (2013) suggests that this policy can benefit economic productivity as the State Governments are able to fund the expansion of infrastructure as required, provide greater transparency in the costs of community service obligations as the government's role as the owner and regulator is removed (Infrastructure Australia, 2013). As a result, the Australian Federal Government's policy 'Asset Recycling Initiative', commencing in mid-

2014, has further boosted the privatisation of ports. The core tenet of this policy is the Federal Government offers a financial incentive to privatise mature state-owned assets and reinvest the proceeds into new, enhanced productive infrastructure to grow the economy. The incentive is that the Federal Government pays an additional 15% of the sale proceeds to State Governments that undertake privatisation (Parliament of Australia, 2015). By doing so, state budget deficits can be improved.

In addition, the Australian Government is seeking further growth in private investment in public sector infrastructure projects to meet increased demand for infrastructure over the next decade (Australia Trade Commission, 2015). Australian governments have had experiences of embracing public-private partnerships (PPPs) and recognised the benefits of private sector participation such as innovation, operational efficiencies and alleviating pressure on public finances. Therefore, growing PPP in investing and managing Australia's infrastructure is another motive for port privatisation. Before presenting the detail on port privatisation in Australia, the next section outlines the research methodology followed.

### 4. Methodology

The research methodology uses both case study analysis and content analysis of secondary data to best explain processes of port privatisation in Australia, analyse its key features and discuss implications and inferences for future privatisations. The paper focuses on the 5 ports that have been privatised since 2010, namely the Port of Brisbane in Queensland, Port Botany, Port Kembla and the Port of Newcastle in NSW, and the Port of Darwin in the Northern Territory. Firstly, a case study approach is used to explain each port's privatisation experience including its governance structure prior to privatisation, the objective of privatisation and the transaction process (Yin, 2014). The authors reviewed academic papers on the evolution of Australian port governance structure, privatisation bills, government reports and privatised ports' websites to compose the cases. The information on each case port facilitates the analysis of key features of Australian port privatisation and the evolution of port governance model, which are presented in Sections 6 and 7.

Subsequently, this study employs content analysis on secondary data to evaluate the impact of Australian port privatisation. Content analysis 'measures the semantic content and follows a systematic

**Table 1**

Private equity ownership of Australian privatised ports.  
Source: Authors.

Port	State and territory	Port company	Private equity owners
Port of Brisbane	Queensland	PBPL	<ul style="list-style-type: none"> <li>• QIC Limited</li> <li>• IFM Investors</li> <li>• Caisse de dépôt et placement du Québec</li> <li>• Tawreed Investments (Abu Dhabi Investment Authority)</li> </ul>
Port Botany and Port Kembla	New South Wales	NSW Ports	<ul style="list-style-type: none"> <li>• IFM Investors</li> <li>• AustralianSuper</li> <li>• Cbus</li> <li>• HESTA</li> <li>• HOSTPLUS</li> <li>• Tawreed Investments (Abu Dhabi Investment Authority)</li> </ul>
Port of Newcastle	New South Wales	Port of Newcastle Investments	<ul style="list-style-type: none"> <li>• Hastings Fund Management Group</li> <li>• China Merchants Group</li> </ul>
Port of Melbourne	Victoria	The acquirer, Lonsdale Consortium, was announced on 19 September 2016; transfer will take place on October 31, 2016	<ul style="list-style-type: none"> <li>• Future Fund</li> <li>• QIC Limited</li> <li>• Global Infrastructure Partners (GIP)</li> <li>• OMERS Private Markets</li> </ul>

process for coding and drawing inferences from texts' (Cooper & Schindler 2014, p.385). The data reviewed and content-analysed include submissions to the Port of Darwin Select Committee, submissions to the Select Committee Inquiry into the proposed lease of the Port of Melbourne inquiry, and newspaper articles. The submissions to the Select Committees of the Port of Darwin and the Port of Melbourne mainly address relevant port stakeholders' potential concerns on the lease of the two ports: however, several key port users have disclosed impacts of existing privatised ports from practical views in their submissions. Contents related to the impacts or outcomes of privatisation, such as pricing, competition, investment, monopoly, regulation, in the privatised ports including Flinders Ports (South Australia), the Port of Brisbane, Port Botany, Port Kembla and the Port of Newcastle were inferred. Appendix 1 lists the sources of data used for this study.

The reviewed secondary data for impact of privatisation were then manually categorised into themes. The themes are the value of port assets, port charges, competition, long-term port investment, and public interests. Discussions on these themes are presented in Section 8.

## 5. Privatised ports

The privatisation process of Australian ports has been complex, with different State Governments and stakeholders involved. The following sections explain in detail Australian port privatisation experiences since 2010, including each port's pre-privatisation governance structure, relevant legislations and the transaction process.

### 5.1. Queensland: Port of Brisbane

The Port of Brisbane Authority, the legal entity that previously managed the port, was corporatised as the statutory Port of Brisbane Corporation (POBC) in 1994 under the *Government Owned Corporation Act 1993*. Further, from 1 July 2007 the port corporation changed from a statutory to a company GOC, named POBC Limited, registered with ASIC (Chen & Everett, 2014). In 2009, in order to fund the State's infrastructure programme, reduce State debt and encourage private sector provision of infrastructure, the Queensland government passed the *Infrastructure Investment (Asset Restructuring and Disposal) Bill 2009* to sell a number of government assets including POBC Limited.

The privatisation model of POBC is a sale of a 99-year lease over the Port of Brisbane to the private sector. The privatisation process commenced with the transfer of all port facilities, equipment and machinery including the dredging fleet, all employees of the Port of Brisbane

Corporation, and the operating rights associated with the Port of Brisbane to a new State Government owned operating company, the Port of Brisbane Pty Ltd (PBPL) (Port of Brisbane, 2016). The Queensland Government then granted a 99-year lease over the Port of Brisbane to PBPL for management. In November 2010, all PBPL's shares were sold at a price of A\$2.1 billion to Q Port Holdings (QPH), a consortium of the world's largest and most experienced infrastructure investors. Currently, the members of the consortium include QIC Limited which is a Queensland government owned institutional funds management organisation, Industry Funds Management (IFM), Caisse de dépôt et placement du Québec (CDPQ) and the Abu Dhabi Investment Authority (Port of Brisbane, 2016). The Port of Brisbane is the first Australian port managed by a private equity consortium.

