Regulation of Harbour Towage

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1. Introduction

The National Farmers' Federation is the peak body representing Australian farmers at a national level. Farming is a very important part of the Australian economy and it depends upon exports for its future prosperity. While agriculture makes up around 3 percent of Australia's GDP, it provides 21 per cent of our exports¹. As such, farmers have a strong dependence on marine freight for their livelihood. Cost increases that impact on the export of farmers' products are damaging to success in the tough, competitive international market place.

The NFF fought hard to reduce port costs. While there has been a welcome decade of significant waterfront reforms, the NFF is concerned that cost reductions are not being passed through to transport users. The national port interface cost index for exports stood at \$596 per teu² during January-June 2001, which is only slightly below the cost of eight years ago, January-June 1993, of \$608 per teu³. It is disappointing to the NFF that the benefits of waterfront reforms that were advocated by the NFF have been wound back, even slightly, by increases in other costs.

The current system for regulating towage is clearly not working. While the ACCC found Adsteam's proposed price increases were unjustified, Adsteam were able to ignore this determination and increase their prices anyway. Either the ACCC price oversight is important, in which case the oversight should have teeth; or the price oversight is unimportant, in which case there is no need for ACCC involvement.

It is however clear that there are elements of natural monopoly in harbour towage. Therefore some regulation is required to ensure that towage operators do not abuse their market power. This regulation can take the form of licensing or price regulation. The NFF considers that it is better to introduce licensing to the market than to strengthen the price oversight mechanism. Price regulation is more complex and costly and can produce poor incentives when compared to licensing.

2. General issues

2.1. Scope of the review

The Productivity Commission's inquiry specifically includes only those ports where harbour towage is regulated under the *Price Surveillance Act 1983* – namely, Melbourne, Port Botany, Port Jackson, Newcastle, Brisbane, Fremantle and Adelaide. The coverage of the Act reflected concerns about competition in these particular ports in 1991. However, there is now little to distinguish these ports from other ports in terms of the analysis that follows. Hence the NFF believes that the recommendations outlined below could easily be used in other Australian ports, as long as they are natural monopolies.

Applying the proposed solutions to only a small number of ports would mean that other ports would miss out on the potential efficiency improvements of improved regulation.

^{1.} Source: Australian Commodities vol8 no4, p674-676

^{2.} Twenty-foot equivalent unit.

Source: Bureau of Transport website: http://www.dotrs.gov.au/bte/docs/indicate/npicost.htm

2.2. Jurisdictional issues

The NFF understands that it is not clear which level of government can or should have the regulatory power over harbour towage. As towage is a vital service for exports and inter-State trade, the NFF would support the Federal Government having oversight of towage regulation. It is likely, however, that other levels would want involvement. No matter which level of government regulates towage, the jurisdictional issues should be solved quickly, without politics driving the outcomes.

3. Market power

Most independent authorities agree that towage is a natural monopoly in the ports that form part of this inquiry. There is only enough throughput at these ports to be able to support one towage operator. The imposition of two operators at these ports would be inefficient and unsustainable in the longer run.

3.1. Evidence that marine towage is a natural monopoly in Australia

Marine towage is largely a natural monopoly because any full-service operator needs to have at least four tugs (under current methods), whereas none of the relevant Australian ports can sustain eight tugs. If there are two tug operators in these ports, they will either operate eight tugs inefficiently, or one will operate less than four tugs and will therefore be unable to provide a full service.

There is an important body of evidence to support this argument. As noted by Queensland Transport⁴, the towage sector is characterised by a high degree of concentration (p5) and several recent reports by the Victorian Regulator General and the ACCC⁵ have concluded that towage is a natural monopoly. The ACCC and Productivity Commission⁶ also argue the view that sunk costs are high and there is a lack of competitive rivalry, implying that contestability of the markets is low. In our submission to the ACCC on Adsteam's proposed price increases (p6), we noted that the ability of Adsteam to offer discounts (or to price discriminate) suggests that it may be exercising monopoly power.

Lastly, we understand a trial of two tug operators at the port of Newcastle was unsuccessful as there was not enough demand to support two operators. We understand that a second tug operator has indicated it will set up in Melbourne in competition with Adsteam. Only time will tell if this move is successful, or whether Melbourne is a natural monopoly and cannot support two operators.

^{4.} National Competition Policy review of the *Transport Infrastructure Act 1994* Harbour towage provisions prepared for Queensland Transport by Economic Associates Pty Ltd.

^{5.} Office of the Regulator-General, Victoria (1999) Review of Port Services Price Regulation, Draft Report, November and Australian Competition and Consumer Commission (ACCC 1995) Inquiry into the Harbour Towage Declaration, December

^{6.} ACCC ibid, Productivity Commission (1998) International Benchmarking of the Australian Waterfront.

3.2. Problem with monopoly services

There are a number of problems with monopolies.

