



2022 ESCOSA Review

Report on selected economic matters

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Executive Summary

Scope and Purpose

This report contains Synergies' response to a request from Finders Ports to provide comment on a number of economic matters relevant to the regulatory review currently being undertaken by ESCOSA.

The regulatory regime that applies to the proclaimed ports in South Australia has two distinct elements:

- An access regime; and
- A price control regime.

The economic rationale for each of these two forms of regulation is different, and the scope of application of each of them in the South Australian context is also different.

Access regulation

Access regulation, in the sense that the term is used in this report, refers to the provision of a regulated right of access to essential infrastructure facilities. The National Access Regime was introduced following the Hilmer review of competition policy, and forms part of the Competition Policy Agreement (CPA). The primary legal instrument for its implementation is Part IIIA of the *Competition and Consumer Act 2010 (CCA)*. Several States, including South Australia, also have legislation that gives effect to the terms of the CPA that deal with regulated access.

Access regulation implies a substantial erosion of, and creates considerable uncertainty regarding, property rights. Clear and enforceable property rights are widely accepted as foundational to the efficient functioning of a market economy. This was recognised from the outset by Hilmer, and the access regime he recommended was intended to apply in very limited circumstances. These circumstances are reflected in the declaration criteria of Part IIIA.

Our survey of regulatory practice in other Australian jurisdictions suggests that most have not found it necessary to apply access regulation to port corporations. The only jurisdictions that currently apply formal access regulation to port corporations are South Australia and the Northern Territory.

Victoria formerly included access provisions in its regulatory regime. These provisions were limited to access to shipping channels. A Part IIIA declaration provided, for a time,

regulated access for Glencore to the shipping channels in Newcastle, but this declaration has now been rescinded.

There are significant economic risks associated with access regulation. The most important of these is the potential chilling effect on investment. This has been widely discussed in reviews of access regulation by the Productivity Commission and in other public reviews, such as that conducted by the Exports and Industries Task Force. Other risks include undermining incentives to resolve commercial disputes by negotiation, and a consequent diversion of resources to expensive and cumbersome forms of dispute resolution. Investigation of the costs associated with access regulation has, in almost all cases, led to warnings about the risk of improperly extending the scope of application of access regulation.

Price regulation

Price regulation has a more general application than access regulation and is in principle applicable to any situation in which an enterprise enjoys substantial market power. However, as with access regulation, there are costs (including, once again, the risk of deterring beneficial investment) that must be weighed against the potential benefits. For the more stringent forms of price regulations, these costs can be high.

Price regulation may take a variety of forms, ranging from simple disclosure obligations to mandating the price that an enterprise may charge. The general economic principle is that of proportionality: as the likelihood and potential economic damage from monopolistic pricing increases, it becomes easier to justify the costs and risks of more stringent price regulation.

As the intrusiveness of the regulatory regime increases, so does the risk of causing material economic damage. Light-handed regimes, such as that to which Flinders Ports is subject, are comparatively low-risk. By providing a ‘cop on the beat’ they give a degree of comfort and protection for port users and allow the early detection of any potential exercise of market power. More intrusive regimes involve materially higher compliance and regulatory costs; even more importantly, they give rise to an increased risk of distorting investment decisions and encouraging economically inefficient strategic behaviour.

Concerns about the potential over-regulation of ports – expressed, for example, in the report of the Exports and Industry Taskforce – led to inclusion in the Competition and Infrastructure Reform Agreement of specific provisions relating to port regulation. The Agreement requires ports should only be subject to economic regulation where there is a demonstrable need for it. Consistent with this Agreement, Australian States and Territories have adopted a light-handed approach to the regulation of port prices.

Price regulation in other jurisdictions

Publicly owned ports are not subject to oversight by an independent regulator in any jurisdiction. Generally, they enjoy considerable freedom in setting prices, although in most if not all instances there is some form of Ministerial discretion to overrule port corporation decisions.

The major commercial ports in NSW, Victoria, South Australia and the Northern Territory, and the port of Brisbane in Queensland are leased to private corporations.

There is no independent regulatory oversight of pricing in the privately owned port in Brisbane, or the privately owned ports of NSW. These ports merely have certain obligations surrounding the provision of information –including the publication of a generally applicable tariff. The relevant legislation includes provisions that allow the ports to be made subject to more formal price regulation if they are considered to be abusing market power, but these provisions have not been exercised in either jurisdiction.

The regional ports of Victoria were subject to price regulation when they were first privatised, but this is no longer the case.

Only the proclaimed ports in South Australia, the port of Darwin and the port of Melbourne are now subject to formal price regulation by an independent economic regulator.

The Northern Territory regime is modelled on the South Australian regime and is similar in most relevant respects. One significant difference is that subordinate legislation in the Northern Territory prescribes the use of price monitoring as the form of price regulation. This has the effect of lowering the level of regulatory threat, making the Northern Territory regime, taken as a whole, somewhat lighter-handed than the South Australian regime.

The regime applied to the Port of Melbourne is significantly more intrusive than that to which Flinders Ports is subject. But the market power held by the Port of Melbourne is, on our assessment, considerably greater than that held by Flinders Ports, and the economic consequences of it exercising that market power would also be much greater. The principle of proportionality would therefore suggest that a regime that may be appropriate in the case of the Port of Melbourne would not be appropriate in the case of Flinders Ports.

It is also the case that the current form of regulation in the Port of Melbourne did not result from an independent assessment of the appropriate form of regulation by the economic regulator in that state. In its most recent review, conducted shortly before the port was

privatised, the Essential Services Commission recommended a form of price regulation that was more light-handed than that which the government decided to introduce.

Proportionality of the South Australian regime

In previous reviews, ESCOSA has considered the question of the proportionality of the price regulation of the proclaimed ports of South Australia and has consistently concluded that the level of price regulation was appropriate. It is reasonable to argue that this assessment should stand unless there is new evidence of the abuse of pricing power, or there has been a material change in the competitiveness of the market. Publicly available data on comparative port price movements over the last regulatory period is limited; but what is available discloses nothing that would suggest the exercise of market power during this time. And our review of developments in the South Australian ports market suggests that, if there has been a change, it has been in the direction of increased, rather than diminished, competition.

Price monitoring in practice

A practical issue that arises in the application of a price monitoring regime is how to assess whether changes in monitored prices could indicate an exercise of market power. This assessment requires us to form some idea on what level of price rises might reasonably be expected in a competitive market. The process usually relies on a comparison with prices elsewhere; with general increases in costs; or with specific increases in the costs faced by the regulated enterprise; or in a mixture of some or all of these. In our discussion of an appropriate benchmark, we examine the uses and limitations of each of these elements. Our conclusion is that a hybrid measure, based partly on generic costs and partly on specific costs incurred by the enterprise, is likely to provide the best indicator of the level of price rises that would be experienced under competitive market conditions. Using such a measure is likely to be preferable to using the CPI.

But whatever indicator is used, it is important that, in using it, we bear in mind the proper use of such an indicator in the context of a price monitoring regime. This is not to provide a precise measure of what price increases are 'justified'. It is to provide an input, along with other information, into a holistic decision on whether the available evidence suggests that the regime has been effective in preventing the abuse of pricing power.

1 Introduction

This report was prepared by Synergies for Flinders Ports. Its purpose is to examine some of the economic issues associated with the economic regulation of certain infrastructure services provided by Flinders Ports.

1.1 Two forms of regulation

The regulatory regime that applies to the proclaimed ports in South Australia has two distinct elements:

- An access regime; and
- A price control regime.

The economic rationale for each of these two forms of regulation is different, and the scope of application of each of them in the South Australian context is also different.

1.2 Access regulation

The National Access Regime was introduced in response to the recommendations of the Hilmer report. The report proposed:

the establishment of a new legal regime under which firms can be given a right of access to essential facilities when the provision of such a right meets certain public interest criteria¹.

An essential facility, in this context, was defined as a facility to which access is required if a business is to be able to compete effectively in upstream or downstream markets. Such facilities are referred by the NCC as 'bottleneck infrastructure', a term which seems to capture the importance to the definition of the role such facilities may play in constraining competition in related markets. Access regulation is intended to ensure that parties that need access to the services of certain infrastructure facilities in order to participate in *markets other than the market those services are bought and sold*. In access regulation, the objective is securing the ability of the access-seeker to participate in upstream and downstream markets.