### 5.2. New South Wales: Port Botany, Port Kembla and Port of Newcastle

Prior to 2013, most of the ports in New South Wales were State Government owned. The Port of Newcastle and Port Kembla are regional ports, whereas the Ports of Sydney (Sydney Harbour and Port Botany) are capital city ports. The Ports of Sydney, Port of Newcastle and Port Kembla were managed by Sydney Ports Corporation, Newcastle Port Corporation and Port Kembla Port Corporation respectively, under the *Ports and Maritime Administration Act 1995* (Everett, 2009). The port corporations leased terminals to private stevedores for cargo handling activities. Port Botany, the second largest Australian container port, was part of the Ports of Sydney.

In 2012, the NSW Government passed *Ports Assets (Authorised Transactions) Bill 2012* to authorise and facilitate the transfer of the State's ports assets at Port Botany, Port Kembla and the Port of Newcastle to the private sector, except port land or associated port land which can be under a long term lease. This privatisation initiative termed as 'recycling of infrastructure assets' was intended to increase public-

**Table 2**

Port function privatisation matrix.  
Source: Baird (1995a).

Port model	Port function		
	Regulator	Landowner	Utility
Public	Public	Public	Public
Public/private	Public	Public	Private
Private/public	Public	Private	Private
Private	Private	Private	Private



private partnerships and raise funds for essential freight logistics infrastructure to improve supply chain efficiency and maintain the NSW Government's AAA credit rating (NSW Government, 2014). Evidence suggests the approach has been successful, with projects such as the Sydney light rail PPP commencing and the continuing AAA rating for NSW (Moody's Investor Services, 2015; NSW Government The Treasury, 2016).

To start the privatisation, a corporation named Ports Assets Ministerial Holding Corporation (PAMHC) was established on 26 November 2012 by the *Ports Assets (Authorised Transactions) Bill 2012*. The PAMHC is a statutory body managed by the State's Treasury and represents the Crown to hold port assets transferred from the Government; it carries on any activities or business that relates to any ports assets held by it, and other functions for the purposes of an authorised transaction as may be prescribed by the regulations. Subsequently, three incorporated companies, Port Botany Lessor Pty Ltd, Port Kembla Lessor Pty Ltd and Port of Newcastle Lessor Pty Ltd were established as a subsidiary of Sydney Ports Corporation, Port Kembla Port Corporation and Newcastle Port Corporation respectively to facilitate the long term lease of land and affixed property, plant and equipment by each Port Corporation to an external party. A number of statutory vesting orders under the *Ports Assets (Authorised Transaction) Act 2012* were received from the Treasurer, transferring specific assets, rights and liabilities relating to the relevant assets at each port from the port corporation to the limited company. Finally, a long term finance lease was executed with an external acquirer and the relevant assets were derecognised by the limited company. Upfront proceeds received from the acquirer were paid directly to Restart NSW, the NSW Government's priority infrastructure fund. On the same date, each Port Corporation's interest in the equity of the limited company was transferred to the PAMHC, which administers the 99-year lease covering port related facilities at Port Botany, Enfield Intermodal Logistics Centre and Cooks River Empty Container Park (NSW Government, 2015).

As a result, in May 2013 Port Botany, of the Ports of Sydney, and Port Kembla were privatised to a consortium, NSW Ports, which paid A\$4.31 billion for Port Botany and A\$760 million for Port Kembla for a 99-year lease. NSW Ports is a consortium jointly owned by IFM Investors, Tawreed Investments, AustralianSuper, Cbus, HESTA and HOSTPLUS. The first two are global infrastructure investment managers; the remaining owners are related to Australian industry superannuation (NSW Ports, 2016). In May 2014 the Port of Newcastle was privatised with a 98-year lease to Port of Newcastle Investments, a consortium consisting of Gardior's The Infrastructure Fund (50%) and China Merchants Group (50%). Fig. 2 shows the transaction structure.

After privatising the three ports, the NSW Government reviewed the port governance of Sydney, Port Kembla and Newcastle Ports Corporations and amalgamated them into a state-owned corporation trading as Port Authority of New South Wales, which took effect on 1st July 2014. The authority is responsible for all commercial marine functions by providing harbour masters and pilotage for the ports of Newcastle, Sydney Harbour, Botany Bay, Port Kembla, Eden and Yamba. It also manages other business activities and related assets including overseeing Sydney's international cruise terminals at Circular Quay and White Bay; hosting the city's only dry bulk facilities, located on Glebe Island; and participating in the Hunter Valley Coal Chain Coordinator (Port Authority of New South Wales, 2015). The port authority has multiple roles; being responsible for the regulatory function at the three

privatised ports (see Section 6 below), performing regulatory and land-owner functions for Sydney Harbour, and Ports of Eden and Yamba.

### 5.3. Northern Territory: Port of Darwin

The Port of Darwin is an important gateway in the Northern Territory (NT). Prior to privatisation it was administered by the state-owned Darwin Port Corporation (DPC) under the provision of the *Darwin Port Corporation Act 2005*. Given the changing dynamics of the NT economy with the anticipation of the increase in naval vessel visits, growth in Darwin based oil and gas industries, and increase in the livestock trade, the Port of Darwin will require further investment in infrastructure and capacity to operate efficiently (Port of Darwin Select Committee, 2015). The NT Government therefore made a decision to privatise the Port of Darwin by involving the private sector in collaboration with the Government to invest and manage the Port. The major objectives of the privatisation are (Port of Darwin Select Committee, 2015):

- seeking a partnership with a private operator having a vision for the port's growth and development aligned with that of the NT Government;
- accessing to new private sector capital into the NT economy; and
- realising the value inherent in an NT Government asset to allow capital to be channelled into new productivity and growth enhancing infrastructure.

The privatisation is supported by a new regulatory framework including the *Port of Darwin Bill 2014* and *Ports Management Bill 2014*. The former Bill 'authorises and facilitates the transfer of certain assets, rights and liabilities relating to, or connected with, the Port of Darwin to a private sector, subject to the restriction that the land comprising ports assets may be leased to a private sector entity for a term of no longer than 99 years, but must remain in the ownership of the Northern Territory' (Port of Darwin Bill, 2014a,b-Explanatory Statement, p.1), and is designed to manage and mitigate risks inherent in the move from public to private operation. The *Ports Management Bill* amalgamating the relevant provisions of the *Darwin Port Corporation Act* and the *Marine Act* is to form a regulatory framework for the management and control of the Port of Darwin and other ports within the Northern Territory (Port of Darwin Select Committee, 2015).

