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Goldilocks and the three bears - the story of market definition and the cruise mergers

Conventional merger analysis has traditionally relied heavily on market share calculations which, in turn, depend on a definition of the relevant market that is usually defined primarily with regard to demand-side substitutability. However, it is now generally accepted that market shares alone provide an incomplete basis for competitive assessment, especially in differentiated product settings where they can potentially either understate or overstate the likely competitive impact of a merger. Moreover, any assessment of the likely impact of a merger must also include consideration of supply-side as well as demand-side responses, since these can provide just as important a source of competitive constraint on attempts to raise price post-merger.

This Brief illustrates these points with reference to the investigations undertaken by various competition authorities into mergers in the cruise industry. These mergers involved premium operators P&O Princess (POPC), Carnival Corporation and Royal Caribbean Cruises.[1]

Market definition and market shares

The merger of POPC with either Carnival or Royal Caribbean would have created an operator with a share of UK "premium cruises" in excess of 60%.[2] Those shares would have fallen to around 30% if so-called economy cruises were also considered, and to below 1% on inclusion of all foreign holidays.[3] Market definition (as the pre-cursor to share calculation) might therefore appear to have been the decisive factor in these cases.

However, as the European Commission's recent draft Notice on the appraisal of horizontal mergers acknowledges:

> "…market shares give an imperfect indication of the intensity of competition in differentiated product markets"[4]

The inherently "in-or-out" nature of market definition, with equal weight given to every percentage point of market share within the relevant market boundary, means that share analysis alone may either under-estimate the impact of mergers between particularly "close" competitors, or exaggerate the competitive constraints between more "distant" products within the market.[5]

Measuring closeness

In the absence of concerns regarding post-merger co-ordination, the main worry with any merger is that the combined entity will have an incentive to raise prices, since sales that would previously have been lost to the (competing) other party to the merger will be retained within the enlarged firm. Thus, with regard to the merger of two firms producing A and B respectively, the UK Competition Commission (CC) merger guidelines highlight the relevance of "…evidence on the proportion of sales going from A to B following a hypothetical price rise of A. If a significant proportion of the sales were to go from A to B, then this would be a strong indication that the merger is likely to lead to a loss of competition"[6]

As a result, "a merger between two producers that offer products which consumers view as particularly close substitutes could generate a significant price increase" since the "closer" are the merging firms' products, the more likely it is, all else equal, that the sales lost by one will be gained by the other.

1 The POPC/Royal Caribbean transaction was considered by the UK Competition Commission, while the UK implications of the POPC-Carnival deal were appraised by the European Commission. The EC turned down an Article 9 request to repatriate the UK dimension of the Carnival case. Meanwhile, the FTC in the US investigated both transactions for their impact on the US market.

2 Pockets of even higher levels of concentration, together with areas of no overlap arise if the premium segment is further disaggregated into 'UK-style' and 'US-style' cruises.

3 Following their entry a few years ago, the major tour operators have rapidly established a significant presence at the economy end of the UK cruise industry.

4 European Commission (December 2002): Draft Notice on the appraisal of horizontal mergers, paragraph 29.

5 Moreover, market shares may overstate the ability of competitors to win additional sales and constrain pricing, for example where capacity constraints bind.

6 Merger References: Competition Commission Guidelines (June 2003), paragraph 3.29.

The best evidence on the "closeness" of the competition between the merging parties' products comes from the observation of past customer behaviour. Failing this, responses to hypothetical survey scenarios can often provide useful insights. Too frequently, however, a simple comparison of product characteristics has been relied upon in drawing inferences about the closeness of competition.

Comparing characteristics

Where products are differentiated in several different dimensions, a simple comparison of attributes may offer particularly limited guidance on the likely competitive impact of a merger.

Cruises provide a good illustration. One cruise will typically differ from another across a range of attributes, including quality, style, duration, departure date, itinerary, and departure point, as well as price. Consider the consumer whose first choice is an outside cabin on a premium 12-day cruise of the Western Mediterranean. Faced with the alternatives of a balconied suite on a 14-day economy cruise to the Western Mediterranean, or a standard inside cabin on a 7-day premium cruise along the Norwegian coast, which would that consumer consider as the closest substitute?