The access regime was always intended to have a narrow range of application, and this is reflected in the rather stringent criteria that must be met before a facility can be 'declared' under Part IIIA of the CCA. Confining access regulation to a narrow domain is

¹ Hilmer, F (Chair) 1993, National Competition Policy, Australian Government Publishing Services, Canberra, p239

economically important because, as Hilmer, the Productivity Commission and the Harper panel have all pointed out, access implies a serious incursion into the property rights that form the bedrock of all market economies². (Price regulation, although it also has its hazards, is confined to constraining a single aspect of market behaviour.)

Hilmer of course recognised that the owner of bottleneck infrastructure may have an incentive to set prices that are higher than those necessary to provide a normal level of profit. But it was not the purpose of the access regime to act as a form of price control.

The National Competition Council (NCC) has emphasised that the access regime introduced by Part IIIA of the CCA serves a different function, and has a different domain of application, from price regulation:

Declaration under the National Access Regime is not a mechanism for imposition of price regulation and was never intended to be such. “Excessive”, “monopolistic” or “gouging” pricing per se is not the focus of Part IIIA. Where such pricing in one market merely transfers income or value from one party in a supply chain to another without materially impacting competition in any other market, Part IIIA does not provide a remedy. The focus of the Regime is on promotion of competition in markets where the lack or restriction of access to infrastructure services provided by facilities that cannot be economically duplicated would otherwise limit competition³.

1.3 Price regulation

Subjecting enterprises with significant market power to some form of price regulation has a long history, in Australia and internationally. Although the mechanism employed varies, there is wide and longstanding acceptance of the principle that some curtailment of the ability of monopoly enterprises to change excessive prices is justified.

The Hilmer review envisaged that pricing issues would be dealt with through a general regime that would be generally available but sparingly applied and light-handed. He proposed:

the establishment of a prices monitoring and surveillance process for a national competition policy. The process would be applied sparingly and only after proper

² Hilmer 1993, pp242; Productivity Commission 2013, *National Access Regime: Final Report*, Inquiry No 66, 25 October, Ausinfo, Canberra, p298. ; Harper, Ian (chair) 2015, *Competition Policy Review: final Report*, p424.

³ NCC 2015, Declaration of the shipping channel service at the Port of Newcastle: Final recommendation, Commonwealth of Australia, Canberra, 2 November, p13.

investigation of the underlying market circumstances and would not directly control prices⁴.

Price control regimes are intended to ensure that organisations that possess significant market power are not able to use that power to charge excessively high prices for the products or services that they provide. The focus is on the market *in which those services are bought and sold*.

This would apply to the owners of essential infrastructure in the same way that it would to other firms that, for whatever reason, possessed significant market power.

1.3.1 Some important differences

There are, then, three key differences between access and price regulation as there were designed to function in National Competition Policy:

- Access regulation was intended to have a narrow application, restricted to essential facilities access to which was of major economic significance⁴, whereas price regulation was intended to be more widely available – although not necessarily to apply without a substantive justification – in any situation where a supplier enjoyed significant market power;
- The concern of access regulation is with the effect of access on markets other than the one in which the relevant service concerned is bought and sold, whereas the concern of price regulation is with the market within which relevant service is bought and sold; and
- The Australian access regime is comparatively novel and, in some respects at least, unique. Price regulation has a long history of legal and economic theory and practice, in Australia and overseas, on which to draw. Access regulation does not. It remains largely an experiment, the consequences of which are not yet clear

Although, in practice, many port services in the proclaimed ports of South Australia are subject to both price and access regulation, these differences make it useful to deal separately with the two aspects of the regulatory regime.

⁴ Hilmer, F (Chair) 1993, National Competition Policy, Australian Government Publishing Services, Canberra, p269

2 Access regulation

2.1 The proper scope of access regulation

2.1.1 Limits to the obligation of competitive neutrality

As we noted in the previous section, access regulation is centrally concerned with the impact of the actions of the provider of regulated services on markets other than the market in which the regulated services themselves are sold. A material increase in competition in one or more such markets is one of the criteria for declaration under Part IIIA of the CCA.

King⁵ points out that if effective competition in the related markets already exists, then the conditions that warrant access regulation are unlikely to exist. A first step in assessing whether access regulation is required is therefore to examine the current state of competition in the relevant market. And the pertinent question is whether the existing conditions of access are such as to allow workable competition.

This is an empirical question. It is answered in the affirmative if there are a number of parties competing for business and succeeding in gaining a share of the market. It does not require that there is a level playing field. It does not require that all competitors are satisfied with the terms and conditions they are able to obtain; nor does it require that that all obtain the same terms and conditions as each other, or the same terms and conditions as the owner of the relevant infrastructure offers to related parties; and it does not require that any advantages a party may incidentally have by virtue of its relationship to the infrastructure owner are neutralised. None of these things are obligations generally owed by a business to its suppliers, tenants or customers⁶.

They may of course become an obligation under certain circumstances. They may become obligations if a facility becomes subject to access regulation, either under the Part IIIA or in an uncertified State-based regime. They may become obligations through an access undertaking required by competition authorities as a condition of a merger or acquisition. They may become obligations as a condition of licensing or development consent. But in the absence of such specific conditions, the failure of an enterprise to act as if they are under an obligation to treat all parties equally is not a justification for introducing access regulation.

⁵ King S 2021, Part IIIB - Why there is no economic case for additional access regulation, Productivity Commission Conference Paper, September, p10.

⁶ See the earlier quotation from the Hilmer report (Section 2.2.1).

Provided whatever arrangements are in place allow rivals in the relevant related market to compete with sufficient vigour to create a workably competitive market, there is no case for access regulation. Demonstrating that workable competition is not possible without mandated access is the foundational to the economic case for access regulation.

2.1.2 The appropriate domain of access regulation

The wording of Part IIIA, and much of the discussion of the application of access regulation, refers broadly to the effect of access to essential infrastructure on 'related markets'. But the balance of the costs and benefits of access regulation may be quite different depending on the character of the relationship between the services provided by the essential infrastructure and the goods or services provided in the related markets.

Access regulation has its roots in the disaggregation of industries such as energy, telecommunications and railways. The relationship that informed the drive for access regulation was what we will call, for want of a better term, the primary user relationship. Access regulation came into being to allow gas owned by a number of companies to pass through a single pipeline; to allow trains run by different operators to pass over a single railway; and to allow competing retailers and generators of electricity to gain access to the poles and wires that were essential to their ability to compete. In the case of ports, the primary users are the shipowners who make calls at the port, and the cargo owners who move cargo through it.

The potential economic gains from securing access to essential infrastructure when the related market stands in a primary user relationship to the market for the infrastructure are often large. They may be large enough to justify the compromising of property rights and risks to investment incentives entailed in access regulation. It was clearly this type of relationship that Hilmer had in mind when he recommended inclusion in the tests for declaration a requirement that:

The making of the declaration is in the public interest, having regard to:

- (a) the significance of the industry to the national economy; and
- (b) the expected impact of effective competition in that industry on national competitiveness.

Commenting on this requirement, Hilmer explains that:

These criteria may be satisfied in relation to major infrastructure facilities such as electricity transmission grids, major gas pipelines, major rail-beds and ports, but not in relation to products, production processes or most other commercial facilities⁷.

Hilmer's focus was on the scale of the economic impact of the denial of access. In our view, it is also clear that what he had in mind was the denial of access to the infrastructure to those that we would classify as primary users. It is not accidental that the services to which access is secured by *Maritime Services (Access) Act 2000* are services provided to primary users.

2.2 Economic costs and risk of access regulation

From the outset, the National Access Regime embodied in Part IIIA of the CCA has attracted critical attention and controversy⁸. Some of this has related to practical concerns about the costs, uncertainty and delays resulting from the complexity of the declaration criteria, certification processes and other aspects of machinery of the regime.⁹ However, others have expressed concerns of a more fundamental economic and philosophical concerns.