The structure of the Port of Darwin privatisation transaction is similar to that used by other Australian privatised ports discussed earlier. Firstly, a special purpose corporate entity (transaction company) was established to receive port assets transferred from Darwin Port Corporation or any other public sector entity. The transfer includes a stipulation that any freehold title to Port of Darwin land remains with a public sector entity, and that any term of a lease or licence granted to a private sector entity does not exceed 99 years (Port of Darwin Bill, 2014a,b). Subsequently, the bidder purchased the shares of the entity to operate the Port within the defined operational and geographical parameters specified in the Ports Management Bill, the port lease, and other contractual transaction documents (The Northern Territory Government, 2015).

In October 2015, the Northern Territory Government sold a 99-year lease over the Port of Darwin, specifically East Arm Wharf and Fort Hill



Fig. 3. Devolution of port management model.  
Source: Drawn by authors.

**Table 3**

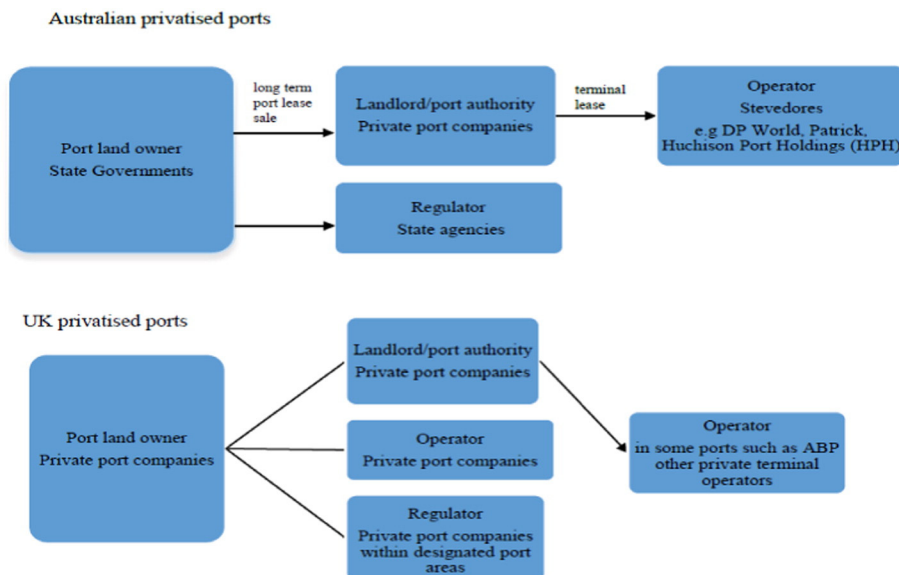
Port function matrix for Australian privatised ports.

Source: Authors.

Port (private/public model)	State or territory	Year of privatisation	Regulator		Landlord		Operator	
			Before	After	Before	After	Before	After
South Australian Ports (Port Adelaide, Port Lincoln, Port Pirie, Thevenard, Port Giles, Wallaroo and Klein Point)	South Australia	November 2001	Public SA State Government departments	Public SA State Government departments	Public South Australian Port Corporation	Private Flinders Ports	Private Stevedores and terminal operators	Private Stevedores and terminal operators including Flinders Ports Logistics
Port of Brisbane	Queensland	November 2010	Public Brisbane Port Corporation Queensland State Government departments	Public Queensland Department of Transport and Main Roads	Public Brisbane Port Corporation	Private Port of Brisbane Pty Ltd (PBPL)	Private Stevedores and terminal operators	Private Stevedores and terminal operators
Port Botany	New South Wales	May 2013	Public Sydney Ports Corporation NSW State Government departments	Public Port Authority of New South Wales	Public Sydney Port Corporation	Private NSW Ports	Private Stevedores and terminal operators	Private Stevedores and terminal operators
Port Kembla	New South Wales	May 2013	Public Port Kembla Port Corporation NSW State Government departments	Public Port Authority of New South Wales	Public Port Kembla Port Corporation	Private NSW Ports	Private Stevedores and terminal operators	Private Stevedores and terminal operators
Port of Newcastle	New South Wales	May 2014	Public Port of Newcastle Corporation NSW State Government departments	Public Port Authority of New South Wales	Public Newcastle Port Corporation	Private Port of Newcastle Investments	Private Stevedores and terminal operators	Private Stevedores and terminal operators
Darwin Port	Northern Territory	October 2015	Public Darwin Port Corporation NT State Government departments	Public/Private Public: Regional Harbourmaster Minister Independent Regulator: Northern Territory Utilities Commission (Access and pricing) Private: Darwin Port Operations Pty Ltd	Public Darwin Port Corporation	Private Darwin Port Operations Pty Ltd	Private Stevedores and terminal operators	Private Stevedores and terminal operators

Wharf, to a Chinese energy and infrastructure group, Landbridge Group, at a price of A\$506 million. On 16 November 2015, Darwin Port was established as the business name that represents Darwin Port

Operations Pty Ltd and Darwin Port Pilotage Pty Ltd (Darwin Port, 2016). Of interest is that the NT government still owns an initial 20% stake in the port, but Landbridge Group is able to seek Australian



**Fig. 4.** Port management models of privatised ports in Australia and the UK.  
Source: Drawn by authors.

companies interested in the port to acquire the 20% stake within the next two years (*The Sydney Morning Herald*, 2015).

## 6. Key features of the Australian port privatisation approach

There are three major features of the Australian port privatisation approach, namely long-term lease sale, private equity owners and foreign ownership. These are examined in more detail below.

### 6.1. Long-term lease sale

The port privatisation transaction structure in Australia provides a unique approach. Australian governments retain the port land title but grant a century long-term lease of port land and operation to the established state-owned transaction holding company, where other port assets and the liability and rights of port corporations are transferred, to be privatised through the sale of shares (see Fig. 2 above). It is a long-term leasehold sale, different from the full privatisation cases in the UK, in which the government relinquished the land property rights to the private sector.

The *World Bank* (2007) explains that a leasehold agreement, which might be considered a long-term rent contract, can be transferred or sold to another private party under the conditions stipulated by the port authority or government as it conveys a possessory interest, which is different to a rent contract. This concept underpins the Australian port privatisation approach considering that governments need to freehold port lands. On the other hand, it is also like a concession agreement, granting the private sector the right to “own” and “manage” port assets, including land, for 98–99 years. A normal port concession agreement focuses on new port development projects, such as BOT that has the public port authority/corporation remaining as the landlord managing the port; however, the Australian approach focuses on existing port land and mature port assets with the private port company managing the port as a landlord.

With the private port company's control over ports for 98–99 years, the long-term lease approach can be regarded as an “effective” privatisation; it allows private port companies to manage and control day-to-day port operations. Moreover, the shares of the private port company can be traded freely to other parties interested in the port business. For example, The Global Infrastructure Partner (GIP), one of the shareholders of Q Port Holdings, sold its 26.7% stake to a Canadian

pension fund manager CDPQ in 2013 (*The Sydney Morning Herald*, 2014).

