Effect of declaration on incentives to invest in coal mines

A report for Port of Newcastle Operations

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Disclaimer

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1. Introduction

This report has been prepared for Port of Newcastle Operations Pty Ltd (PNO), the provider of a range of port-related services at the port of Newcastle.

PNO has made an application[1] to the National Competition Council (the Council, or NCC) seeking its recommendation that the declaration of certain services provided by PNO made by the Australian Competition Tribunal on 16 June 2016 be revoked, pursuant to section 44J of the *Competition and Consumer Act 2010 (Cth)* (CCA). The service the subject of the application (the relevant service) is:[2]

> The provision of the right to access and use the shipping channels (including berths next to wharves as part of the channels) at the Port [of Newcastle], by which vessels may enter a Port precinct and load and unload at relevant terminals located within the Port precinct and then depart the Port precinct.

The Australian Competition and Consumer Commission (ACCC) has written to the NCC stating that the primary economic concern in relation to the application of criterion (a) of the declaration criteria arises where, 'absent regulated access', there appear to be few limits on the ability of an owner of monopoly infrastructure to raise the charge for services, or otherwise impose terms and conditions of access that are other than 'reasonable'.[3] The ACCC says that this has two main potential effects, ie:[4]

- increases in prices for the relevant service may lead to reduced output in dependent markets, and potentially exit of firms from those markets; and
- investments that are made in or to use the service may be subject to hold-up, ie, the threat that once an investment is made, the service provider will seek to change the terms and conditions, including price, in its favour – fearing this outcome, customers will be reluctant to invest, or will make less desirable investment decisions.

In a letter dated 4 September 2018, the NCC requests that PNO provide additional submissions, documents and information to enable its consideration of whether it should recommend that the declaration of the shipping channel service be revoked.

PNO has asked us to address the second of four matters identified by the NCC, which corresponds with the second consideration we identify above as having been raised by the ACCC, ie, the effect of declaration on:

> Investment incentives in new coal mining projects in the port's catchment area…..

The remainder of our report addresses this question, ie, the effect of declaration on incentives to invest in new coal mining projects.

[1] PNO, *Application for revocation of declaration*, July 2018

[2] PNO, *Application for revocation of declaration*, July 2018, p 3.

[3] Letter from Rod Sims to Richard Home, 8 August 2018, p 5.

[4] Letter from Rod Sims to Richard Home, 8 August 2018, p 5.

2. Investment incentives

In this section we explain that there would be no discernible difference in the investment incentives in new coal mining projects, with and without declaration of the relevant service, because:

- the expected return from mining investments will not be discernibly different with and without declaration because:
  - it cannot be assumed that the terms of access to the relevant service will be any more favourable for any user or group of users with declaration than without;
  - port charges are only a very small part of the cost of supplying coal, and so any reduction in them arising from declaration is unlikely to have a discernible effect on the expected return from investing in new mines; and
  - investors in coal mines will not face any risk of ‘hold-up’ because PNO cannot set its terms and conditions of service so as to discriminate between one mine and another;
- the risk of investing in coal mines will not be discernibly different with and without declaration because:
  - port charges are only a very small part of the cost of supplying coal, and so any increase in the level of uncertainty over such charges could only have a similarly sized effect; and
  - the risks to the returns from investing in coal mines are subject to vastly greater sources of uncertainty, such as the variation in the price that investors may receive for their coal.

2.1 Investment incentives affected by return and risk

The incentive for a firm to invest in a coal mining project depends on the expected returns of the mining project over its life, and the degree of risk arising in relation to those returns. The incentive increases if either:

- there is a higher expected return, with the same level of risk; or
- there is a lower level of risk, with the same level of expected return.

The expected return from an investment is derived from the expected revenue minus the expected costs over the life of the investment.

2.2 Expected return on investment

We discuss below those matters affecting the expected return on investment in a coal mining project.

2.2.1 Prices for the relevant service will not be higher with declaration

PNO’s application for the revocation of the declaration of the declared service (PNO’s application)[5] sets out that:

- PNO currently provides open access to the relevant service and will continue to do so regardless of whether the relevant service are declared; and
- port charges are already set, and will continue to be set, so that they take into account the matters that are required to be taken into account in any arbitration relating to access to a declared service, including the mandatory considerations in section 44X of the CCA.

[5] PNO, *Application for revocation of declaration*, July 2018, p 17.

It follows from these considerations that there is no basis to conclude that the terms of access to the relevant service would be materially different as between the future with and without declaration.

2.2.2 Port charges are a small part of the return on supplying coal

Port charges for the combined channels and berth services have been estimated to be $AU0.53 per tonne in 2017,[6] whilst profits were approximately $45.39 per tonne.[7] Port charges therefore amount to around one per cent of the profit earned from supplying coal. A doubling of the port charge would therefore reduce profits by only about one per cent, assuming the entire amount of any such increase was absorbed by the coal supplier.[8]

Mine investments must take into account expected profits over a substantial period. However, port charges have been very small over a long period. For example, port charges have been less than 1.5 per cent of the thermal coal price since 1991.[9]

The small relative magnitude of port charges means that investors in mines cannot be expected to make discernibly different investment decisions, even if port charges could be higher without declaration of the relevant service. This is consistent with the decision of the NCC in 2015, which stated that the port charges:[10]

> …represent a minor component of FOB cost of coal at the Port of Newcastle, and as such are unlikely to have an effect on production or investment decisions…

2.2.3 Hold-up problem will not arise

The hold-up problem described by the ACCC[11] could only arise in relation to mine investment if, for each potential mine:

- an investor makes a specific and sunk investment in a coal mine, which can be best served through the PNO;
- after the investment is made, the PNO increases the port service charges in the knowledge that the mine will continue to operate as long as it earns a profit on its variable costs – in other words, some of the margin that the mine expected to earn at the time its investment was made would subsequently be transferred to the PNO; and
- knowing that this is likely to happen, the investor is less likely to make the investment in the first place.

