Goldsworthy Railway Application for Declaration

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This submission to the Goldsworthy Railway application to have the services of the said railway declared under Part IIIA of the *Trade Practices Act*. The submission deals primarily with part 2(a) of Section 44G of the Act. Namely, it contends that declaration would not promote competition in any market, certainly not competition in any meaningful sense. The submission is a very much condensed version of arguments made by the author in the following article:

- Wills-Johnson, N, 2007, "Regulating Railways in Logistics Chains" *Agenda* **14(1)** 51-68

A copy of the relevant article can be provided upon request.

The most important issue associated with declaration of the Goldsworthy Railway (and indeed, any similar railway in the Pilbara) is that it is based upon a mistaken understanding of how a rational, profit-seeking railway operator would conduct itself when operating in an environment like the Pilbara. The mistake arises because analysis thus far has focussed on each link of the logistics chains which deliver ore to global markets, and not on the chain as a whole. If one starts with the chain as a whole, a rather different perspective emerges.

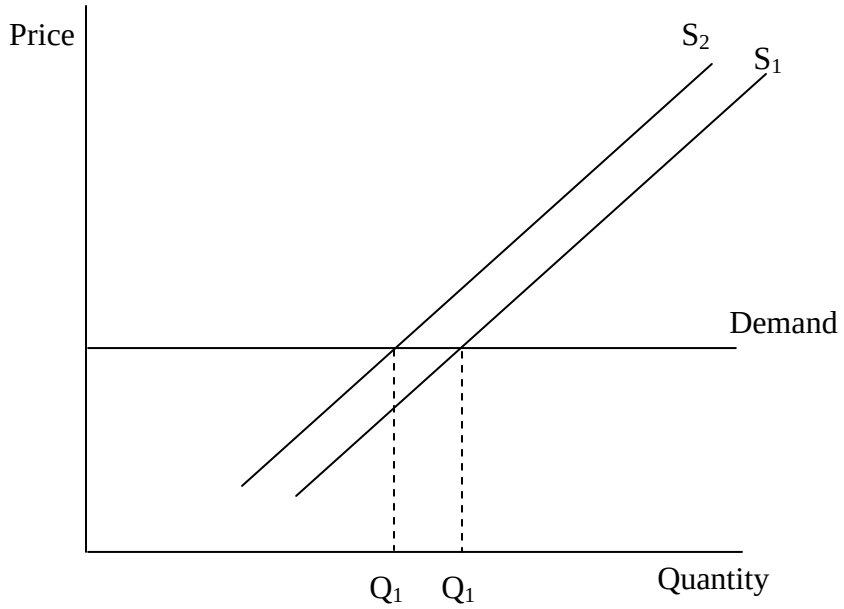
As the NCC made clear in an earlier determination, the global market for iron ore is competitive. There are thus no monopoly rents at the ends of the logistics chains which feed these markets (of which rail is a part). If there are no monopoly rents for the chain as a whole, then it stands to reason that no links in the chain will be able to appropriate monopoly rents from any other link in the chain; put simple, you cannot take something from someone which they do not have.

There are, however, resource rents; Australian mines generally have costs which are lower than those of their overseas competitors, and they are hence able to earn super-normal profits from their operations. However, the important distinction between resource rents and monopoly rents is that those who earn resource rents have the same incentives as those of a competitive firm; since they cannot influence market prices, they simply produce as much as they can at the going rate.

That is not to say that the presence of a monopoly in a logistics chain which earns only resource rents will never cause any problems. Consider the case where one has a number of different mines, all of varying costs, and one railway which provides transport services to those mines. The railway owner will be interested in capturing as much of the resource rents as it can, and since it has the only railway track, it has a very good opportunity to do so. Consider the case first where the railway owner charges a single price to the whole industry. In so doing, it will maximise its profits by focussing on the average mine, and pricing such that it would remove all of the resource rents from such

an average mine.[1] Mines with lower costs than the average would still make some super-normal profits, but the average mine would have to make do with just normal economic profits. Mines with costs higher than average would be forced out of business, because their own mine costs plus the railway haulage charge, would make their costs higher than the global price for their ore. The result would be a reduction in the Australian supply of the particular ore, as seen in Figure One, where the fact that the global market is competitive is exemplified by the horizontal demand curve.

Figure One: Effect of a Railway Exercising its Market Power in an Export Logistics Chain with a Single Price for Haulage.



It is apposite to ask, however, why a railway company would offer a single price of haulage to the entire market. It is a monopoly provider and it is impossible for its customers to on-sell its services. It is thus in a perfect position to price discriminate. Moreover, it can increase its profits by doing so. If a railway has a number of different customers, all with different costs, then it can increase its profits by tailoring its haulage charges such that it extracts all of the resource rents each mine would otherwise earn. Thus, those with below average costs would no longer keep part of their resource rents, as they could in the model described in Figure One. More importantly, mines with higher than average costs could now be serviced, provided of course that any additional costs they impose on the system as a whole (say by being far away, or up a hill) do not outweigh the benefits their extra profits earn.