### 6.2. Private equity owners

Different to the privatisation in the 1990s in which port operators were involved, recent privatisation attracts institutional investors looking at ports as assets to invest for return. This is evidenced by the involvement of sovereign fund and private equity funds (PEFs) in some of the privatised ports including the Port of Brisbane, Port Botany, Port Kembla, the Port of Newcastle, and Port of Melbourne. Table 1 shows the private equity (PE) owners of the port company at each port. The sources of PEFs are mainly from superannuation funds and infrastructure investment funds. This is a common occurrence for infrastructure investment globally because ports have become popular mature assets for those fund managers to seek high returns, for example in the UK, USA and Canada. Of interest is that there are PE owners with shares in multiple privatised ports, which may raise concerns on the market power of these consortiums over Australian ports. For example, the global investment manager IFM and the sovereign fund Tawreed Investments (Abu Dhabi Port Authority funds) have a 46% share in the Port of Brisbane and a 65% share in NSW Ports (*Lloyds List Australia*, 2013). And QIC has shares in both the Port of Brisbane and the Port of Melbourne; the Lonsdale Consortium, led by QIC, has successfully acquired the 50-year lease of the Port of Melbourne for A\$9.7 billion (*Lloyds List Australia*, 2016).

Baird (2013), referring to the UK case in which PEFs acquired the full property rights of the ports, argues that PEFs in port ownership may lead to limited new capital investment. PEFs acquired ports with a high price so they may mostly focus on sweating the existing assets to pursue high short- to mid-term dollar returns. As a result, it may lead to port congestion and high charges. He further addresses that PE ownership of port authorities may exploit local monopolies through high prices, aggressive lease renewals and misuse of regulatory powers, diminishing quality/capacity port infrastructure, loss of national competitiveness, seriously worsening trade deficit and weaker urban waterfront redevelopment strategies. Although the approach that PEFs involved in Australian ports adopt, particularly the investment in a very long-term lease, is different from the UK case, the issues Baird raises need to be considered when evaluating port performance post-privatisation.

**Table 4**

Price regulation and monitoring regimes in Australian privatised ports.

Source: The authors based on ACCC (2014, 2015); Utilities Commission (2016), *Essential Services Commission of South Australia* (2015).

Port	Regulator	Price regulation and monitoring regime	Legislation
Port Botany and Port Kembla; Port of Newcastle	Nil	<ul style="list-style-type: none"> <li>Port companies publish information on charges, give advance notice of changes to charges including a rationale for any increases</li> </ul>	Part 6 of the Ports and Maritime Administration Act 1995 (NSW)
Port of Brisbane	Nil	<ul style="list-style-type: none"> <li>Port company publishes standard charges and conditions on the port's website</li> <li>If declared by the relevant Minister, Port of Brisbane operations may be subject to price and access regulation by the Queensland Competition Authority under the Queensland Competition Authority Act 1997 (Qld)</li> </ul>	Transport Infrastructure Act 1994 (Qld)
Flinders Ports	Essential Services Commission of South Australia (ESCOSA)	<ul style="list-style-type: none"> <li>Port company publishes prices of essential maritime services (cargo, harbour and navigational Services)</li> <li>ESCOSA evaluates Flinders Ports' price against changes in the Consumer Price Index (CPI), with the requirement that Flinders Ports must provide reasons to the Commission to explain any rise in prices above CPI</li> </ul>	Maritime Services (Access) Act 2000 (SA)
Port of Darwin	The Northern Territory Utilities Commission	<ul style="list-style-type: none"> <li>Port company publishes standard charges for prescribed services and a statement as to the Darwin Port Operator's general pricing policies for any prescribed service</li> <li>The Utilities Commission monitors price levels using benchmarking or annual price increases linked to an indexation factor, as considered appropriate for the industry circumstances and good regulatory practice at the time the price levels of prescribed services by the Darwin Port Operator</li> </ul>	Ports Management Act and regulation 16(2) of the Ports Management Regulations



### 6.3. Foreign ownership of Australian ports

The privatisation also results in foreign ownership in managing Australian ports to varying extents. The Port of Darwin is managed by a sole Chinese company, Landbridge Group; while at the Port of Newcastle, China Merchants Group owns 50% shares of Port of Newcastle Investments. The Port of Brisbane and NSW Ports involve foreign PE owners i.e. IFM Investors, Caisse de dépôt et placement du Québec Canada and Abu Dhabi Investment Authority. These instances of foreign ownership reflect government policy that encourages offshore investment and operations in Australian infrastructure development.

Foreign ownership of ports has induced debate on national security. The Dubai Ports World's sale for P&O's U.S. operations at 6 major ports in 2006 was a result of the security controversy. Similarly, the decision to privatise the Port of Darwin is controversial. The Port of Darwin is at a strategic location being an Australian gateway to Asia and is also an important military base for the Royal Australian Navy and the Royal Australian Air Force. Of note is that the United States has marines based in Darwin. These facts, coupled with the recent tension in the South China Sea have brought complexity to the 99-year port lease regarding national security and the alliance between Australia and the US. The Australian Government states that the security issues were rigorously and thoroughly investigated by the Department of Defence and Australian Security Intelligence Organisation (ASIO) when privatising the port, and there is no security concern. However, the privatisation still concerns the general public regarding security and politics; according to a recent survey, 90% of Australians considered there would be a security risk (Nicholson, 2015). It seems that the Australian Federal and Northern Territory governments consider that the port lease has more benefits than security threats.

## 7. A new port governance model

Since the 1990s, the devolution of port governance worldwide has been evidenced through different port reform programmes including commercialisation, privatisation of port operations, and corporatisation and privatisation of port authorities. Consequently, the port management model has shifted along the spectrum of types of port i.e. from the public service port and tool port to landlord port and private port (World Bank, 2007). Furthermore, the responsibilities of three major port functions i.e. regulator, landowner and utility (operator) functions have shifted among the parties between the public and private sectors (Baird, 1995a; Baltazar & Brook, 2001). Baird (2000) states that the trend of devolution prefers the public/private model with both the regulator and landowner functions falling to public sectors, while the utility functions are undertaken by private sectors in terms of the port function privatisation matrix (Baird, 1995a). This differs from the Australian model which is private/public (see Table 2).