The risk of such an outcome may only arise if PNO was able to increase the price of its service to each mine individually. Without this ability, there is no mechanism by which PNO can expropriate profits from each investment project.

However, the nature of port services negates any risk of PNO engaging in such price discrimination. PNO's customers are usually the ship owners and charterers (via their agents) and, under PNO's current arrangements, it does not have systematic visibility over the source of coal loaded on to vessels before or during the vessel's use of the Port. Without the ability to identify the source of coal, the port is unable to set navigation service charges in such a manner that it could expropriate profits from investment projects.

Consistent with this, it seems reasonable to expect that, when making investment decisions, mining companies would recognise that PNO does not in fact have unfettered pricing power in the absence of

[6] This represents the sum of the navigation & security charge ($AU0.46) plus the wharfage charge ($0.07). See: PNO, *Application for revocation of declaration*, July 2018, p 26

[7] PNO, *Application for revocation of declaration*, July 2018, p 26

[8] PNO, *Application for revocation of declaration*, July 2018, p 26

[9] PNP, *Application for revocation of declaration*, July 2018,p 25

[10] NCC, *Declaration of the shipping channel service at the Port of Newcastle,* Final recommendation, November 205, para 4.104.

[11] See also: Rod Sims, Competition key to restoring Australia's productivity, Speech, 4 September 2015

declaration, and so investment will not be affected by any form of hold-up problem. Nevertheless, even if a mine owner was to perceive such a risk, there is no impediment from a miner seeking to enter into a long term agreement in relation to the relevant port charges, prior to it committing to its investment decision.

2.3 Risk to investment

There are numerous ways of measuring the risk of an investment, but for the purpose of this report we use the uncertainty in the level of return, ie, revenue minus costs over the life of an investment. It follows that the risk increases with uncertainty in either revenues or costs.

We note in section 2.2.2 that port charges are a very small part of the return on investment from supplying coal. It follows that any increase in the uncertainty over the future level of port charges would only have a small effect on the potential range of returns from a mine investment. By way of example, if port charges were, say, to double, this would reduce coal mining profits by about only one per cent, assuming all of that increase was absorbed by the supplier of the coal (as distinct from the potential for any such cost increase also to be borne by the coal buyer and/or the shipping line transporting the coal).

Variations in the price of coal and other input costs play a far more significant role than port charges in determining the profitability of a coal mining operation. For example, we noted in our report from 2015 that:[12]

- Newcastle benchmark thermal coal prices had ranged from US$20/tonne to US$180/tonne in the previous 15 years;
- variations in the coal price exhibit a standard deviation that is 39.6 times (132.6 times) that of the increase in port charges in the period May 2014 – May 2015 (January 2010 – May 2015);
- shipping (bulk freight) rates are highly volatile, and had ranged from approximately US$8/tonne to US$53/tonne in the previous 10 years;
- freight costs have a standard deviation that ranges from 9.6 times to 18.5 times (depending on time period and export destination) that of the increase in port charges in the period March 2011 to May 2015;
- site costs have a standard deviation that is 46 times that of the increase in port charges in the period 2006 to 2014;
- transportation costs have a standard deviation that is 8.6 times that of the increase in port charges in the period 2006 to 2014;
- marketing and finance costs have a standard deviation that is 2.8 times that of the increase in port charges in the period 2006 to 2014;
- business cost (free on board) have a standard deviation that is 49.6 times that of the increase in port charges in the period 2006 to 2014; and
- exchange rates have ranged from approximately 0.70 USD/AUD to 1.1 USD/AUD in the last five years, although a relatively high correlation between the AUD/USD exchange rate and USD thermal coal price have negated some of the effects of this volatility.

Since 2015, thermal coal prices have maintained their volatility, eg, prices approximately doubled in less than a year from the beginning of 2016.[13] The effect of this volatility would have been to multiply the expected return on a mining project by about six times, from around $10/tonne to $60/tonne.[14]

The result of these other influences on expected returns from mining investment is that any risk to investing in mines from uncertainty over the cost of port charges is immaterial when set alongside the range of the other, much more significant risks set out above. In our opinion, it is very difficult to envisage how any

[12] HoustonKemp, *Potential declaration of services provided at Port of Newcastle*, 1 October 2015, p 10

[13] PNO, *Application for revocation of declaration*, July 2018, p 29.

[14] This assumes that the cost of production are around $40/tonne and an initial price of coal of $50/tonne, and a final price of $100/tonne.

reasonable assessment of the risks associated with future changes in the level of port charges could be such as to have a discernible effect on mine investment decisions.

This is consistent with the decision of the NCC in 2015:[15]

> While the Council acknowledges this concern, it remains the case that any uncertainty that exists is in relation to charges that are a very small component of the overall cost of delivered coal. Coal producers also face significant uncertainty from changes in the price of coal, ongoing costs (for example labour costs) and changes in regulation, such as those dealing with carbon emissions. Compared to these other sources of uncertainty, any uncertainty about charges at the Port of Newcastle is likely to be relatively small.

[15] Para 4.102

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