2.2.1 Undermining of property rights

The most fundamental issue is the tension between an enforceable access regime and long-established understandings of property rights. Hilmer was well aware of this issue.

As a general rule, the law imposes no duty on one firm to do business with another. The efficient operation of a market economy relies on the general freedom of an owner of property and/or supplier of services to choose when and with whom to conduct business dealings and on what terms and conditions. This is an important and fundamental principle based on notions of private property and freedom to contract, and one not to be disturbed lightly¹⁰.

⁷ Hilmer 1993, p251

⁸ Marshall B and Mulheron R 1998, Access to 'Essential Facilities' under Part IIIA of the Trade Practices Act: Implementing the Legislative Regime, *Bond Law Review*, Vol 6.

⁹ Pengilly, W 2006, *The Man From Mars Would Have Done Better: A Commentary on the Declaration and Arbitration Provisions of the Access Regime Under Part IIIA of the Trade Practices Act*, Queensland University of Technology Law Faculty, <https://lr.law.qut.edu.au>.

¹⁰ Hilmer 1993, p242

In 2015, the Harper Panel made a similarly strong statement on the need to ensure that the prospective benefits on regulating access justified the inevitable erosion of property rights that it entails:

The Regime facilitates intrusive economic regulation of infrastructure assets. It overrides private property rights, mandating that the operator of an infrastructure facility make that facility available for use by a third party on terms and conditions (including price) determined by a regulatory body.

Economic regulation of privately owned assets can impose costs on the economy... Given the economic costs that can be caused by this form of regulation, it is important to examine the benefits of the Regime carefully and to ask whether those benefits can be achieved by a less intrusive form of regulation.¹¹

At least from the time of Locke, clarity of and respect for property rights have been regarded as fundamental to the efficient functioning of any market economy. A private property right, in the economic sense, is defined by Alchian¹² as having several attributes:

1. exclusivity of rights to the choice of use of a resource;
2. exclusivity of rights to the services of a resource; and
3. rights to exchange the resource at mutually agreeable terms.

Access regulation curtails all three of the dimensions.

It is difficult – perhaps impossible – to quantify, or even to specify with precision, the economic detriments associated with the erosion of property rights. This is because the effects are often diffuse and usually indirect. But one important component of this effect will be to divert effort away from commercial negotiation – which National Competition Policy has consistently endorsed of the preferred means of resolving disputes¹³ – towards the pursuit of a favourable arbitrated judgment.

An optimistic view of the effect of mandated access is that it is required to force monopolistic service providers, who might otherwise have little incentive to do so, to

¹¹ Harper 2015, p424.

¹² Alchian, Armen A, 2002 Property Rights, in *The Concise Encyclopedia of Economics, Library of Economics of Liberty*, <https://www.econlib.org/>

¹³ The Competition Principles Agreement, for instance, declares that “Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the person seeking access”. The Competition and Infrastructure Reform Agreement states that ‘the Parties agree that, in the first instance, terms and conditions for third party access to services provided by means of significant infrastructure facilities should be on the basis of terms and conditions commercially agreed between the access seeker and the operator of the infrastructure’.

enter into good-faith negotiations with customers. From this perspective, the fact that a regulatory backstop exists will generally be harmless, and often have a beneficial effect – even if it is not actually invoked.

The alternative view is that the existence of a regulatory alternative encourages strategic behaviour, undermines good faith negotiations and may lead to costly proceedings with uncertain outcomes¹⁴. From this perspective, the regulatory backstop can be and often is harmful, even when it is not actually invoked; and may be seriously disruptive if it is.

2.2.2 Chilling effect on investment

Concerns about the potential chilling effect on investment of access regulation have been a constant theme since the early days of the National Access Regime¹⁵.

These concerns were explored in detail by the Productivity Commission in its 2001 review¹⁶. The Commission canvassed several reasons why such chilling might occur, including the possibility that regulatory intervention in the price-setting process, and the unpredictability of the outcome of that intervention, will in itself increase the risk to investment. But it pays particular attention to the risk of the truncation of investment outcomes by regulatory action.

The essential thesis is that investment is always made in a climate of uncertainty. Investors therefore contemplate a range of potential outcomes for their investments and implicitly or explicitly assess the likelihood of each outcome. The investment case therefore depends on the possibility that, under some credible future conditions, the investor will obtain a rate of return that materially exceeds its cost of capital.

But it is these conditions that are most likely to lead to disaffection on the part of customers, and lead to an application for access to the facility on regulated terms and conditions. Investors are aware of this possibility and are likely to expect that a successful application for mandated access will lead to their returns being constrained to (more or less) the cost of capital. The possibility of earning an above-normal rate of return under some future conditions is therefore disregarded, or at least discounted. The investment case is correspondingly weakened, and the likelihood that beneficial investment is

¹⁴ This view is held by several submitters to the 2001 Productivity Commission Inquiry – see Productivity Commission 2001, pp89-90.

¹⁵ See, for example, Industry Commission 1997, Submission to the NCC on the National Access Regime: A Draft Guide to Part IIIA of the Trade Practices Act Pt IIIA, January.

¹⁶ In the chapter of the report devoted to a discussion the costs of access regulation, 23 of a total of 36 pages are devoted to this issue.

undertaken correspondingly reduced; or, if it is undertaken, it may be undertaken at a smaller (and sub-optimal) scale.

In the case of infrastructure investment, the risk of such truncation is exacerbated by the fact that it is likely that returns will increase over time. The Productivity Commission notes that it is common for infrastructure investments to yield poor returns in the early years of operation, with high returns later in the life of the investment compensating for the weak returns – or even losses – incurred during these early years. If a successful application for access on regulated terms and conditions is made mid-way through a project's economic life, and the assessment of an acceptable rate-of-return made on a forward-looking basis, profits in these later years will be unable to compensate the investor for the poor investment performance of earlier years. Once again, this possibility will be contemplated by investors when assessing the business case and could have the effect of deterring desirable investment.

The Exports and Infrastructure Task Force, established by the Howard government in 2005, expressed similar concerns about the impact of inappropriate regulation on infrastructure investments. The general tenor of the Task Force report reflects a concern that the surge of regulatory activity in the period since the signing of the CPA may have resulted, at least in some cases, in the costs of regulation outweighing its benefits.

It is important to be realistic about what regulation can and cannot achieve. The information available to regulators is necessarily highly imperfect, so regulators cannot hope to mimic the outcomes that would be secured by fully efficient markets. In fact, the search for fully efficient outcomes is likely to merely add delay, cost and uncertainty to the regulatory process. As a result, any feasible system of regulation is likely to be characterised by a level of 'government failure'. Reflecting this, regulation should be used cautiously, and the costs of regulation taken fully into account in decisions about whether and how to regulate.

In addition to the need for caution in the application of regulation, the manner in which assets are regulated is also of great importance. One way to achieve a better balance in this respect is to try to match the extent and nature of regulation to the market power held by the infrastructure owner and the likelihood that market power would be misused.¹⁷

Specifically with respect to export infrastructure, the Task Force argued for a strong presumption in favour of the resolution of access issues by commercial negotiation.

¹⁷ Exports and Infrastructure Taskforce 2005, *Australia's Export Infrastructure*, Report to the Prime Minister, Canberra, May, 20. We would add 'and the scale of the economic damage likely to be caused by such misuse'.

These concerns about the potential negative effects of the access regime implemented by the National Access Regime are heightened by the fact that it casts a shadow that extended well beyond the direct effect of any declarations and certifications made under its provisions. The Productivity Commission observed that:

Since its introduction in 1995, the national access regime has proved to be an innovative, but often controversial, piece of economic regulation. Although determinations under Part IIIA have been relatively few in number ...the regime influences the framework for the provision of access in most of Australia's essential infrastructure sectors (Productivity Commission 2001, p xv).

2.2.3 This risk of scope creep

The tendency to apply a regulatory tool, once it becomes available, to situations for which it was not originally intended has been widely discussed¹⁸. This tendency is not irresistible: but, if we are to ensure that the application of regulatory tools remain confined to the domain for which they are well-adapted and appropriate, it must be consciously and consistently resisted. This point was made by the Productivity Commission in its 2013 review of the National Access Regime:

Access regulation can address an enduring lack of effective competition, due to natural monopoly, in markets for infrastructure services where access is required for third parties to compete effectively in dependent markets. This is the only economic problem access regulation should address.