It is complex to exactly define the limits and role of public and private sectors in undertaking port functions within a public/private, private/public and private port model due to the characteristics of each port and different legislative frameworks between ports globally. Even for a genuinely privatised port, it may not be possible for the private sector to undertake all regulatory duties. For instance, the navigation channels, pilotage and safety to and from the private port Felixstowe in the UK are the responsibility of a public trust, Harwich Haven Authority (Chen, 2009). On the other hand, at the Port of Portland in Australia, privatised in 1995, the private sectors are responsible for regulatory, landlord and operator functions (Port of Darwin Select Committee, 2015). However, this has not been the case in the other port privatisations in Australia that have occurred since.

### 7.1. Private landlord port model

The current trend of Australian port privatisation implies a further port devolution by moving from the public/private port model to a

private/public model with landowner and utility functions falling to the private sector and regulatory functions are mainly under public responsibility. In other words, the port management model of these privatised ports has shifted from a public landlord port to a private landlord port (Fig. 3). The private port company as the landlord and port authority has rights, except disposing of leasehold port lands, to own and manage the port assets, including the use of strategic assets, land development, maintaining and developing port and related facilities, marketing, and tariff setting. The private company also assigns lease contract of terminals and port facilities with private stevedores and terminal operators, who are responsible for the utility function by providing cargo handling and relevant port-related services. For example, at the Port of Brisbane, PBPL is responsible for the following:

- Maintain and develop the port and related facilities;
- Operate the Brisbane Multimodal Terminal;
- Lease and manage land for port-related services;
- Facilitate the development approval process for developments on Brisbane core port land;
- Maintain navigable access to the port for commercial shipping (such as dredging); and
- Operate the Visitors Centre.

Other port operations undertaken by the private sector through concessions remain the same as that prior to privatisation, including stevedoring, pilotage and towage (Port of Brisbane, 2016).

### 7.2. Port regulatory function

It is noticeable that when Australian port authorities were corporatised during the 1990s, there was a tendency that the port regulator functions such as safety, environmental and other non-competitive issues were shifted from the statutory port authority/corporation to other public agencies such as independent departments in the State Governments (Productivity Commission, 1998). Therefore, only a few ports have regulatory powers over some port activities e.g. waterfront services licensing, administering some environmental dangerous goods and other regulations. This development is aligned with Baltazar and Brook' (2001) port devolution matrix that separates regulatory functions from port functions. The current privatisation continues this trend by shifting existing regulatory functions related to public interests to existing, or new, public agencies. This is evident with the establishment of the Port Authority of New South Wales being accountable for regulatory functions at Port Botany, Port Kembla and the Port of Newcastle with the following responsibilities (Port Authority of New South Wales, 2015):

- Managing the navigation, security and operational safety needs of commercial shipping on the abovementioned port areas;
- Providing the emergency response and clean-up in each port for maritime incidents such as oil and fuel spills; and
- Administering legislation concerning the handling, transportation and storage of dangerous goods within the jurisdiction of the ports.

Similarly, the regulatory function for the Port of Brisbane falls into the Queensland Department of Transport and Main Roads which is responsible for safety issues such as channel navigation. However, at the Port of Darwin the private port company is required to perform a few regulatory functions. The Ports Management Bill provides a regulatory framework for the port after privatisation, with the Northern Territory Government mainly overseeing regulatory functions related to public interests including maritime safety, environment protection, pilotage, port access and pricing (Port of Darwin Select Committee, 2015). Specific regulatory role over the functions including port operations, stevedoring licensing, pilotage, navigational aids, pricing and access

are identified and allocated to responsible officers including Regional Harbourmaster, Port Operator, Minister and Statutory Independent Regulator (*Port Management Bill, 2014*). As Darwin Port Operations Pty Ltd is appointed as the Port Operator according to the Bill for the purposes of a 99-year lease of the Port of Darwin, so the regulatory responsibilities for the port in fact are divided between the public officers and the private port authority (port company). This has resulted in the port authority's dual role as a regulator and as an operator, which is against the principles of separation of port administration (regulatory functions) and business management recently adopted worldwide.

Table 3 summarises the change in sectors responsible for port management functions at the Australian privatised ports. The change to a private landlord port model is apparent. Fig. 4 further shows the relationship between the regulator, private landlord, port authority and other private operators in Australia. In contrast to Australia, the figure also presents that in the UK privatised ports, the private company is responsible for the three main port functions.

## 8. Impact of the privatisation

The outcomes of previous Australian port reform in the 1990s, including labour reform, privatisation, and commercialisation and corporatisation of port authorities have shown that the port productivity and financial performance of port authorities/corporations improved (*Productivity Commission, 1998; Tull & Reveley, 2001; Reveley & Tull, 2008*). *Everett and Robinson (2007)* indicate that privatised ports, i.e. where government's ownership was removed, are able to operate independently, free from political and bureaucratic control, subject to the same regulatory constraints as those imposed on any other private sector operation; they are thus likely to be more efficient. However, in the case of corporatised ports, they point out that while corporatisation should enhance internal efficiency of the corporation itself, it is not clear if this strategy improves efficiency in the port generally. Although port corporations in Australian ports are expected to operate like private sector businesses and to be largely free from bureaucratic and political interference, they are not absolutely free to operate independently because politicians still retain considerable control of them. The possibility of intervention thus imposes constraints on achieving competitive efficiency.

The current port privatisation model has removed the bureaucratic and political interference and improved State Governments' financial situation. From an operational efficiency perspective, there is no significant evidence showing that the privatisation negatively affects terminal productivity because the privatised ports previously adopted the public landlord model with contestable waterfront services such as stevedoring being supplied privately. Stevedores continue investing in their leased terminals, which enhances an increase in productivity, for example through automation. It is reported that the performance of major container terminals at the Port of Brisbane, Port Botany and Adelaide was close to record high levels in 2014–2015 (*ACCC, 2015*). Nonetheless, there are concerns raised by relevant port stakeholders about the long term effects of privatisation. These include risk of undervaluing port assets, increased charges, impeded competition, decreased long-term port investment, and other issues affecting public interests.

### 8.1. Risk of undervaluing port assets

Infrastructure recycling or funding for further infrastructure and debt reduction have been the main reasons for the recent port privatisation in Australia, as discussed earlier. However, this policy may distort the decision of State Governments on assets privatisation and infrastructure funding. They may relinquish the revenue earning assets such as ports and purchase loss making infrastructure (*The Senate, 2015*). For example, in 2010 Global Infrastructure Partners (GIP), a private equity fund from New York, USA purchased a 27% stake of the Port of Brisbane for \$575 million. However, in 2013 GIP sold their stake for

approximately \$1 billion effectively nearly doubling their investment in three years (*The Sydney Morning Herald, 2014*). There does not appear to have been any investment in the assets in the 3 years. This indicates that the value of the Port of Brisbane has perhaps not been accurately forecast for the long term, resulting in a significant loss to public revenue.