Price discrimination depends upon information, and thus the railway operator would need to be knowledgeable about the cost structure of the mines to which it is providing service.

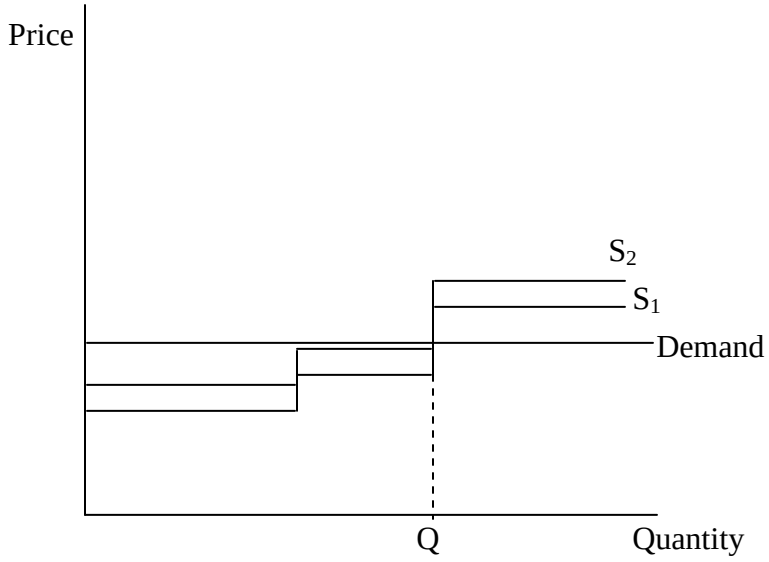
[1] The actual calculus will be based upon the output of all of the mines; the railway wants to maximise a combination of profit per unit and numbers of units shipped. For simplicity, we might presume here that all the mines have the same output, but different costs. The intuition is the same in a more complex case.

It would not need perfect knowledge, as a regulator does, but it would need to be reasonably close for the effort of price discrimination to be worthwhile.

Before continuing, it is worth noting that neither a single industry price, nor price discrimination as described above alters the final market price of the ore, which is determined by global markets.

If a rational railway, aware of its advantages in the logistics chain, is price discriminating, the relevant supply curve is no longer the industry supply curve of Figure One, but those of each one of the mines (the demand curve stays the same). Essentially, the railway sells haulage to each mine, not to the industry. This is important, because it is by no means clear that the supply curves of each mine will look like Figure One. Mines are themselves very capital intensive, involving large fixed costs. However, once fixed costs are incurred, marginal costs over a range of output often increase slowly, if at all. Thus, for a single mine, the equivalent of Figure One is likely to look more like Figure Two below.

Figure Two: Effect of a Railway Exercising its Market Power in an Export Logistics Chain where the Railway Price Discriminates.



Here, when the railway increases its haulage charges, the supply curve of the individual firm rises, as it did for the industry in Figure One. However, because of the shape of the supply curve, not only is there no change in price, there is also no change in output. All that happens is that some of the resource rent (or indeed all of it; a rational, fully-informed railway operator would increase prices by just a little more than shown in Figure Two, and capture all of the resource rents) is transferred from the mine to the railway.

There may be any number of good industry policy arguments for allowing mines rather than railways to capture the resource rents. Indeed, historically, Australian policymakers have done precisely this with the export agriculture industry, which was established on the back of low-cost rail services. However, competition policy is not about favouring one business over another, but about increasing competition overall. Whilst it is not clear that the supply curves of each mine will look exactly like Figure Two (which is deliberately presented as the extreme case), it is important to ascertain what they look like in order to ascertain what the impacts of competition policy might be.

It is apposite at this point to ask what might transpire in a context like Figure Two, if policymakers split the incumbent railway, and allowed entry to other above-rail firms. The answer depends upon how regulators allow the track owner to set access prices. If they allow the below-rail owner only a single price for access, then we are in the world of Figure One. The only difference is that the track owner has lost its monopoly power by virtue of regulation, and will be less able to price smaller mines out of the market. This phenomenon will not necessarily completely disappear, however; the railway track owner still has a right to a reasonable return on its efficient capital base, and the single price of access needed to earn this return might preclude providing services to some of the smaller, high-cost mines, regardless of how much efficient new-entry occurs. This optimal situation requires, of course, upon the regulator being able to accurately assess the cost base of the railway track, something which is not assured. If it errs by setting prices too low, then the track will degrade, and there will eventually be no asset left to argue about. If it errs by allowing prices that are too high, then a degree of the effect shown in Figure One will still occur, as it will if the efficiency losses of vertical separation are such that it actually costs more to operate two vertically separated railways than it does to operate one which remains vertically integrated.

If the regulator allows price discrimination, then the track owner can still do the same thing as the vertically integrated railway did previously; it can charge more for access to track which serves the lower cost mines (which have more resource rents to capture) than it does for access to track to higher cost mines. There is no difference in its ability to price discriminate (except where efficiency losses from splitting the railway mean some resource rents are dissipated), just a difference in the way that it does so.