The scope of the Regime should be confined to ensure its use is limited to the exceptional cases where the benefits arising from increased competition in dependent markets are likely to outweigh the costs of regulated third party access to infrastructure services. Proposed changes to the declaration criteria seek to achieve this outcome.

Robust institutional arrangements, including an avenue to limited merits review, should ensure that access regulation is judiciously applied¹⁹.

Reinforcing the need to be conscious of – and to resist – the inherent tendency for scope creep is the asymmetrical nature of the economic risks involved. Its judgement that the costs of over-regulating were likely to exceed the costs of under-regulating led the Exports and Industry Task Force to argue that:

¹⁸ See, for instance, Better Regulation Task Force (UK) 2004, *Avoiding Regulatory Creep*, HMSO, London.

¹⁹ Productivity Commission 2013, National Access Regime, Inquiry report No 66, October 25, Ausinfo, Canberra.p2

In our view, there should be a presumption that issues associated with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users. We accept that this will often be imperfect, but it is still likely to be preferable to intrusive regulation. We therefore believe that some further tightening is desirable of the hurdles that need to be met before regulatory solutions are imposed on export oriented infrastructure²⁰.

In a submission to the Productivity Commission, a former head of the ACCC made a similar point more directly:

For a broad access regime that applies across the economy, the costs of being unduly generous in providing access are likely to be substantially greater than the costs of erring on the side of being slightly too stringent. As a result, the conditions for access should put greater weight on avoiding false positives than false negatives.²¹

2.3 Access to port infrastructure – other jurisdictions

For the most part, Australian jurisdictions have not provided a legislated right of access to any services provided by port infrastructure. In Victoria, a right of access to channel infrastructure was initially included in the regulatory framework, but it was subsequently removed. This does not appear to have had any adverse consequences. Only in South Australia and the Northern Territory (where the regime is closely modelled on the South Australian regime) does the relevant legislation define a set of regulated port services that are subject to an access regime²².

The only State-based regulatory regime that is certified as effective by the NCC is the South Australian regime. In the absence of a certified State-based regime, the way is open to port users to seek a right of access to port infrastructure through declaration under Part IIIA of the CCA. There has been only one attempt to secure access in this way. This was made by Glencore, which sought access to channel services at the Port of Newcastle. This application was initially successful, but the declaration was revoked following the changes made to the CCA in the wake of the Harper review.

²⁰ Exports and Infrastructure Taskforce, 2005, p45

²¹ Fels, A 2013, Submission to the Productivity Commission Inquiry into the National Access Regime, March.

²² Although no ports outside of South Australia and the Northern Territory are subject to access regulation, a small number of individual port terminals are. This has generally been the result of conditions imposed on a merger or through sector-specific regulation. Access to the Dalrymple Bay Coal Terminal is regulated by the Queensland Competition Authority.

3 Price regulation

3.1 The importance of proportionality

Price regulation may take a variety of forms, ranging from mandating the price that an enterprise may charge to simple disclosure obligations. The general economic principle is that of proportionality: as the potential economic damage from monopolistic pricing increases, it becomes easier to justify the costs and risks of more stringent price regulation. The potential economic damage from monopoly pricing depends in part on the extent of the market power possessed by the enterprise in question. But it also depends on the extent to which the prices charged by the enterprise affects the demand for the goods or services it produces. Port corporations generally have some degree of market power; but the impact of their pricing decisions on demand is generally very modest.

Conversely, as the intrusiveness of the regulatory regime increases, so does the risk of causing material economic damage. Monitoring regimes, such as that to which Flinders Ports is subject, are unlikely to give rise to substantial economic damage. They are generally less costly to operate and comply with than more intrusive regimes. They deliver a degree of comfort and protection for port users and allow the early detection of any exercise of market power. As well as involving materially higher compliance and regulatory costs, more intrusive regimes incur a greater risk of distorting investment decisions and encouraging economically inefficient strategic behaviour.

3.2 Price regulation in other jurisdictions

3.2.1 A clear preference for light-handed regulation

Australian States and Territories have adopted a light-handed approach to the regulation of port prices – in many cases, an extremely light-handed one.

The major commercial ports of Western Australia and Tasmania, and all of the major commercial regional ports in Queensland, are controlled by public or State-owned corporations. Publicly owned ports are not subject to oversight by an independent regulator in any jurisdiction. Generally, they enjoy considerable freedom in setting prices, although in most if not all instances there is some form of Ministerial discretion to overrule port corporation decisions.

The major commercial ports in NSW, Victoria and the Northern Territory, and the port of Brisbane in Queensland have been privatised.

There is no independent regulatory oversight of pricing at the privately owned port in Brisbane, or the privately owned ports of NSW. These ports merely have certain

obligations surrounding the provision of information –including the publication of a generally applicable tariff; and the possibility of being brought under more formal price regulation if the relevant Minister considers that they are abusing market power. This may be considered a form of price regulation, albeit an extremely light-handed one. But there are currently no formal price monitoring regimes; no oversight by an independent economic regulator; and no regular, structured reviews of the economic behaviour of privatised ports.

Following privatisation, the regional ports of Victoria were originally subject to Pricing Orders mandating particular pricing behaviour. But following the recommendations of a series of scheduled reviews (the first by the Office of the Regulator-General then its successor, the Essential Service Commission) the regime was progressively relaxed. After a period in which a price monitoring regime was applied to these ports, price regulation of Victoria's regional ports was eventually abandoned. This remains the case, and the services provided by these ports are no longer subject to the Port Management Act.

Outside of South Australia, only two ports are now subject to formal price regulation by an independent regulator: the port of Melbourne and the port of Darwin.

The price regulation introduced for the port of Darwin at the time of its privatisation adopted the South Australian regime as its model, so it is unsurprising that it is similar in many respects. The Northern Territory legislation, like the South Australian regime, provides the regulator with the power to decide what form of price regulation is to be applied.

However, subordinate legislation in the Northern Territory prescribes the use of price monitoring. The effect is to constrain the discretion provided by the regulator in the Act unless and until the government can be persuaded to change the Port Management Regulations. So, although it is possible to change the form of price regulation used in the Northern Territory, there are significant obstacles to doing so.

Prices at the port of Melbourne are regulated under a Pricing Order which came into effect on 1 July 2016. The Pricing Order defines the future pricing path for the charges from which the port derives most of its revenue. The role of the independent regulator (the Essential Services Commission) with respect to the pricing of prescribed services is reduced to periodic inquiries into the compliance of the Port of Melbourne with the terms of the Pricing Order and approving any proposed change in the balance of prices (including the introduction of new prices). To facilitate these tasks, the lessee is obliged to provide an annual statement of compliance.

If the ESC makes an adverse finding in its periodic compliance review, it could trigger a change in the regulatory regime. However, the process by which this would be effected is clearly intended to ensure that this step is not taken lightly (ESC 2017, pp24-25).

Changes to the Port Management Act made around the time the Pricing Order was issued also defined several new roles for ESC, including monitoring the behaviour of the port lessee in setting rents for port tenants. Under previous regulatory arrangements, rentals and leases for port property were explicitly excluded from the scope of price regulation.

3.2.2 Comparison with South Australia

The form of price regulation that is used to control the prices charged for regulated services provided by Flinders Ports is price monitoring. This is generally regarded as a light-handed form of regulation, with relatively low compliance costs and carrying less risk of undermining investment and discouraging efficiency initiatives. This is consistent with the terms of both the Competition and Infrastructure Reform Agreement and the recommendation of the Exports and Industries Task Force.

Nevertheless, it is clear from the above summary of price regulation in other Australian jurisdictions that price regulation of Flinders Ports is more stringent than at any of the other privatised ports in Australia, with sole exception of the port of Melbourne²³. Price regulation of the port of Darwin is similar to the South Australian regime in many respects. However, mandating price monitoring as the form of price regulation in subordinate legislation effectively lowers the level of regulatory threat faced by the regulated enterprise. Consequently, taken as a whole, the Northern Territory regime is slightly less onerous than the South Australian regime.