- Monopolies generally price their product above the competitive price and supply less than the competitive quantity. This means a loss of efficiency⁷
- For most practical purposes, monopolies do not have as strong a pressure to reduce costs or increase quality of service as exist in more competitive markets.
- For export oriented industries, such as marine towage, the reduction in quantity and increase in price can have an adverse effect on our balance of payments.

These problems can be limited or removed by government regulation.

3.3. Limits on the ability of tug operators to exercise monopoly power

Tug operators may be limited in their ability to exercise monopoly power by the countervailing power of ports or ship operators, or by competition between ports. The NFF is not in a position to comment on countervailing power; but we can indicate that it is unlikely that ports could compete against each other for most bulk farm commodities. As the value of these products is low per tonne, it can become uneconomic to move these commodities to other ports that are even a small distance away. In other words, bulk commodities are largely 'captured' by one port.

3.4. Market power summary

The NFF argues that harbour towage is a natural monopoly for the ports covered by this inquiry, and appropriate regulations need to be introduced to prevent abuse of this monopoly market power.

4. Designing towage regulation

Given the above argument, regulations are needed to limit or remove the potential for abuse of market power from harbour towage. There are two generic solutions to natural monopoly:

- Price regulation to cap the price for customers; and
- Granting of a license to operate the monopoly for a limited time period.

4.1. Benefits of licensing over price regulation

Price regulation requires the regulator to gather a large amount of information about the revenue and cost structure of the monopolist. Even then, the regulator may overlook relevant data and the monopolist may obfuscate or use creative accounting to 'massage' the information to its advantage. This method also means an elongated and costly process of claim, counter claim, decision, appeal etc as evidenced by the recent ACCC investigation of Adsteam's price changes.

There are also important theoretical and practical problems with price regulation. For CPI-X price regulation, it is difficult to set the discount "X" against the CPI so that cost reductions are encouraged, investment can occur, monopoly prices do not reappear and the business can earn an appropriate rate of return. If the regulation is based upon costs (as it appears the ACCC used for its investigation of Adsteam),

^{7.} Technically, the loss in consumer surplus is greater than the gain in producer surplus; the difference is the efficiency (or deadweight) loss.

then the incentive to cut costs could be very low (and may in fact be reversed if the regulator adopts a cost-plus methodology).

While licensing is not cost-free, it certainly appears easier and less costly than price regulation. The incentives for cost reduction and quality improvement can coexist; the only possible objection is that investment may not occur as the monopoly businesses are not necessarily in the market for the long term. This is clearly a problem for markets with high levels of immovable capital; however with tug operations, almost all of the capital costs occur in the tugs themselves – and tugs are very mobile capital. The remaining on-shore capital could be owned and maintained by the port authority. To the extent this problem remains, the license period can be extended appropriately (see section 4.3 below).

4.2. Choosing a licensee

Under a license system, prospective tug operators are asked to tender for the right to operate a monopoly towage business at a particular port for a number of years. The contract can be offered to the business that will:

- pay the highest fee to the government or port authority; or
- offer the lowest cost, highest quality combination to customers.

The first option transfers the benefits of the monopoly to the government, without reducing the size of the monopoly problems. The second solution removes the monopoly problems and is clearly preferable.

It is important that the licensee be chosen on the "lowest cost, highest quality" criteria only. There is a risk that if other criteria are used, the license process will degenerate into a competition over monopoly rents again (and possibly encourage corruption). This would be worse than licensing based on a fee to the government, as the rents would largely be dissipated in the selection process. The same concern applies if the licensor has wide discretion over the selection. Therefore, it is important that the selection process be clear, accountable and not subject to arbitrary discretion.

4.3. Length of license

A license would clearly have to be for a limited period of time, or else abuse of market power could reappear. However, the licensee would require a minimum license time to recoup its costs. This suggests that the license length should be longer for ports that require greater investment, such as from port-specific investments or because the costs of tendering for the license are higher.

4.4. Should the license be exclusive?

A non-exclusive license to operate tugs at ports is no different from the current situation. After a non-exclusive license is granted, the incumbent operator could continue operation at the port, greatly discouraging the entry of a new operator. It is therefore clear that for a license system to operate appropriately, it must be able to give the prospective operator exclusive rights to operate tugs for the length of the license.

4.5. Economies of scope

There may be efficiencies from a particular tug operator having the license in several nearby ports at the same time (called economies of scope), particularly because maintenance will be easier and cheaper to schedule. This possibility needs to be

analysed more closely; if it is shown to be an important factor, then it can be taken into account by issuing license tenders for a region simultaneously. However, it is important to ensure that this does not encourage market power to be re-established.

5. Conclusion

There are clearly problems with the current methods for regulating harbour towage. Either there needs to be effective regulation or no regulation at all. The NFF argues that there is a strong case for regulating this industry, preferably by issuing exclusive licenses for tug operations to the lowest cost, highest quality tenderer. This will ensure that Australia can maintain and strengthen its export position into the future.