November 10, 2006

Freight Inquiry
Productivity Commission
LB2 Collins Street East
Melbourne Victoria 8003

Dear Sir/Madam

I'd like to thank the Productivity Commission (PC) for the opportunity of providing submission on the Discussion Draft regarding road and rail infrastructure pricing.

My query relates to the definition and underlining meaning of the term "competitive neutrality" as well as its welfare/efficiency implication. I'd like to raise this matter as I feel that it might be of some interest to the PC and some of the participates and have a bearing on the outcome of the inquiry as, according to the PC, "competitive neutrality between road and rail freight is a key focus of this inquiry".

The terms of reference for this inquiry state that the purpose of the inquiry is "…to assist COAG to implement efficient pricing of road and rail infrastructure through consistent and competitively neutral pricing regimes, in a manner that optimises efficiency and productivity in the freight transport task and maximises net benefits to the community." However the document stops short of providing more detailed guidance as to how the term "competitive neutrality" should be interpreted, leaving this task to the PC.

The terms of reference also require that pricing reflect all financial costs in each mode. As I understand, in economic terms, this requirement serves as a budget constraint for each mode.

My difficulty with the concept of competitive neutrality originates in that, in the context of intermodal competition, competitive neutrality seems to imply a broader application than what it is originally intended for as a principle of National Competition Policy, which is to provide a level playing field between public and private businesses providing identical services. In fact the PC has observed that "in the present context, assessing competitive neutrality is more complex because it is being applied more broadly to two transport modes which provide substitutable but often somewhat different services."

In Draft Finding 8.2, the PC offers its own interpretation of competitive neutrality:

Achieving the highest-valued use of resources generally requires prices for goods and services being equal to their short-run marginal social costs. This would also ensure that choices are 'competitively neutral'; that is, that they reflect relative costs.

Explaining why competitive neutrality promotes efficiency, the PC observes:

If prices of road and rail did not reflect their relative costs, there could be inefficient diversion of freight from a lower cost to a higher cost mode. Additional inefficiency could arise if prices for one or both modes were subsidised: there then also would be 'over-consumption' of freight services overall. However, because the two modes have quite different cost structures and institutional arrangements, ascertaining the extent of relative (and overall) subsidisation is difficult.

Given the observations made by the PC, it seems that there might still be room for more clarity around the underlying meaning of competitive neutrality: does competitive neutrality mean marginal pricing in each mode, or does it mean pricing arrangements that do not involve subsidisation in either mode? These two interpretations would seem to rule out the possibility of subsidisation if the competitive neutrality principle is to be applied as set out in the terms of reference. But what if one or two modes are currently being subsidised? What if one mode needs public funding to remain viable, as could be the case for rail at the present time? In those circumstances, does competitive neutrality translate into a somewhat different meaning, for example absence of relative subsidisation between two modes? In such case the question that naturally follows is: how should relative subsidisation be identified or measured? The PC has found that “the evidence that heavy vehicles competing with rail freight on major corridors are relatively subsidised is not compelling.” This view has significant implications to a number of PC’s findings and recommendations. However, without a proper understanding of “relative subsidisation”, it might be difficult to apprehend and appreciate the validity and significance of those findings.

Another interesting question relates to whether there is a theoretical framework that could be used to justify the presumed linkage between efficiency and competitive neutrality. A rich body of literature is available on efficient pricing for public utilities. In theory, a first-best outcome is achieved when price equals marginal cost. However, in the case of natural monopolies, decreasing average cost implies that marginal pricing is not viable, thus requiring some deviation of price from marginal cost. A second-best outcome under a profit constraint can be achieved through Ramsey pricing, where mark-ups over marginal costs are set to be inversely related to demand elasticties. This result however is limited to the multi-product monopoly case (Baumol & Bradford 1970). Attempts have been made to extend the pricing principle to rivalry in homogenous product markets (Baumol, Panzar & Willig 1982) and in differentiated product markets (Braeutigam 1979 & 1984). Other pricing approaches have also been proposed, such as two- or multi-part tariffs, which can produce a more efficient outcome (actually first-best) than Ramsey pricing (Brown & Sibley 1986).

As noted before, the terms of reference, which define the scope for this inquiry, explicitly require the adoption of the competitive neutral principle. However, absent a theoretically rigorous argument demonstrating the validity of the assumption that competitive neutrality (that is after the term has been properly defined) promotes efficiency in current setting of the inquiry, I feel less comfortable to accept such belief simply on good will. It seems that the main challenge is to identify and/or construct a proper model that provides a reasonable proxy to the subject of this inquiry, which is characterised by intermodal competition between rail and road with economies of scale evident in both modes. As challenging as it already is, this task is further complicated by the fact that the rail industry might not be viable at the present time absent public funding. Recognising the complexity of the issues at hand and the absolute criticalness of getting things right in the interest of the continuing economic growth in the nation, a thorough investigation into the linkage between efficiency and competitive neutrality and further research on appropriate theoretical framework might be warranted.

Once more I’d like to thank the PC for this opportunity of sharing some of my personal views. As a member of the community, I sincerely hope that the inquiry will bring about benefits to the entire community across the board.

Sincerely,

Zhen Wang