Price regulation of the port of Melbourne is significantly more intrusive than that to which Flinders Ports is subject. The regulatory trajectory prior to the privatisation of Melbourne was towards more light-handed regulation, and a case can be made for understanding the subsequent tightening of the regulatory settings as a political necessity rather than regulatory response framed primarily by economic considerations.

But even if we put this consideration aside, there are structural reasons for expecting that tighter regulation would be justified for the port of Melbourne than for Flinders Ports.

²³ It is also arguably more stringent than price regulation at most publicly owned ports. However, the reserve powers that Ministers have in the case of the pricing decisions of publicly owned ports complicate this assessment somewhat. The issue is that the Minister may in practice act as the guardian of the interests of port users, behaving essentially as an economic regulator; or the Minister may give primacy to the financial outcomes for the port, behaving essentially as an owner's representative. The trend in recent times has been towards the latter. Insofar as the Minister in fact acts as a regulator of public port prices, this provides a form of regulatory control that is potentially quite heavy handed. But insofar as the Minister acts as an owner's representative, this reserve power does not act as a form of economic price regulation.

3.2.3 Melbourne – the exception

The general principle of proportionate regulations requires that as the market power possessed by an enterprise increases – and hence the chance that it could get away with charging prices substantially above efficient costs also increases – the case for more intrusive economic regulation becomes stronger. There are clear differences between the port of Melbourne and ports controlled by Flinders Ports that indicate that Melbourne is more likely to possess market power. These differences are summarised briefly in this section and explored in more detail in the Annex to this report.

The disparity in market power is particularly striking in the critically important container trade. This trade is, by a large margin, the most important component of Melbourne’s business, and is also important for Flinders Ports. Melbourne is Australia’s largest container port, and almost all major container shipping services serving Australia include it on their itinerary. By contrast, the port of Adelaide – the only container port operated by Flinders Ports – has been able to attract calls from only a minority of these lines. The location of Adelaide makes attracting lines in the largest and fastest-growing trade – the trade with North and East Asia – particularly difficult. As a consequence, a substantial share of containerised cargo (particularly imports) that is ultimately bound for South Australia continues to be imported through Melbourne.

Melbourne also enjoys a strong market position in its other major trade – the importation of motor vehicles. Once again, it has the only motor vehicle import facilities located in the large Victorian market. It would be very difficult for those importing cars intended to serve this market to call elsewhere. And once again Melbourne is able to leverage this strength to compete as a point of importation for cars ultimately destined for South Australia. Flinders Ports, by contrast, must compete vigorously to win a share of even its home market.

The market position of Melbourne is not so strong in the bulk trades. In these trades, it faces competition from the regional ports of Geelong and Portland. But bulk cargoes form a small part of Melbourne’s trade: containers and the motor vehicles trades generate most of its revenue. It is therefore the container and motor vehicles that must be given most weight in assessing whether the level of regulation in the port of Melbourne is proportionate.

3.3 Evidence of the need for change

The form of price regulation to which Flinders Ports is subject is not new: it has been in place since the regulatory regime was introduced. ESCOSA has repeatedly found, in reviews conducted over this period, that it remains appropriate for the competitive conditions that prevail in the market for essential maritime services in South Australia.

It is reasonable to argue that this assessment should stand unless one (or both) of two things has changed over the last regulatory period:

- There has been a significant decline in competitive pressure on Flinders Ports over this period; or
- The pricing behaviour of Flinders Ports over the period has revealed that the previous assessment of ESCOSA was wrong, and Flinders Ports had both the incentive and the ability to increase prices above competitive levels.

In this section, we examine the empirical evidence for each of these propositions.

3.3.1 Changes in competitive conditions

There does not appear to be any structural reason to believe that the level of competitive pressure on Flinders Ports is any lower than at the time of the previous ESCOSA review, and some reason to believe that it likely to have intensified.

As discussed in Section 3.2, Adelaide faces competition in the container and motor vehicles trades from Melbourne. With Melbourne now in private ownership, it is difficult to see any decrease in competitive pressure from this source.

It is clear from Table 1 that there is lively interest in developing new regional ports that will compete with Flinders Ports for both existing cargoes and emerging opportunities. This interest is certainly no less, and probably more, intense than at any time since the inception of the regulatory regime.

Table 1: South Australian ports and port proposals – competing port operators

| Established ports not owned by Flinders Ports | |
|---|--|
| Port | Comments |
| Port Bonython | Historically used by Santos to ship liquid hydrocarbons and in more recent years, import of diesel fuel (IOR Terminals). |
| Penneshaw, Cape Jervis | Provide passenger transport facilities and intrastate cargo services to/from Kangaroo Island |
| Ardrossan | A bulk export port operated by Glencore – grain and dolomite exports. |
| Whyalla | Used by Liberty Steel to ship iron ore, steelmaking inputs and copper concentrate on a regular basis and steel products and other commodities on an ad hoc basis. Historically a single user port, it has now been opened for the carriage of third-party traffic ²⁴ |
| Recent Port Developments | |
| Lucky Bay | A transshipment-based port, operated by T-Ports which commenced bulk grain export operations in March 2020. Expected to ship up to 500,000tpa. |
| Prospective port developments | |
| Port Spencer (Peninsula Ports) | <p>Potential development of a deep-water wharf grain export facility.</p> <p>Awaiting financial close before deploying to site. Construction is planned to be completed by the end of 2023 in time to generate first revenues from the 2023/24 harvest.²⁵ Port is designed to deliver the following benefits</p> <ul style="list-style-type: none"> – Increased competition resulting in freight savings and supply chain savings – Advanced receipt and storage technology – The largest at-port storage facility in the region (currently planning for approximately 800,000 tonne capacity) – New access to affordable shipping capacity, particularly for small to medium traders, which will bring greater competition to global trade. This should contribute to higher prices paid for SA grain. |
| Port Augusta (Port Augusta Operations) | <p>Potential development of a transshipment-based iron ore export facility is planned. New port to be known as Port Playford.</p> <p>Development application was submitted in July 2020 and involves the development of a new iron ore export port featuring upgraded and new infrastructure and facilities designed to receive, store and handle iron ore.</p> <p>At this stage, it is anticipated the port will be operational by late 2022.²⁶</p> |
| Cape Hardy | Iron Road and EPBCH) – potential development of a deep-water wharf facility. Iron ore and potential hydrogen/liquid ammonia exports and grain. |
| Wallaroo (T-Ports) | Development of a transshipment grain export facility |

²⁴ [OZ Minerals inks export deal with Whyalla Port - Australian Mining](#)

²⁵ See <https://peninsulaports.com.au/>

²⁶ See <https://www.portplayford.com/>

3.3.2 Changes in pricing

As part of previous reviews, ESCOSA has commissioned price benchmarking reports. On each occasion, these reports have found that neither the level nor the rate of increase of Flinders Ports' prices were out of line with prices and price increases in the Australian port sector as a whole²⁷.

We have been informed by Flinders Ports that it generally applies the same percentage increase across all prices in a particular class (for example, all Cargo Services Charges are generally increased by the same percentage). We should therefore be able to get a good indication of whether Flinders Ports' prices have generally increased at a more rapid rate than prices at other ports by comparing prices for just one trade.

