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Comments on the Draft Merger Guidelines (2008)

Submission to the Australian Competition and Consumer Commission

Author: **Professor Joshua Gans**

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Melbourne Business School 200 Leicester St Carlton VIC 3053 **T** (03) 9349 8173 **E** J.Gans@unimelb.edu.au **W** www.mbs.edu

Introduction

This submission provides some specific comments on various sections of the Australian Competition and Consumer Commission's (ACCC) *Draft Merger Guidelines*. Overall, this document represents a significant and important advance over the ACCC's previous guidelines. It incorporates a modern approach to anti-trust analysis and a clear statement of the type of evidence an economist would consider in evaluating merger proposals from a competition perspective. My comments here are to address a few remaining specific issues which fall short of the standard that the *Guidelines* otherwise has adhered to. They are not meant to detract from the overall favourable impression that I have of them.

Some Omissions

I first begin with considering some issues that were not given explicit treatment in the *Guidelines* but that, in my experience, have been of significance of numerous merger decisions.

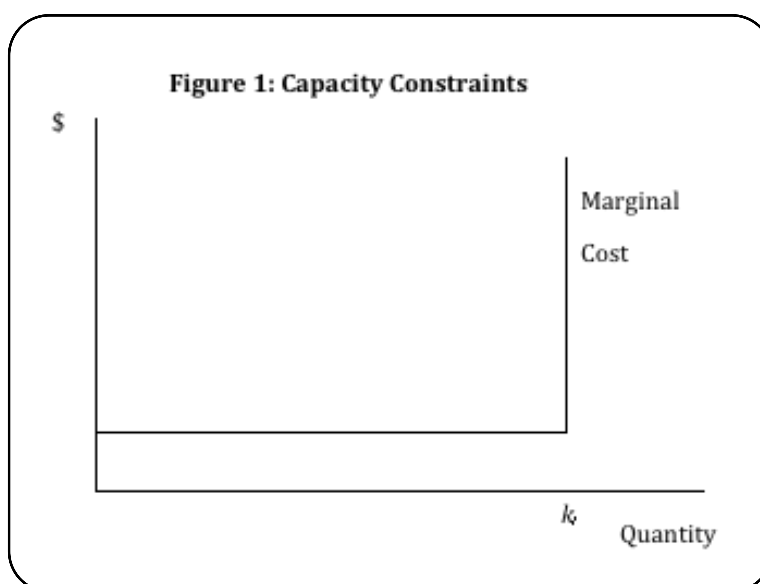
Capacity Issues[1]

The *Guidelines* discuss potential competition that can come from international competition. Of course, potential competition can be provided internally as well as externally. In a merger that I gave advice on a few years ago, it turned out that while the merging parties had 80 per cent of sales in a market, the industry had so much excess capacity that their capacity share was about 50 per cent. This meant that if their output was substitutable with output produced by others, even if they were to merge and shut down all of their production, demand in the industry could still have been served by existing participants.

In that case, there was an issue as to whether capacities were substitutable but that is not the key point: when looking at potential competition, **it is the capacity to compete that matters more than the actual sales achieved**. Indeed, when there is excess capacity in an industry, there are limited opportunities to exercise market power by merging or other means.

This issue was borne out in the recent decision by the Australian Competition Tribunal with regard to the quasi-merger of Qantas and Air New Zealand on trans-Tasman routes. The ACT found that new entrants such as Virgin Pacific and Emirates had built up sufficient capacity to constrain the pricing policies of Qantas and Air New Zealand even if that pricing was coordinated. The New Zealand High Court was not convinced about this and, as a result, the quasi-merger hasn't proceeded.

