11th Annual BIICL Merger Conference

Foundation Universitaire,
Rue d’Egmont 11
1000 Bruxelles

Tuesday 21 January 2014
09:00 to 16:00
Programme

09:00    Welcome coffee

09:30-11:00  Panel 1: Screens and Inferences in Mergers

Chair: Adrian Majumdar, RBB Economics

Has DG Comp opened the Pandora’s box of price pressure tests and what can be learned from UK experience?


Nelson Jung, Office of Fair Trading, “The OFT’s use of price pressure tests – what value do they add?”

Edyth Kyegombe, Shell – “What do businesses think about having their real life mergers assessed by theoretical back-of-the-envelope simulations?”

Giulio Federico, EU Chief Economists Team – “Reaction: what does DG Comp think about price pressure tests?”

11:00-11:30  Coffee break
The Art in Assessing Unilateral Merger Effects

BIICL Merger Conference
21 January 2014

Gregory J. Werden
Senior Economic Counsel
Antitrust Division
U.S. Department of Justice

The views expressed herein are not purported to reflect those of the U.S. Department of Justice
Caution about the Standard Model

- A model of price competition with differentiated products motivates insight on unilateral price effects from mergers.

- But one should never merely assume that insight from this standard model applies in a particular case.
Insight from the Standard Model

• Merger effects in the standard model are determined largely by diversion ratios among products combined by a merger.

• After a merger combining A and B, the incentive to raise A’s price depends on the resulting gain from B, and so on the diversion ratio from A to B times the margin earned on B.
Upward Pricing Pressure (UPP)

- UPP analysis assumes prices change postmerger to account for substitution at the margin among products combined.
- UPP calculations such as the GUPPI are not price increase predictions, and no rule of thumb identifies a large GUPPI.
Compensating Marginal Cost Reductions (CMCRs)

- CMCRs are cost reductions exactly offsetting the incentive for postmerger price increases in the standard model.
- CMCRs are computed from diversion ratios and margins and are most usefully expressed relative to premerger price.
Approximate CMCRs (aCMCRs)

- The aCMCRs omit second order terms in the CMCRs and also ignore the impact of differences in product prices.
- For a merger combining A and B, the aCMCR for A is B’s margin times the diversion ratio from A to B.
- The aCMCRs can be very close approximations.
Predicting Price Effects

- Price effects depend on the unknown curvature of demand as well as on diversion ratios and margins.
- By assuming a demand form, e.g., linear demand, price effects can be predicted using merger simulation.
- Approximations to predictions from linear merger simulation result from dividing the aCMCRs by two.
The Art in Merger Assessment

• Merger assessment entails a judgment about how best to characterize competition and gauge a merger’s impact.

• Insight from the standard model does not always apply.
Warning Signs

Hesitate to rely on insight from the standard model whenever:

- prices of different brands tend to equality;
- prices are set separately for individual customers;
- prices interact strongly with other competitive choices;
- prices are not set at the margin affected by the merger; or
- prices are not set at the usual competitive margin at all.
Equal Prices Across Brands

- Both collusion and intense competition are apt to entail price matching not observed in the standard model.
- Insight from the standard model clearly does not apply if premerger price matching would continue postmerger.
Distinct Prices Across Customers

- Bidding competition can work quite differently from that in the standard model because a price is set for each customer.
- With oral auctions, a merger affects a customer’s price only when it combines the customer’s first and second choices.
- The magnitude of the merger effect is determined by the closeness of the customer’s third choice to its second choice.
Interacting Competitive Choices

- Interaction with competitive choices other than price can substantially alter the unilateral price effects of a merger.

- Rarely, a merger can lead to product repositioning by the merged firm that greatly mitigates the merger’s price effects.
Lumpy Merger Effects

- Insight from the standard model does not apply if the unilateral effect of the merger is to alter a lumpy choice.
- The unilateral effect of a merger could be implemented by permanently withdrawing a block of productive capacity.
- The incentive to do so depends on costs and benefits not associated with marginal changes in price or output.
A Model of Drug Competition

• Suppose patients are treated with one of two drugs unless both are priced above $p$, in which case surgery is used.

• With prices not above $p$, both treat the same number of patients unless their price difference is at least $d$ percent.

• With such a price difference, the higher priced drug treats $s$ percent of the patients it treats without a price difference.
Equilibrium in the Model

• If $d$ is large, specifically $1 - d < 1/(2 - s)$, both prices are $p$; e.g., if $s$ is 50%, both prices are at $p$ if $d > 33.3%$.

• If $d$ is a bit lower, one price is $p$ while the other is $(1 - d)p$; e.g., if $s$ is 50%, just one price is $p$ if $18.4% < d < 33.3%$.

• For lower values of $d$, there is no equilibrium.
Conclusion

*Do not just assume that diversion ratios are the critical indicators of a merger's likely effects.*

*Always examine how competition works and how a merger is apt to alter competitive actions.*
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The OFT’s use of price pressure tests – what value do they add?

Nelson Jung
Director of Mergers
Background

**UK merger control**
- Is voluntary, not mandatory
  - Resources are targeted where needed
- Is administrative, not judicial
  - Decision makers are used to applying economic concepts
- Frequently examines local retail mergers with numerous overlaps
  - Particularly groceries cases with significant numbers of overlaps where pricing pressure tests can form part of a filtering exercise
- CMA will have formal information gathering powers at Phase 1

**Concept of diversion ratio**

![Diagram showing the concept of diversion ratio with firms A, B, and C, and diversion to others indicated by arrows.](image-url)
Price pressure analysis used in small number of cases

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<th>References</th>
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<td>Possible concerns</td>
<td>But actually…</td>
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<tr>
<td>● The analysis is too new</td>
<td>● Used by OFT regularly since 2008 (starting as early as 2005)</td>
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<td>● All these formulas are too complicated</td>
<td>● The underlying data inputs have been used/are for market definition. However, when products are differentiated, markets can look too narrow and price pressure analysis can be useful to identify areas of potential concern.</td>
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<td>● It always uses consumer surveys and they’re too expensive</td>
<td>● It uses evidence from internal documents, supply disruptions, market research and econometrics as well as consumer surveys</td>
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Or rather too simplistic?

**Possible concerns**
- The data may be poorly measured
- The analysis requires lots of hidden and unrealistic assumptions, so authorities should not rely on the psychology of a number

**But actually...**
- To the extent that economic evidence contains measurement errors, this is relevant to the weight attributed to the evidence
- Just one piece of evidence that is assessed in the context of other evidence
## Does it result in over-intervention?

<table>
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<tr>
<th>Possible concern</th>
<th>Reality</th>
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<td>The analysis is outcome determinative</td>
<td>Analysis is seen in the light of other evidence: “...the evidence on diversion and the GUPPI calculations corroborate this view.”</td>
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<td>By comparison to the traditional market definition and market share approach, it leads to more intervention</td>
<td>In the majority of cases where price pressure analysis has been used, it has been helpful to the parties’ arguments – so there may have been more references and possible Type I errors without these tools.</td>
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On balance, price pressure tests can be useful

- Price pressure tests can be a useful tool for the economic analysis for certain types of cases
  - screen/filter for differentiated products, horizontal mergers, markets where necessary data is available or obtainable

- Has its limitations, not outcome determinative
  - competitor reaction, product repositioning, buyer power

- OFT takes all evidence in the round when making decisions
Thank you.