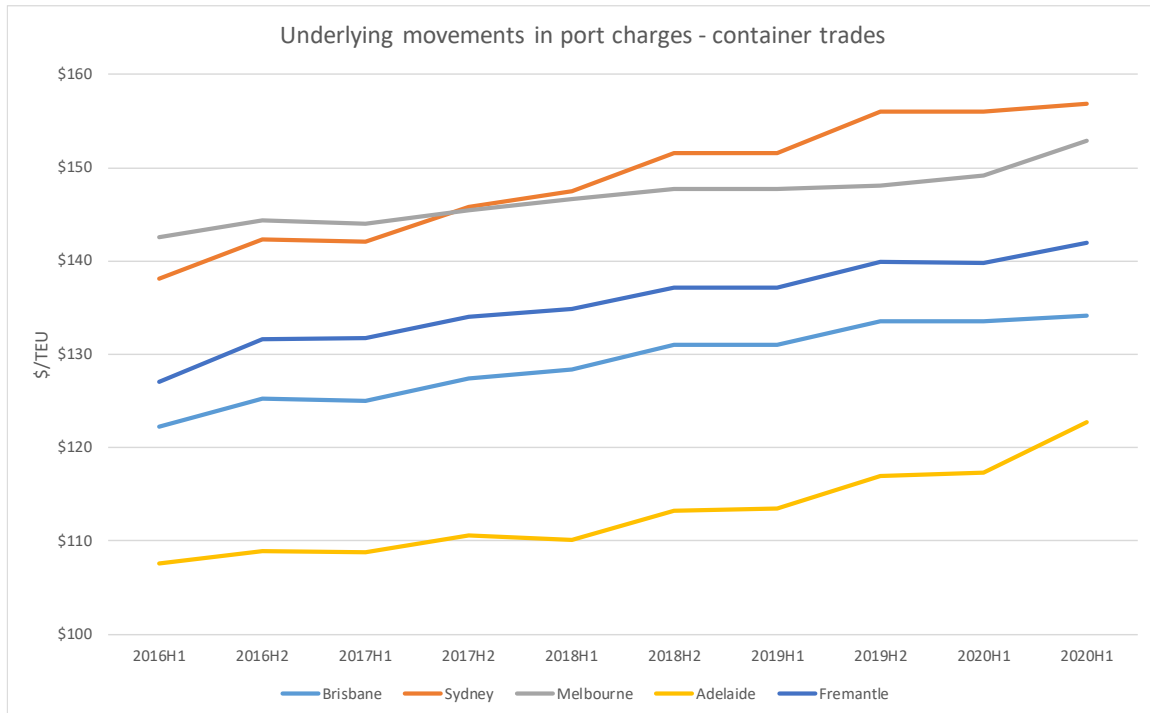
Data for the container trades is available through the BITRE's *Waterline* series. We have used this data to obtain an indication of whether prices charged Flinders Ports have increased more rapidly than prices at other Australian ports. There are some complexities in using the BITRE data for this purpose. Most of these arise because the measures used by BITRE are designed to track changes in the costs faced by port users, rather than the prices charged by port corporations. This means that some adjustments need to be made to use this data series as an indicator of general movements in prices.

Most of these adjustments are purely technical. However, one is more fundamental – this is how to deal with levies or price increases that are introduced specifically to fund major port improvements in port infrastructure. This is a longstanding practice in the port sector. Within the period covered by the BITRE's time series, several of the ports included in the BITRE comparisons have funded major improvement projects in this way. The ports of Melbourne and Fremantle both made one-off adjustments to their charge to fund channel deepening project during the 2000s; the port of Brisbane introduce a new change to fund improved road access to the port.

It would be inappropriate to read such increases, which are typically introduced after extensive consultations with users who support the need for the project and accept that a mechanism is needed to fund it, as evidence of the exercise of market power. They therefore should be excluded from any comparison of price movements designed to search for evidence of such power.

²⁷ Meyrick and Associates 2007, Benchmarking of Port Prices in Australia. GHD (2012) Port Price Benchmarking: Final Report.

Figure 1: Underlying movements in prices, capital city ports, 2016-2020



Source: Derived for data in BITRE Waterline 63 (October 2019) and BITRE Waterline 67 (December 2021). See also footnotes below and the Technical Appendix to this report.

In the ports covered by the *Waterline* publication, we have been able to identify three price adjustments of this type since the last South Australian Ports Prices and Access Review. One of these involves Flinders Ports, which, in 2019, introduced a new charge to fund the channel widening project²⁸. The others involve the Port of Melbourne, which, in 2020, substantially increased wharfage charges on import containers to fund the Port Rail Transformation Project²⁹; and the Port of Botany Bay (Sydney), where an increase in charges on full containers was introduced in 2019, also to support improvements in on-dock rail³⁰. All of these increases have been excluded from the estimation of general price increases shown in the chart above.

²⁸ In its 2020 Ports Price Monitoring Report, ESCOSA notes that ‘Channel levies for full containers (both 20 and 40 foot sizes) were increased by 2.2 percent for 2020-21 to allow partial recovery of the \$80 million Port Adelaide Outer Harbor channel widening project completed in 2019’ (p1). T

²⁹ The Port of Melbourne’s website reports that ‘The project is being funded by an amendment to the Pricing Order effective from 1 June 2020 that includes an increase in the tariff on full import containers of \$9.75 per TEU. (<https://www.portofmelbourne.com/>, accessed 19 January 2022).

³⁰ ‘An increase in wharfage fees for full import and export containers is to be implemented to help bankroll a significant on-dock rail capacity expansion at Port Botany. From 1 July 2019, a \$3.08 increase per TEU is to apply in order to cover the cost of the \$120m project. The project is expected to result in an increase in capacity at each of the three Port Botany container terminals. (David Sexton, *Rail Boost at Botany to Require Wharfage Fee Rise*, *Daily Commercial News*, 27 November 2018).

The chart shows that charges in the port of Adelaide remain materially lower than charges at other container port and have moved more or less in line with increases at most of these ports. The underlying increase in Flinders Ports' charges (14%) is almost identical with that in Sydney; and slightly higher than the increase in Brisbane (10%) and Fremantle (12%). Over the same period, the Consumer Price Index increased by approximately 10.6%³¹.

Prices in the Port of Melbourne increased by only 5% over this period. But Melbourne's charges on containers are constrained by the provisions of the Pricing Order, issued prior to the privatisation of the port, and cannot safely be assumed to reflect changes in underlying costs.

As we noted above, the information available on which to benchmark movements in Flinders Ports' prices is limited. But there is nothing in the information that is available that would suggest the exercise of market power to charge prices materially above competitive levels. This is consistent with the findings of ESCOSA in its earlier reviews³².

3.3.3 Discounting from published tariffs

It is our understanding from discussions with Flinders Ports that, while the published tariff effectively defines the maximum that can be charged for regulated services, the prices paid for these services by many customers are substantially lower than the published rate³³.

From an economic perspective, the obvious explanation for this behaviour is the threat of competition. Unless the port perceives that there is a real threat that, at least in the long term, it will lose some or all of a customer's business unless it discounts its charges, offering a price discount would not make business sense. It would reduce revenue without reducing costs, and therefore reduce profitability.

A possible alternative explanation is a high elasticity of demand with port prices. This, however, seems unlikely except in rare cases of extremely low value cargoes. Port charges typically comprise only a small proportion of the total cost moving freight

³¹ Calculated as the increase between Mar 2016 (the first period covered by BITRE data) and Sep 2021 (the midpoint of the last period covered by the BITRE data).

³² See, for example, ESCOSA 2017, *Ports Access and Pricing Review*, p2.

³³ It is, in principle, permissible for Flinders Ports to charge a higher rate than the published rate as part of a contractual arrangement with a customer. But, to the best of our knowledge, there are no current instances in which this is currently done. Because a customer contemplating contracting with Flinders Ports would have the option of declining to do so and availing itself of the tariff rate, the circumstances in which it would be in the customer's interest to contract to pay a higher charge are likely to be very unusual.

internationally³⁴. Unless there was a real possibility that a shipper would, at least in the long term, find a way to transfer its business to another port, even quite large movements in port charges are unlikely to materially affect the volume shipped. If the volume effect is very limited, then the revenue gained from it will not compensate for the revenue lost by the drop in price.

3.4 The role of justification in a price monitoring framework

3.4.1 The underlying purpose

Before discussing how an assessment of appropriate price increases should be made, it is useful to reflect on why such assessments need to be made in the context of a price monitoring regime.

A price monitoring regime is, deliberately and by design, not a prices control regime. Determinative price control regimes, such as those typically implemented using the 'building blocks' approach, function by assessing and enforcing a limit on the revenue that a regulated enterprise is permitted to earn. The enforcement of this limit means that arriving at a definitive estimate is essential to the task. The regulator must settle on a precise value. Even though the precision with which the estimate is derived – and reflected in the regulatory decision – is epistemologically indefensible and economically meaningless, it is essential to the operation of the regulatory regime.