### 8.2. Increased port charges

Port users including shipping lines, shippers, stevedoring and logistics companies are mainly concerned about the increase in port charges and rental charges after privatisation as it affects their business' viability and end consumers. For example, at the Port of Brisbane, PBPL increased charges to ships by 53% and rental charges to stevedores by 111% between 2008–2009 and 2013–2014 (*Shipping Australia, 2015; Asciano, 2015*). In addition, the private port company may introduce new charges for ships or cargoes. For instance, port access charge at the Port of Brisbane was introduced in July 2011. The charge is levied on cargo to recover the costs of upgrading and maintaining the Port of Brisbane Motorway, in which the port company agreed to invest when signing the port deal (*Chen, 2013*). The Port of Newcastle, privatised in April 2014, has increased charges and revalued its assets without any independent check on the charges (*ACCC, 2015*). It raised the navigation service charges on ships when entering the port, and as a result some coal-carrying vessels have paid 60% more from January 2015 for navigating the shipping channel. As a consequence, Glencore, an Australian coal-mining giant has applied to the National Competition Council in an effort to embed Australian Competition and Consumer Commission (ACCC) oversight and supervision of tariff pricing for the Port of Newcastle shipping channel (*Stevens, 2015*). Moreover, port privatisation may make residual government services not viable and increase some charges, such as NSW Port Authority raising its navigation charge by 9.6% (*Shipping Australia, 2015*).

Currently, inconsistent levels of price regulating and monitoring among Australian privatised port are evident. As shown in Table 4, each port is subject to a price monitoring or regulation regime under its respective state's maritime and port legislation; it is a common practice that each port company should publish port service charges. At the Port of Brisbane and NSW Ports (Port Botany and Port Kembla) and the Port of Newcastle, there is no price regulation, nor a formal independent statutory regulator; nevertheless, NSW Ports needs to give advance notice of any proposed change to charges and the rationale for any increase. On the other hand, at Flinders Ports and the Port of Darwin an independent regulator and a monitoring framework exists. The statutory independent regulator *Essential Services Commission of South Australia* (ESCOSA) monitors port charges over time by evaluating Flinders Ports' prices against changes in the Consumer Price Index (CPI) (*ESCOSA, 2016*). At the Port of Darwin, the Northern Territory Utilities Commission is an independent regulator for port pricing (*Port Management Bills, 2015*). It monitors price levels using benchmarking or annual price increases linked to an indexation factor, as considered appropriate for the industry circumstances and good regulatory practice at the time (*Utilities Commission, 2016*). Landbridge Group has stated any price rises for users of the Port of Darwin will be limited to increases in the consumer price index. This statement indicates that the presence of an independent regulator may have affected pricing decisions.

Current price monitoring regimes do not seem to effectively provide a constraint on exercising market power of private port companies (*ACCC, 2015*). The price hiking at the Port of Brisbane and the Port of Newcastle is a result of insufficient oversight of prices. Additionally, that the regulator merely monitors port charges provided by private port companies without asymmetric information on port costs and asset data for regulation may reduce the effectiveness of price regulation (*Agrell & Gautier, 2012*). As the privatised ports can be characterised as being effectively monopolies, private port companies can increase port charges to recover their costs and return profits to

shareholders. Without regulatory settings for price, Australian consumers and exporters are disadvantaged. Port operations become less competitive, which imposes risks on the productivity of Australia's economy, growth, supply chain efficiency, international competitiveness and living standards (ACCC, 2015; Asciano, 2015). Therefore, ensuring that adequate price regulatory safeguards are imposed on private port companies as part of the privatisation process is critical to mitigate the risks associated with significant price increases.

### 8.3. Impeded competition

Two main issues related to port competition following port privatisation in Australia have been raised by port users.

#### 8.3.1. Restrictions on competition between ports

In the state of New South Wales, as Maersk Line notes, the lease sale of Port Botany and Port Kembla as a bundle to maximise the State Government's revenue has relinquished an opportunity of competition between them (Bleby & Wiggins, 2014; Shipping Australia, 2015). In addition, the NSW Government leased Port Botany and Port Kembla to NSW Ports with a confidential clause that prevented the Port of Newcastle from competing against them by developing a container terminal. The NSW Government promised to pay compensation of \$100 per container to NSW Ports for container movements at the Port of Newcastle exceeding the annual 'cap on numbers', estimated to be 30,000 containers (Wilson, 2016). The compensation makes the development of a container terminal at the Port of Newcastle economically unviable and limits that port's future development. This is despite it being considered as a potential opportunity to develop a container terminal because of its better intermodal connectivity to the north of NSW and southern Queensland.

This payment has been questioned at the NSW State Parliament since October 2014 as it may be unlawful and breaches the anti-competition provision of the *Commonwealth Competition and Consumer Act 2010* (Cameron, 2016). On 10 August 2016, the NSW Government has finally admitted this fee charge in the State Parliament. It seems that this confidential deal of compensation that the NSW Government favours NSW Ports was politically made to push up the sale price at the expense of the northern NSW regional economy, which would benefit if a container terminal could be built at the Port of Newcastle.

Of interest is in the proposal for the Port of Melbourne privatisation, there are two conditions regarding future compensation. Firstly, the private port leaseholder will be compensated if the second container port is built in the State within 30 years (although this term has later been changed to 15 years in the Victorian Parliament) and secondly, if the new port removes container capacity that would have processed through the Port of Melbourne. Many port stakeholders have raised concerns for this compensation regime, as the new market structure would negatively impact future competition and entrench monopoly power at the port (Parliament of Victoria, 2015). This may have major impacts on the supply chains of Australian products and industries. The complexities arising from different levels of government involvement in port privatisation may be impeding competition in Australia.

#### 8.3.2. Vertical integration within the privatised port

Under the private landlord port model, the port company has easy access to vertical integration enabling it to leverage its monopoly power further by acquiring established downstream businesses or entering into a joint venture with existing downstream businesses. Such vertical integration strategy would allow the private port operator to prefer its own related stevedores, and as a result, it would impact effective competition in the stevedoring industry within the port. For example, the private port company Flinders Ports, managing 7 South Australian ports, expands its operation to a full range of stevedoring services across different cargoes by establishing Flinders Logistics and acquiring the Adelaide Container Terminal from DP World. As a result, it

has become both a landlord and a competitor to existing providers of stevedoring services, Qube and Patricks, which rent port areas from Flinders Ports (Asciano, 2015). This may create unfair competition as Flinders Ports' related stevedore, Flinders Logistics, competes with the two existing stevedores for the same customers; Flinders Ports imposes cost and conditions, resulting in Qube and Patricks failing to win customers (Asciano, 2015). The industry is concerned that the unconstrained vertical integration would undermine the competitive process within the industry and the efficiency of supply chains (DP World, 2015). This issue has drawn ACCC's attention and it has urged the Victorian Government to consider restriction on vertical integration for the coming privatisation of the Port of Melbourne.