The answer will depend on the preferences of the individual passenger. If their absolute priority was to cruise in the Western Mediterranean, or to have a cabin with a sea view, then any switching would probably be directed towards the economy cruise. On the other hand, if they were primarily interested in the standard of the general facilities on board ship, or had a maximum of 12 days free for the holiday, then the premium cruise to Norway could be expected to pick up most switchers. Inferring likely patterns of substitution on the basis of product characteristics alone therefore risks the making of arbitrary conclusions as to the impact of a merger, unless good information on the preferences of customers for each of the various attributes of the products is available.

Evidence of diversion

The best information on demand-side substitution comes from evidence on the actual behaviour of customers. Where sufficient data are available – for example in the grocery sector where supermarket scanner data are available – it may be possible to employ econometric techniques to estimate the extent of diversion between individual products.

In examining the POPC cruise mergers, the US authorities obtained detailed data on individual transactions which allowed cabin prices and sales for different cruise ships to be tracked over time. In Europe, however, transaction level data were not collected by the authorities and an equivalent analysis was not undertaken.[7]

Supply-side responsiveness

However, even where sophisticated demand-side analysis can be undertaken, it is still important to take account of other sources of competitive constraint, including supply-side responses of existing firms in the market. Failure to do so is likely to result in too-interventionist a merger regime. The recent EC draft Notice on horizontal mergers acknowledges that, even if demand-side substitution is found to be limited, "…it may be relatively easy and not too costly for the active firms to reposition their products or extend their product portfolio".[8] These supply-side responses may provide the decisive competitive constraint which would defeat any attempt by the merged entity to raise prices post-merger, so it can be critically important to take them into account. Moreover, it is frequently easier to assess the likelihood of a supply-side response, since doing so relies largely on issues of technical feasibility rather than knowledge of (potentially unpredictable) consumer preferences.

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Survey evidence on customer's views on alternative cruises was made available to the Commission by Royal Caribbean, but was regarded as providing an incomplete view of customer perceptions of the competitive relationships between cruise operators.

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Draft European Commission Notice on the appraisal of horizontal mergers, paragraph 37.

The cruise industry offers notable examples of supply-side responsiveness. The fact that cruise ships can be (literally) repositioned means that a cruise ship currently sailing in the Caribbean, say, can easily re-locate to the Mediterranean. With some cosmetic adjustments, a ship that currently serves the North American cruise market can be switched to offer cruises aimed at European passengers. Even more straightforward, a cruise ship catering for an international mix of passengers could easily target a greater proportion of its capacity at the UK market.

Cruise operators have also shown themselves able to expand and to change the quality of their offerings. Fred Olsen and the Sun Cruises arm of tour operator My Travel (formerly Airtours), for instance, have used second-hand cruise ships to upgrade their offerings, while POPC has re-branded an ex-P&O Cruises ship to extend its cruise range to a new market niche through the introduction of its Ocean Village offering.

Consequently, even if demand-side substitution across the spectrum of current offerings of cruises is limited, this does not imply that a merger leading to substantial concentration in one particular niche will necessarily remove a competitive constraint that would permit prices to rise post-merger. The market under consideration can still be subject to effective competition if rival suppliers have the incentive and ability to reposition their offerings in response to new profit opportunities.

What Role for Market Definition?

Detailed evidence on the "closeness" of the competition between the merging firms can permit a more informed conclusion than simple market shares. However, this does not necessarily mean that market definition should be ignored or by-passed. The principles underpinning the market definition framework remain relevant and can play a valuable role in framing the subsequent analysis.

With this in mind, it is interesting to consider the varied ways in which market definition was approached by the FTC, the CC and the EC Commission in the cruise merger cases.