Price monitoring regimes do not carry this burden. The task facing a regulator administering a prices monitoring regime is very different. It is to scrutinise movements in prices in order to assess whether these movements provide evidence of the exercise of market power. If prices rise materially faster than costs, this would normally be considered *prima facie* evidence that market power is being exercised, and a signal that more rigorous forms of regulatory intervention may be required.

This task inevitably involves the exercise of judgment. It does not require – nor is it improved by – the pursuit of false precision that is an inevitable part of determinative regulatory judgements. It is necessary for the regulator to form a judgement on whether price increases over the regulatory period have been 'reasonable' under all of the circumstances. 'Reasonable', in this context, means compatible with the level of price rises that might have been expected in a workably competitive market.

Forming such a judgement will be based, amongst other things, on indicators of the extent to which costs have changed over the period. But consideration of these indicators, and

³⁴ For containerised cargoes, we estimate less than 5%.

an assessment of what they imply for the reasonableness of observed prices, will properly be mediated by the broad range of qualitative considerations. These will include, for example:

- An understanding of any improvement or deterioration in the quality of service provided
- Appreciation of any material changes in the level of commercial and operational risk (for example, the impact of the COVID pandemic on the uncertainty of both costs and revenues)
- The implication of compliance with emerging regulatory requirements.

Assessment of the reasonableness of price increase cannot therefore be properly made simply based on a comparison with an index of cost increases, however this may be constructed. At best, such a comparison will form one of many components that should inform the regulatory judgment. Discussion of the relative merits of different ways of constructing a cost index should be read with this in mind.

3.4.2 The trade-off

The general principle here is that the price benchmark should allow the regulated enterprises to increase its prices in line with cost increases that are beyond its control. The underlying economic rationale is simple enough:

- On the one hand, if an enterprise is unable to increase its prices in line with unavoidable cost increases, it will eventually have neither the incentive nor the capacity to continue operating.
- On the other hand, if the enterprise is confident that it will be fully compensated for costs that it is able to control but will be able to increase its prices only if, and to the extent that, costs increase, its incentive to operate efficiently will be undermined.

But although the principle is straightforward, applying it in practice is much less so. The nub of the matter is the difficulty of distinguishing between controllable and uncontrollable cost increases.

There is a degree of asymmetry in the information available to regulated entities and regulatory authorities: businesses are likely to have a clearer view of their costs and what measures can be taken to reduce them than a well-informed outsider. There is therefore an understandable tendency on the part of regulators to rely heavily on quantities and indexes that cannot be influenced by the behaviour of the regulated entity. Preference is usually given to indicators of cost increases that are generally accepted as authoritative

and that are publicly available. The most widely known and widely used is the Consumer Price Index (CPI).

One problem with the use of the CPI is evident from its name: it is an index of *consumer* prices. In a general sense, one would expect there to be some correlation between movements in the CPI and the costs faced by producers: both are broadly influenced by inflationary trends. But there is no good reason to expect that an index reflecting the costs of a basket of consumer goods will accurately reflect the cost increases faced by producers in general, and even less reason to expect it to be a good measure of the cost pressured faced by a particular enterprise.

For an enterprise such as a regulated port, this can in part be remedied by developing a composite index based on publicly available data on trends in prices in the most important inputs to production. For example, the Australian Bureau of Statistics (ABS) produces a range of producer price increases for various industries, such as the construction industry, that reflect movements in the prices of specific goods and services³⁵. It also produces indexes of labour costs for specific industry groups. Using an appropriately weighted average of these indexes is likely to give a better indication of changes in unavoidable input costs for a regulated enterprise than movements in the CPI.

For an industry comprised of relatively homogenous firms operating under similar circumstances – for example, for a trucking company – this approach is likely to produce a close approximation to the actual changes in unavoidable costs. However, infrastructure enterprises are typically subject to regulation precisely because these conditions do not apply.

Ports are particularly diverse. Most obviously, ports operate in specific locations, and cannot move their operations to take advantage of lower input costs. Regional differences in costs (and cost movements) are therefore unavoidable: the movement in costs – and especially in labour costs – is likely to be quite different for a port in the Pilbara than for a port in Tasmania.

Additionally, each port operates in materially different physical conditions, determined in part by physical geography and in part by the built environment within which it operates. There are differences between ports in the scale of their operations, and the mix of trades that they serve. And the range of services provided by individual ports also differs widely. Some, like the port of Portland, provide pilotage services; others do not. Some, like the port and Gladstone, are engaged in cargo handling activities; others are

³⁵ A summary of these indexes is provided at <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/producer-price-indexes-australia/latest-release>

not. Some, like the port of Melbourne, are actively engaged in the development and management of rail terminals at the port; others are not.

Finally, investment in port facilities is typically intermittent, and it is not uncommon for major investments to be large enough to materially affect the overall costs of the port.

3.4.3 Striking a balance

The difficulties discussed above make the development of an industry-wide price index both more difficult and less useful. To reflect accurately movements in the input costs faced by a particular port, the specifics of that port's circumstances and operations must be considered. This means we must confront directly the trade-off between the desirability of using an approach that closely reflects the movement in underlying costs and the desirability of using an approach that is demonstrably independent of discretionary decisions of management. There will never be a perfect solution to this problem. However, a reasonable balance is likely to be struck if the following principles are observed:

- Port costs are divided into two categories (which we will refer to as generic and idiosyncratic cost)
 - generic costs are those costs that are likely to change broadly in line with changes in the same category across the community (an obvious example is fuel costs).
 - idiosyncratic costs are the costs in which changes are closely tied to the circumstances in which the port operates (costs related to compliance with regulation – both environmental and economic – may well fall into this category).
- Unavoidable increases in generic costs are estimated by applying an appropriate index from a publicly available source. For each cost item included in generic costs it is likely that a suitable index, could be drawn from the ABS producer price or labour cost indices.
- Unavoidable increases in idiosyncratic costs are, in the first instance, estimated from changes in actual expenditure incurred by the port, but the basis for these estimates would be subject to scrutiny and potential revision.

Annex: Market power at the port of Melbourne

Container trade

Melbourne is Australia's largest container port, and almost all major container shipping services serving Australia include it on their itinerary. Analysis undertaken by Synergies immediately prior to the onset of the COVID pandemic indicated that over 90% of the major container shipping services serving Australia included the port of Melbourne on their itinerary; most of the remainder were services to New Zealand that called, in passing, at the port of Brisbane. All container services that call in Adelaide also call in Melbourne.

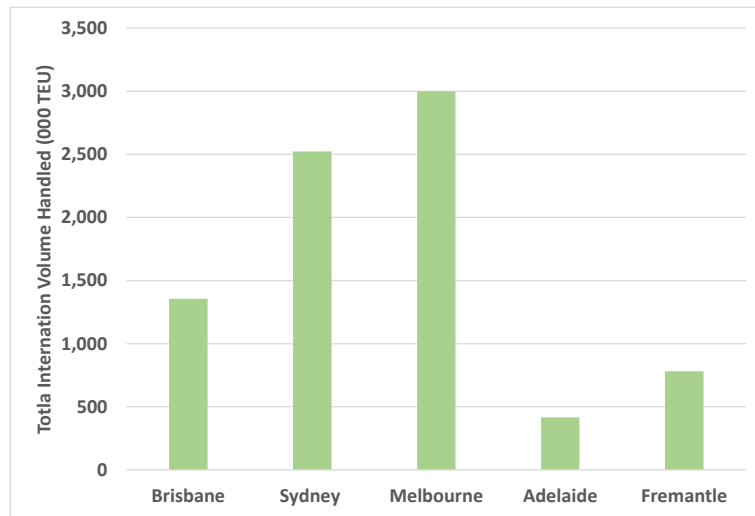
Most of the containerised cargo shipped through Melbourne is effectively captive to that port: competition from other ports is largely confined to cargoes to and from South Australia (for which Melbourne competes with Adelaide) and to and from a narrow band along the Victoria-NSW border (for which Melbourne competes with Sydney and, to a much lesser extent, Adelaide).