### 8.4. Decreased long-term port investment

Broad public interests in using ports as a means to encourage trade and regional economic development is one of the key reasons why many governments are involved in port management. With the public ownership and public governance structure, the port authority is responsible for planning long term port investments to achieve the broader objectives of society. However, under the privatisation model, the private port company, being the private port authority, does not guarantee further investment and may not be able to facilitate any integrated planning for transport infrastructure development supported by the governments connecting to the port. This is more likely to happen in those PE ownership ports because they focus on short-term targeted rate of returns for their investors.

The impact of privatisation on port investment may not be observed in a short period of time following its implementation; therefore, it may be too early to draw conclusions on the impact for all privatised ports. Looking at the seven South Australian ports and Port of Brisbane, privatised for 15 years and 6 years respectively, there are few observations available on the impact. The extent of port investment is affected by the rationale for privatisation and the ownership structure of privatised ports. Those ports with PEFs may have an easy exit strategy by selling port assets to others after three to five years without even making any investment for new infrastructure development. MUA (2015) indicated that after four years of privatisation, the assets value of the Port of Brisbane did not change significantly, implying no significant investment in the port by the private port company.

On the other hand, those ports owned by professional industry operators may have more planning and investments for the future. For example, Flinders Ports commencing operations in South Australian ports in 2001 has invested in port infrastructure, stevedoring and logistics functions (MUA, 2015). Landbridge Group, leasing the Port of Darwin from November 2015, agreed to invest \$200 million in the port over the next 25 years to boost trade and tourism links with Asia, including improving cruise ship facilities. The facilities for cruise shipping are particularly important as the Port of Darwin is an emerging destination (The Sydney Morning Herald, 2015). It appears that when the leaseholders include professional industry operators, they are more likely to utilise their expertise to strategies for the privatised port in greater harmony with the national and regional economic and social interests.

### 8.5. Other issues affecting the public interest

Public port authorities play an important role in coordinating the port users and the regional communities they serve. Furthermore, they collaborate with governments in planning strategies for freight logistics related infrastructure development specific to the future needs of the port and region. However, after privatisation, whether the private port authority will play these roles is doubtful. The doubt arises from the change in the representatives on the privatised port company board. Prior to privatisation, port users and other key stakeholders such as Union members were represented on the board of directors of



the public port corporation; nowadays the Board of the private port company consists mainly of representatives of key shareholders, such as investment funds. Such changes to the Board composition will affect decisions on strategic priorities of the port. In addition, there is less professional maritime experience on the Board, in particular at the ports owned by PEFs, which may reduce the sector-specific knowledge related to strategic port issues.

The impact on local employment at ports is always a concern that arises during privatisation. Australia is no different, with private port companies giving guarantees of no job cuts within certain timeframes (normally 3 years) when signing the port lease contract. Evidence has shown a reduction in the workforce at privatised ports after the guaranteed timeframe. In an impact study of Brisbane Port privatisation, undertaken by the Maritime Union Australia (MUA, 2015), it is found that at the Port of Brisbane the number of employees at the port, excluding the stevedoring workforce, has decreased by 31%. The reduction has occurred primarily due to not replacing workers leaving the port and by contracting out maintenance work. According to the MUA, contracting out port business activities resulting in job losses and worse employment condition of workers is also evident in Port Botany, where the operation of recently-expanded Bulk Liquid Berths was made to contract-out. The job losses may be because the private port company is more concerned about the profit and financial gain to their shareholders rather than the workforce.

A further area of public interest that may be affected by the move to privatise ports is corporate social responsibility and accountability. Corporate social responsibility and accountability are mainstays of government and, with diverse stakeholders interested in the port, its activities and role in the region it serves, the minimum requirements of legislation are usually exceeded when fully-owned by governments (Kolk & Van Der Veen, 2002). The influence of voters, special interest groups and local development agendas are often conspicuous in port strategies. Privatisation increases the likelihood that the number of stakeholders and their interests considered in long-term strategic planning is reduced, with more focus on the shareholders' interests.

## 9. Implications for further port privatisation

From the experience of the recent Australian port privatisations discussed in the previous sections, there are implications for further port privatisation in Australia or elsewhere.

### 9.1. Duration of lease

The current length of lease sale at privatised ports is 99 years, which seems too long. The rationale for offering a 99-year lease term is to attract investors to invest in and manage port assets with a long term perspective and to recover investment over the long-term. Meanwhile, State Governments intended to maximise the sale proceeds from the privatisation. However, if there is no term in the lease contract about performance management, and the investors do not perform adequately, such as limited port investment and maintenance, particularly towards the end of lease term, it may affect the future of privatised ports. As a matter of fact, the present value of a 99-year lease to operate ports would not substantially be changed if the lease duration was halved with a condition of roll-over. By doing so, it may ensure the private company is more cautious or cooperative in facilitating national and regional community needs.

### 9.2. Price regulation and competition

The most concerning aspect of port privatisation for port stakeholders in Australia is insufficient regulatory protections against monopoly pricing. The significant market power of the private port company at privatised ports has imposed a risk of increasing port prices.

This requires appropriate mechanisms for price monitoring and regulation. Thus, for future privatisations, the following may be considered:

- Clear regulations/legislations and port policy are needed to influence port companies to operate under the appropriate market structure to not only limit monopoly power but also embed pricing and access arrangements as part of the privatisation process. For example, imposing conditions on the port company through the commercial agreement for the privatisation can be a strategy.
- An independent state regulatory agency for price regulation following the privatisation is needed to protect users and end customers.
- Current port service price monitoring against or capped to CPI does not allow port users to benefit from cost reductions and improvements in efficiency and productivity. An effective price regulation design i.e. CPI-X may be considered by relevant port price regulators. That is: the maximum price rises in line with CPI, but falls at a rate X set in advance by the regulator. The value of X reflects potential cost savings by port companies due to increased efficiency (King, 1998). This will benefit port users and end customers.

Competition has also raised concerns. The two concerns of anti-competition as a result of Australian port privatisation are restrictions on competition between ports and vertical integration, explained in Section 8.3. The former may be avoided by involving a national regulatory body such as ACCC in the privatisation process, which has not occurred in the past privatisation cases. For the latter, the government should consider restriction on vertical integration in the tender for future privatisations.