Most importantly, if the original, vertically integrated railway is operating as per Figure Two and price discriminating, it will be acting to maximise the throughput of the logistics chain. It receives no benefits from not shipping ore that cannot be sold in global markets, because holding back supply does not increase the price at which the remaining supply can be sold. Also, the global price of iron ore does not change. Thus, there can be no positive change to the logistics chain as a whole, only a negative one if the move to a single price shuts out some supply. All that happens when one imposes third party access is that there are more players involved on the same chain. This is what I mean when I refer earlier to increasing competition in any "meaningful way"; using three or four or a dozen firms to export the same amount of ore at the same price as a single firm does now seems hardly a worthwhile goal of competition policy.

Why Has There Been No Access in the Pilbara?

Figure Two raises a second issue, which can be considered under Part 2(f) of Section 44G, namely whether access is in the public interest. Consider what the railway is doing in Figure Two as it increases its haulage charges (or indeed access charges, as noted above, the effect is the same) such that the cost curve of the mine increases from S_1 to S_2. It is appropriating some of the resource rents associated with the relevant mine. More importantly, it is doing so without incurring any additional risk to its business. Effectively, by virtue of owning the only link between the mine and the port, the railway owner can extract all of the resource rents the mine would otherwise earn. It won't change output or global prices, but will just take the cream from the mine's operations.

This must have occurred to the owners and operators of the railways in the Pilbara. Each operates mines of their own, and hence would have a reasonably good idea what the costs of FMG are in respect to mining. The obvious question is why they have not allowed access years ago, and charged an access fee which would appropriate all of the resource rents which FMG might earn from its mining operations. Some media reports have suggested that BHP and Rio Tinto are determined to capture all of the ore resources of the Pilbara for themselves, and are hence trying to shut others out of the market.

However, this does not stand up to scrutiny. If their mining costs are roughly the same as those of FMG,[2] the best they could do from undertaking mining themselves would be to earn the same resource rents from mining that they could earn from access fees. However, in order to do so, they would have to incur all of the risks associated with opening the mines themselves, such as the risk of ore prices falling after they have made expensive capital investment. It is much simpler to allow access, and charge fees which capture the rents. As global prices change, the access fees can move up or down accordingly , for if they are unregulated, then no regulatory restrictions exist to prevent them doing so.

The only logical reason why the incumbents have fought access is that they believe that allowing it will have negative impacts on their own operations that exceed the resource rents they could earn through access fees. Each of the incumbents has provided a number of scenarios outlining how such negative impacts could occur in their submissions to declaration proceedings undertaken by the NCC, and Rio Tinto has recently suggested they could cost upwards of $30 billion. This number is almost certainly an over-statement. However, the NCC's own assessment of these impacts, that they are "theoretical" and based on "improbable scenarios and pessimistic assumptions" is equally incorrect. The important point is not whose numbers are right, but rather that the incumbents don't really have a strong reason to lie about what they think the numbers are.

At face value, lower profits for the incumbents are not an issue which can be defined as being in the public interest. However, consider where the profits of the incumbents come

[2] If their mining costs are appreciably lower, it is in the public interest to let them mine the resources, because greater resource rents will mean more surplus available to all stakeholders.

from. On the assumption that the mining costs of the incumbents and FMG and the incumbents are roughly the same, since each earns profits based upon the resource rents their mines can earn, if providing access (freely, at a price with no regulatory intervention) has greater costs than benefits to the incumbents, then this can only mean that the tonnes hauled by the access seeker will displace more tonnes previously hauled by the incumbent.[3] In other words, the output of the logistics chain will fall. An iron ore logistics chain which produces less output because an access regime has been imposed is clearly not in Australia's broader public interest, which is intimately tied in maximising export revenues from minerals exports, particularly in the current climate when the market favours domestic producers.

The incumbents may, of course, be wrong; it may indeed be the case that it is possible to operate an access regime in such a way that the access seeker's operations do not impose a net cost on the access provider. This is something the NCC could examine more deeply. However, it is largely an empirical question, which is very difficult to answer a-priori. Fortunately, it is not one that has to be answered. FMG has itself created an open access railway in the Pilbara, and has been very keen to promote itself as a provider of access to third parties.[4] This means we have, rather uniquely, an opportunity for a policy experiment. Policymakers could allow FMG's open access railway and the closed railways of the incumbents to operate side-by-side for a number of years, with each being required to provide the requisite data for an objective assessment to made concerning their efficiencies. If, after the period of analysis, it transpires that FMG's open access is at least as efficient as the closed railways, then Rio Tinto and BHP would have no legitimate reason to oppose access any further. Since the industry involved is one of Australia's largest export industries, this form of experimentation is arguably more prudent than simply imposing access, and hoping that the NCC's estimate of its impacts (see above) is right, and that those of the incumbents are indeed "overly pessimistic".

[3] Alternatively, if costs are different, then the value of the haulage task overall will fall. This is not really in the public interest either.

[4] A corollary of this is that, based upon the discussion under Figure Two, FMG should face few restrictions on how it prices access, as doing so will impose regulatory costs with few appreciable benefits in terms of competition. This, however, is an issue for the ACCC to consider when it assesses the proposed access regime, not the NCC.