Adelaide's challenges

By contrast, Adelaide –the only container port operated by Flinders Ports –has historically regarded as, and in many cases is still regarded today, as an optional call. There are three main reasons for this.

- **Geography.** Adelaide is not well positioned with respect to Australia's largest and fastest-growing container markets in East and North-East Asia. Most ships serving this trade sail down the east coast of Australia to Melbourne, then turn and head back to Asia. As well as incurring additional port charges, ships in this trade would add approximately three days sailing time to their itineraries by calling in Adelaide. This is a costly extension that lines are typically very reluctant to make. Similar extensions are required for the itineraries of vessels serving the North American and New Zealand trades.

Figure 2: Australian container port throughput, 2020



- Scale.** The South Australian container market is much smaller than that of the other eastern seaboard States. Total full container throughput at each of Australia’s main container ports is shown in **Error! Reference source not found.** The South Australian market is somewhat larger than the volume through Adelaide would suggest, because some of South Australian cargoes are shipped though inter-State ports³⁶. But even when this is taken into account, it is clear that the volume of cargo on offer for container lines calling in Adelaide is only a small fraction of that on offer in Melbourne.
- Composition.** The composition of South Australian container movements is relatively unattractive to shipping lines. A substantial share of containerised imports that are ultimately intended for the South Australian market are routed via national distribution hubs, mainly in Melbourne³⁷. These goods are imported through the port of Melbourne. This happens to a far lesser degree with exports, a much higher proportion of which are shipped through the port of Adelaide. The result is that Adelaide is the only significant Australian container port at which the volume of full

³⁶ Most of this is shipped through Melbourne. Recent work undertaken by the Port of Melbourne indicates that in the order of 2% of its total container volumes originate in or are destined for South Australia. This would imply that total South Australian container volumes are approximately 15% larger than the volumes shipped through the port of Adelaide.

³⁷ Because of there, it is important to distinguish between the share of containers bound for South Australia that passes through inter-State ports and the share of containerised cargo that passes through inter-State ports. The former includes only those cargoes that are actually packed or unpacked in South Australia. The latter include all cargoes that travel on the sea voyage in containers but are packed or unpacked at an inter-State location and leave or enter South Australia in non-containerised form (typically as pallets loaded into trucks). The share of South Australian containerised cargo passing through inter-Sate ports is materially larger than the share of full containers. It is this latter share that is the true indicator of the extent of the competitive pressure from inter-State ports that Adelaide faces in the container trades.

export containers exceeds the volume of imported containers. This is unattractive to shipping lines for three reasons:

- Because, for Australia as a whole, the volume of full export containers is only a fraction of the volume of full import containers, exports are priced as a backhaul cargo, and export freight rate are much lower than import freight rates³⁸.
- To meet the needs of exporters, shipping lines must bear the cost of relocating empty containers from an import-dominant port (typically Melbourne) to Adelaide.
- Several major South Australian export cargoes – for example, wine – are typically dense, allowing containers to be packed to the maximum allowable weight. Under the circumstances that prevail in Australia’s export trades, heavy cargoes may be less profitable than lower density cargoes³⁹.

Implications for attracting shipping services

For the reasons outlined in the previous sections, it has been and continues to be difficult to attract and retain calls by container shipping service to the port of Adelaide. Although there have been a handful of (often short-lived) exceptions, in general success have been limited to two categories of service:

- Services to Southeast Asia. Many of these services circumnavigate Australia, effectively passing by Adelaide in their transit of the Great Australian Bight. For these services, the deviation cost of including Adelaide on their itinerary is comparatively small, and Adelaide is now served by several such services.
- Multi-continental services operating to Europe via Asia or on round the world services. Adelaide has also been provided with direct service to additional destinations in Europe or North America services that operate between Europe and Australia, or round-the-world itineraries. Once again, these services sail past Adelaide on their way to or from Melbourne, and the cost of deviation is comparatively small.

³⁸ The exact ratio varies from time to time and between commodities and customers, but our estimate is that export freight rates are typically between 30% and 50% of import rates.

³⁹ The maximum weight that can in practice be carried in a container varies according to a range of factors, including the destination of the container, but the limit is typically in the range of 20 -24 tonnes of cargo to a 20’ container (TEU). However, modern container ships are designed on assumptions drawn for the global average tonne per container of around 14 tonnes per TEU (including the weight of the container itself). This means that, when the average weight of the containers a ship is carrying exceeds 14t/TEU – a common situation in the Australian export trades – the carrying capacity of the ship is limited by the total weight of cargo rather than the number of container slots available. If the ship is operating at or near capacity, a container filled with high density cargo will effectively displace two TEU of lighter cargo.

Adelaide currently receives services from a total of seven major international container services, of which:

- Five are Southeast Asian services;
- One is a multi-continental services; and
- One is a service to the west coast of North America

Implications for container volumes

These limitations mean that Adelaide offers direct shipping services to only a limited number of international ports. However, the ports to which it can offer direct services include the major Southeast Asian hubs of Singapore, Tanjung Pelepas and Port Klang. Through these hubs, Adelaide is connected to the global container shipping network. As transshipment operations have increased in importance globally and become more efficient, they have gained wider acceptance a legitimate alternative to direct services by importers and exporters. This has had a positive effective on the competitive position of the port of Adelaide.

Helped by this, and by persistent efforts to market the port, the South Australian Port Corporation (originally) and Flinders Ports have successfully attracted more services to the port, and the share of containers with origins and destinations in South Australia that are shipped through Adelaide has gradually increased. Today the majority of South Australian containers are shipped through Adelaide. We estimate the share currently shipped through the port of Melbourne is between 7% and 12%⁴⁰.

However, building a container trade through the port of Adelaide has been a long, slow process that has, at every stage, required the port to win cargo that has historically been shipped through other ports (principally Melbourne). And this process is not irreversible. Although transshipment as an alternative now has broad acceptance, all other things being equal importers and exporters still prefer direct services.

The use of transshipment services opens up a number of supply chain vulnerabilities, including reliance on the availability of space on connecting services. These vulnerabilities have been particularly manifest during the COVID crisis. Figures provided by Flinders Ports indicated that, between FY2018 and FY2021, the long-term trend towards an increasing share of South Australian containers being shipped through Adelaide has reversed, and the volume of international containers shipped through Melbourne has doubled.

⁴⁰ The former figure is based on estimates provided by Flinders Ports of the 'leakage' of SA cargoes to Melbourne; the latter on the Port of Melbourne's estimate that 2% of Melbourne's volume is sourced from South Australia.

If we turn our attention to the volume of containerised cargo, rather than the number of containers, the market share of the port of Adelaide is much lower. As noted above, a substantial share of import cargoes ultimate destined for South Australia is unloaded in Melbourne, the containers are unpacked, and the goods sent overland to South Australia in non-containerised form. Using national figures for imported TEUs per capita, we estimate that only around 50% of containerised cargo bound for South Australia is imported through Adelaide.

The motor vehicle trade

Melbourne also enjoys a very strong market position in its other major trade – the importation of motor vehicles. Once again, it has the only motor vehicle import facilities located in the large Victorian market. It would be very difficult for those importing cars intended to serve this market to call elsewhere. And once again Melbourne is able to leverage this strength to compete as a point of importation for cars ultimately destined for South Australia. Flinders Ports, by contrast, must compete vigorously to win a share of even its home market.

Other trades

Melbourne has far less market power in the bulk trades, in which it faces competition from the regional ports of Geelong and Portland. But bulk cargoes form a very small part of its business: containers and the motor vehicles trades generate most of its revenue.

Bulk trades – and particularly grain exports – are a more important component of the trade mix for Flinders Ports. Historically, its position in these markets has been strong. However, increasing competition in this component suggests that Flinders Ports' market power in this trade segment has declined and is likely to decline further over the next regulatory period. The current and emerging competitive situation within South Australia is discussed in the next section.

Assessment

Both the circumstances in which more intrusive regulation was introduced and a comparative assessment of market power suggest that the form of price regulation now in force for the port of Melbourne provide little guidance on the appropriate way to regulate prices charged by Flinders Ports.