### 9.3. Future investment

It is uncertain whether the private sector does invest in the port for future development or simply utilises the existing facilities for profit making. Ideally, port privatisation policy should encourage long-term investment and contribute to the development and growth of infrastructure and sustainable employment. Therefore, the potential bidder for the port should be required to specify their plan for utilising the current port facilities and future development to support freight logistics chains with a good level of service and adequate capacity. Additionally, the legislation of privatisation should require the private port company to regularly disclose their port development plan and strategy. By doing so it will ensure the port is able to continue supporting freight logistics efficiently to benefit Australian consumers and exporters.

### 9.4. Ownership issues

Ownership of the lease has raised two key issues among stakeholders. Firstly, is the issue of the risks associated with profit-taking from the lease, either by the original tenderers or subsequent lease owners. Secondly, there are questions associated with national security and protecting the nation's, and/or the state's, economic interests.

- Ownership change during the lease period:  
To reduce the risk of those investors such as PEFs playing ports as mature assets for quick returns and cash inflows, future privatisations may consider setting conditions on the tenderer in the terms of reference as selection criteria to ensure the port has a sustainable future. For example, the tenderers' experience in managing ports and duration, time restriction on disposing of their investment after buying the port lease and long term investment plans for the port.
- Foreign ownership:  
Ports are strategic assets with importance of national security and economic interests. Considering the challenge of global terrorism and a new cold war, the Australian government has to consider carefully if a sole foreign ownership is allowed in managing national ports for a century long. This is an emerging issue in Australia, challenging

the Australian government in balancing strategies in economic development and security.

## 10. Concluding remarks

Australian ports have experienced three stages of port reform commencing with commercialisation, moving through corporatisation and now into the privatisation of port assets. Major ports, in particular capital city ports are, or are planned to be, privatised. The privatised ports follow a similar transaction model i.e. a long-term leasehold contract over the port assets with the private sector. The State Government transfers major port assets including the port corporation, except land, to a state-owned holding company and then sell to a private winning bidder. As a result, the governance structure at those privatised ports is private/public, with the private port company being the port authority and landlord with the right to manage the port. The regulatory function following the privatisation is the public sector's responsibility while operator functions are undertaken by the private stevedores. Australian port privatisation follows the international trend of reducing the public sectors' involvement not only in port operations but also infrastructure provision. This approach helps the State Government meet its budgetary goal by bringing in private capital to reduce debt and fund investment in other infrastructure.

Major Australian ports are mature assets with growth prospects and limited threats from competition. Such nature attracts interests of investors in particular institutional fund owners involved in the port privatisation process. The buyer will be interested in the port assets if they can create profit, provide revenue opportunities and growth with minimal government regulation; however, there are concerns to customers and communities of the privatised ports to be watched and monitored.

This paper considers that the latest port privatisation trend in Australia is alternative to the full privatisation approach undertaken by the UK Government in the 1990s. Both nations have a similar objective i.e. reducing governments' financial burden for port privatisation. The UK Government transferred ports' property rights to private ownership to enable the company to operate commercially and create a new and more positive business culture within the organisation (Thomas, 1994); and to induce further intensification of competition as ports strove to retain market share and attract new traffic to remain profitable. However, the evidence shows that the financial and economic performance of privatised ports in the UK has failed to meet government expectations, i.e. higher efficiency relative to public ports, when comparing the performance of publicly owned ports (Saundry & Turnbull, 1997). Further, Baird (1995a, 1995b, 2000) indicates that the form of the UK port privatisation with outright sales appears to have failed to bring about positive outcomes with respect to port investment, port competition, and port planning and control. It appears to have transferred the increased profits, high shareholders' dividends, share price gains and directorial benefits to the private sector from the public sector (Goss, 1998). It is noticeable that some of outcomes of port privatisation in the UK have already been observed in Australia. In particular, privatisation has shifted the monopoly power at ports from the public to the private sectors.

Is the Australian port privatisation policy effective? It depends on whether the objectives of the policy have been achieved. In the short term, the port privatisation policy may be effective as it achieves the objectives of the policy. From the financial perspective, the State Governments of privatised ports receive financial gain with the proceeds which are usually 25–28 times of the port's underlying profit in terms of earnings before interest, tax, depreciation and amortization (EBITDA) (Bever, 2014). Moreover, the government's financial obligations and risks associated with future capital expenditure requirement at ports are shifted to the private port company. As a result, the government's

balance sheet is improved significantly in the short term. However, with the recycling assets initiative hasty and rushed decisions on port privatisation may result in governments abandoning income earning infrastructure and investing in loss-making assets. Another concern is the use of the proceeds of privatisation. Proceeds may not be allocated as planned, such as inappropriate use, insufficient and inequitable allocation to infrastructure or regional areas of states. For example, the proceeds of a privatised coal terminal in Queensland were inappropriately used for disaster recovery rather than funding new infrastructure (The Sydney Morning Herald, 2011).

On the other hand, for port businesses to be viable and long term port development to be sustainable, the outcomes of the privatisation in relation to port management and operations should be evaluated as well as it will influence the nation's supply chain costs and trade. It may be too early to conclude the other outcomes given the short time period of post privatisation, despite South Australian Ports and Brisbane respectively privatised in 2001 and 2010. However, a continuous monitoring and evaluation of the performance, including efficiency and effectiveness as suggested by Brooks and Pallis (2008), at the privatised Australian ports is necessary. For further study, the issues of Australian privatisation raised in this paper should be revisited and examined.

## Appendix 1. Sources of secondary information for analysis

Sources	
Government reports	Container stevedoring monitoring reports by Australian Competition and Consumer Commission (ACCC) Port of Darwin lease model report Darwin: Port of Darwin Bill, 2014a,b
State privatisation bills	NSW: Ports Assets (Authorised Transactions) Bill 2012 Queensland: Infrastructure Investment Bill 2009
Port websites	Port of Brisbane NSW Ports Port of Newcastle Port of Darwin
Submissions to Select Committee Inquiry into the proposed lease of the Port of Melbourne and Port of Darwin submission	87 submissions Among which, relevant information from 15 submissions were drawn and analysed
Submissions to inquiry into Darwin Port privatisation	5 submissions
Newspaper articles (Lloyd List Australia, ABC News, The Australian, The Sydney Morning Herald)	The key terms such as 'Australian port privatisation', 'Port of Brisbane privatisation', 'Port of Darwin privatisation', 'Port Botany and Port Kembla privatisation', 'Port of Newcastle privatisation', and 'privatisation and impact', were used for search. Approximately 40 articles were found relevant.

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