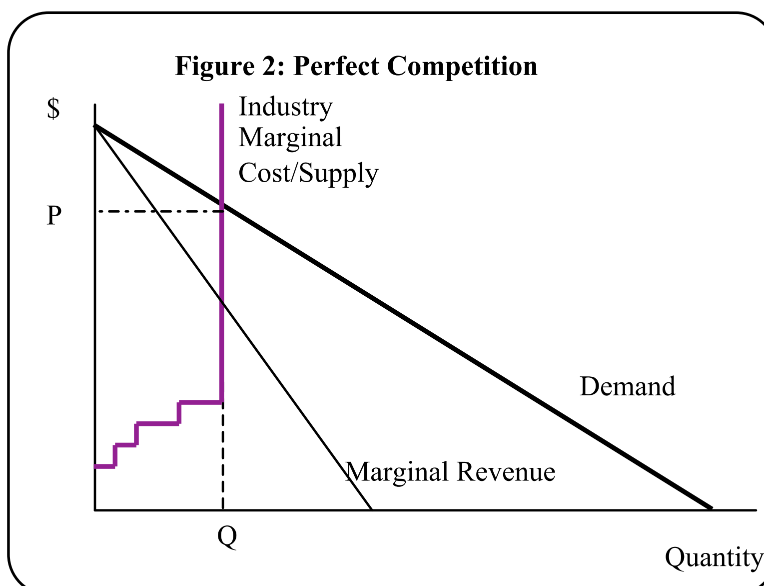
While excess capacity in an industry might bolster the case for merger approval, tight capacity constraints can do a similar job. Put simply, **when there are capacity constraints, the operational difference between monopoly, oligopoly and perfect competition breaks down**. Consequently, it is very difficult to conceive of situations where a merger that does not create a dominant player, can lead to a substantial lessening of competition in terms of downstream prices.



To see this, note that a capacity constraint means that a production facility cannot operate beyond a certain capacity, k_i. As production approaches k_i, the cost of producing even one

[1] Parts of this section are drawn from Joshua Gans, "Dealing with difficult mergers," *The Melbourne Review*, Vol.1, No.1, November 2005, pp.10-24.

additional unit becomes very large (possibly infinite indicating that such production is not possible). Below k_i, the unit cost of production may be much lower (comprised mainly of variable fuel, labour and raw material costs). As firms producing at close to full capacity will only incur these 'book' costs on their balance sheet, it can appear that their costs are low. However, this masks the capacity constraint, which means — from an economics and business perspective — the costs of producing more are very high. The nature of these costs is depicted in Figure 1.



Consider first a perfectly competitive industry where market demand is such that all firms in the industry are operating at full capacity. If there are, say, four firms, then this outcome may be as indicated in Figure 2. In this situation, as is well known, competition drives prices to be equal to the marginal cost of the least efficient active producer. In this case, given the capacity constraints, the perfectly competitive pricing outcome would be P. Thus, the capacity constraint means that prices are high and that firms, even under perfect competition, will earn profits.

Suppose instead that there is a single firm that owns all four production facilities. In this situation, its profit maximising price will be determined by the intersection of marginal revenue and marginal cost as depicted in Figure 2. Notice that this results in exactly the same price and output as the perfectly competitive case. Specifically, price is equal to marginal cost. The monopolist who is capacity constrained does not want to use its market power to restrict output as it is producing below its desired level. Thus, the pricing outcomes of a monopolist are precisely the same as in a perfectly competitive (or indeed oligopolistic industry).

To summarise, capacity constraints are the 'event horizon' of industrial economics: traditional (textbook) conceptions that mergers reduce competition and prices exceed marginal cost break down as those marginal costs themselves rise to infinity. For mergers, this means that tight capacity constraints reduce the scope for the usual anti-competitive effects.

For these reasons **I recommend that the ACCC consider explicitly how it will treat evidence on capacity and capacity constraints in its guidelines**.

Interaction between Vertical and Horizontal Issues

Like most textbook treatment of mergers, the Guidelines considers horizontal and vertical mergers separately and does so in a useful way. However, in modern industrial economics the 'stage in the vertical chain' where a merger occurs interacts with the degree of vertical integration. The most dramatic example of this concerns upstream horizontal mergers when there is no vertical integration.

To see this, note first that many supply agreements are negotiated between upstream and downstream firms rather than purchased on an open market. Supply agreements struck through bilateral negotiations are likely to be efficient in the sense that unit prices for inputs reflect upstream firms' marginal costs. Starting from any supply agreement where unit prices are above marginal cost, an upstream and downstream firm can always find, say, a mutually beneficial fixed payment that would compensate the upstream firm for lowering unit prices to marginal cost. Recent research has established that this outcome carries over to the situation where there are many upstream and many downstream firms.[2]

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2 For instance, see Catherine de Fontenay and Joshua Gans "Vertical Integration in the Presence of Upstream Competition," *RAND Journal of Economics*, 36 (3), 2005, pp.544-572.