The FTC approach

According to the FTC's own analysis, an across-the-board increase in cruise prices would be unprofitable, suggesting that, by conventional standards, a broader market definition than cruises was appropriate. However, it argued that a different approach to market definition was needed in this case, since "…a hypothetical monopolist could likely use yield management systems to mitigate this effect, and thus likely raise average prices profitably…".[9] As a result, cruises were identified as a separate relevant market even though, by the FTC's own reckoning, non-cruise holidays imposed an effective constraint on cruises as a whole.[10]

In this case, a broad market definition would appear to have been more appropriate, since only then would all of the potentially effective substitutes for the cruise holidays of the merging parties have been identified. Of course, it is critical that the market definition exercise is then augmented by an in-depth competitive assessment of differentiation within that broad market. According to the FTC's conclusions, this analysis would have revealed that a post-merger strategy of differential pricing across cruises would be profitable for a monopoly cruise operator.

In fact, the FTC concluded that harmful unilateral effects of this kind were unlikely to arise, because sufficient competition among cruise operators would remain after the merger. Nevertheless, by blurring the boundary between the competitive assessment and market definition stages of the merger analysis, and identifying a separate cruises market despite the finding that cruises were constrained by non-cruise alternatives, the FTC risked omitting potentially relevant sources of competition from further analysis.

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See statement of the Federal Trade Commission concerning Royal Caribbean Cruises Ltd/P&O Princess Cruises plc and Carnival Corporation/P&O Princess Cruises plc, October 2002. Note that the effects of the merger on the US cruises market were somewhat different from those in the UK, so the substantive cases addressed by the US and European agencies were distinct.

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Presumably, the FTC believed that a hypothetical monopolist cruise operator could profitably raise the prices of a sub-set of cruise offerings, such as those available to 'early bookers', but could only do so because a sufficient proportion of any sales lost from that sub-set would divert to other cruises within its portfolio.

The CC approach

In its UK inquiry, the CC was also puzzled by the market definition aspects of the case. Although market definition was considered at some length, in the final analysis the CC was "…not able to come to a single view…"[11]

11 Competition Commission (2002): P&O Princess plc and Royal Caribbean Cruises Ltd, paragraph 2.64.

This conclusion seems to reflect unresolved disagreements within the CC. Some members interpreted the available evidence as indicating that the cruise industry was part of a broader holiday market, whilst others thought that an even finer segmentation than "all cruises" was appropriate. Ultimately, the market definition was simply left open, with no attempt made to narrow the range of possibilities.

The EC Commission approach

Whilst the European Commission noted the possibility of unilateral effects within a narrow sub-set of cruises (such as premium cruises), and examined these as part of the competitive assessment, it recognised that a mix of demand- and supply-side substitution justified a broader market definition, and settled on defining the market as all cruises marketed to UK consumers.

Conclusions

Faced with the problem of how to make appropriate use of market definition in merger analysis in a differentiated products setting, it is interesting to observe this divergence in the approaches adopted by the three regulators. The outcome is somewhat reminiscent of the children's story of Goldilocks and the Three Bears. Even judged on its own appraisal of the evidence, the First Regulator (the FTC) appears to have forced market definition to take on part of the role properly assigned to subsequent competitive analysis. The Second Regulator (the CC) seems to have given up on market definition altogether. But, on its own interpretation of the evidence, at least, the Third Regulator (the EC Commission) struck the balance "just right", recognising that there is some merit in framing the analysis through market definition, but also showing that this structural assessment is just an intermediate stage in the story, which must be augmented by consideration of the specific impact of the merger given the nature of the merging parties' businesses and the way competition works.

As it happens, no lasting damage was done by the divergence of regulatory opinion on market definition, since all three regulators reached a consistent conclusion on the substance of the cruise mergers. However, this need not always be the case. In this respect, the fact that none of the authorities decided on a premium-only cruise market definition, and the decisive role of supply-side arguments, were important.

Indeed, in terms of substantive analysis, the main lesson from the cruises cases is that even a full analysis of demand-side factors, including a careful assessment of "closeness", is not sufficient. The cruise merger cases show how supply-side responses can shed a light on the effects of a merger which is fundamentally different from that indicated by demand-side factors alone, and which deserves to be integrated fully into the competitive assessment.

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