This implies that, if two upstream firms merge, unit supply prices will still reflect marginal costs. Even if that merger gives the upstream firms a better bargaining position, there will be no pass-through of such higher costs to final consumers. The only time this may have an adverse impact on them is (i) if it causes some downstream firms to exit the market; or (ii) it causes some upstream firms or resources to exit. The former concern will not likely arise if there are credible alternative supply sources for the downstream firms. The latter concern may arise if upstream firms are able to shut down capacity. However, if new upstream firms are able to enter with new capacity, an upstream merger will only stimulate this. Indeed, under those circumstances, final consumers will be better off if competition authorities permitted all upstream mergers.

Of course, this all applies to upstream mergers between firms that do not own downstream assets. In 2004, Boral proposed a takeover of Adelaide Brighton with an undertaking to divest downstream assets so that its market share downstream remained unchanged. However, while this nominally made the merger an upstream one, its downstream presence raised concerns and the ACCC opposed the merger. The merger did not proceed.

The rule of thumb is that when the downstream assets of an integrated firm are greater than its upstream assets, a merger consolidating upstream assets is less problematic than if the integrated upstream firm is a net seller in wholesale markets. Indeed, based on this, to evaluate mergers that do involve vertically integrated firms, it is better to use a Vertical Hirschman-Herfindahl Index (VHHI) rather than traditional 'horizontal only' concentration measures.[3]

Dynamic Characteristics of the Market

In 6.53 - 6.56, the *Guidelines* discuss the legislative factor that the ACCC will consider the "dynamic characteristics of the market" in evaluating any merger. The *Guidelines* suggest that this will mean that the ACCC will look at "growth, innovation and product and/or service differentiation." However, the *Guidelines* do a poor job of explaining why these factors are important and in what respect they might impact on merger assessment. Instead we are offered: "In general, the more dynamic the changes and the more rapid the growth in a market, the less likely that a merger will substantially lessen competition." How exactly "changes" can be more "dynamic" is very unclear, especially to an economist.

What I understand to be the import of s50(3)(g) is that an analysis of a merger that considers a 'snapshot' of the market at a particular point of time might miss some attributes of that market that are relevant to the competition assessment. The *Guidelines* in fact acknowledge this elsewhere with the application of the "future with and without test" as well as a consideration of entry or expansion that might be triggered by the merger. However, the relevant considerations can go beyond just these things.

Consider, for instance, innovation. Some industries have higher rates of innovation than others. This is a function of the maturity of the industry as well as the nature of demand that might generate product innovation, in particular. The key question here is what will the merger itself do to the rate of innovation? On the one hand, scale can improve incentives to innovate as the expenditures associated with R&D are fixed while the return is dependent on the size of firm's market. On the other hand, increasing current scale can reduce innovation incentives as the merged firm fears cannabilisation of its existing product lines (now more valuable as a result of the merger). In order to adjudicate the effect of a merger on innovation will, therefore, require evidence on existing product lines, the degree of product innovation, the sources of new product introduction (are they from the merging parties or elsewhere) and the fate of innovation based entry -- either into the market directly or further upstream.[4]

So while I acknowledge that arguments based on innovation and future innovation at that are complex and often speculative, **there is a theoretical basis for understanding and evaluating such arguments and the *Guidelines* should spend**

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3 For a derivation and discussion of the VHHI see Joshua Gans, "Concentration-Based Merger Tests and Vertical Market Structure," *Journal of Law and Economics*, 2008 (forthcoming).

4 For a discussion of these issues see, for instance, John Sutton, *Technology and Market Structure*, MIT Press, 1998. See also Susan Athey and Armin Schmutzler, "Investment and Market Dominance," *RAND Journal of Economics*, 32 (1), 2001, pp.1-16.

some time articulating those and the framework that the ACCC will use to consider evidence on this. As it stands, little guidance is given despite the clear importance of this issue in the real competitive consequences of a merger.

Some Thoughtful Appendices

As a final request, these *Guidelines* are unusual in that they do not reference research, especially academic research, for the origins of key points throughout. Given the modern emphasis of the *Guidelines*, this is problematic for those for who guidance is being given to understand the basis for arguments in more depth.

Consequently, **I recommend that the ACCC provide an annotated bibliography, highlighting that research, that will direct readers to relevant research both in clearly exposited textbooks but also academic journals**.

To that end, it would also be useful to provide an appendix that provided historical information on mergers, their industry characteristics and decisions the ACCC has taken in the past. There is no better guidance than precedent and there is surely no harm in documenting and aggregating publicly available information in a useful manner. To this end, **an appendix that tabulated the merger, the relevant market, the market shares of the merging parties, approximate concentration, import shares and the broad decision taken would be a sound addition to the *Guidelines***.