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Unilateral versus coordinated effects: Comparing the impact of consumer welfare of alternative merger outcomes

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Unilateral versus coordinated effects

CCP Policy Briefing

BACKGROUND

- In merger analysis, unilateral effects arise from an individual incentive to raise prices post merger, while coordinated effects result from an increased likelihood of post merger tacit collusion. Either theory of harm may cause competition authorities to intervene in the merger.
- The recent theoretical literature on collusion, for example Compte *et al*.[1], has highlighted the crucial role of symmetry between firms, with the clear consensus that increased asymmetries reduce the likelihood of collusion.
- Since symmetric outcomes are most conducive to tacit collusion whereas asymmetric outcomes are associated with unilateral effects, there is a potential important trade-off between the two.
- Furthermore, tacit collusion may often be unstable i.e. subject to periods of breakdown and/or result in lower prices than are achievable through explicit collusion. Consequently, once breakdowns are taken into account, it is no longer always true that an outcome subject to tacit collusion results in lower consumer welfare than an alternative with unilateral behaviour.

METHODOLOGY

- Demand uncertainty is introduced to the Compte *et al*. model. This follows the literature initiated by Green and Porter[2] in which unobserved demand fluctuations are used as a means to introduce a lack of transparency. Once the market is not fully transparent deviations from collusive behaviour are no longer perfectly observable and therefore breakdowns in collusion can occur.
- Once breakdowns in collusive behaviour are allowed for, it is then possible to make meaningful comparisons between alternative outcomes where either unilateral or coordinated effects are expected to arise. This is illustrated by re-examining the Nestle/Perrier merger analysed by Compte *et al*.

KEY FINDINGS

- Compte *et al.* argue that the accepted remedy in the Nestle/Perrier merger enhanced the likelihood of collusion by placing too much emphasis on creating a third main player and too little attention to the increased degree of symmetry. In the current paper it is argued that assessing the merger solely in terms of the potential for collusion only captures part of the story.
- We show that, despite leading to an outcome less conducive to collusion, the merger absent remedies would be likely to harm consumer welfare due to a substantial unilateral effect. Even though the remedies may have made collusion more likely, collusive behaviour might breakdown and result in sufficiently frequent/long price wars such that consumer welfare is improved compared to the un-remedied merger. Therefore, also taking into account welfare losses from unilateral effects allows the remedies imposed by the European Commission to be seen in a more favourable light.

[1] Compte, O., Jenny, F., and Rey, P. (2002), Capacity constraints, mergers and collusion, *European Economic Review*, 46(1), 1-29.
[2] Green, E. and Porter, R. (1984), Non-cooperative collusion under imperfect price information, *Econometrica*, 52, 87-100.

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POLICY ISSUES

- The Nestle/Perrier merger highlights the conflict between theories of harm particularly starkly. However, this case is illustrative of a far more general trade-off between unilateral and coordinated effects. This trade-off has important implications for evaluating potential merger remedies.
- There is therefore a need for alternative approaches to be developed which, like the model developed in this paper, allow comparisons to be made between outcomes where different theories of harm are expected.
- This is also relevant for the merger simulation literature. Whilst simulation is now reasonably well established for examining unilateral effects, a recently emerging literature[3] aims to apply it to coordinated effects analysis. The next step would then be simulation models which allow comparisons between the two.

THE CCP

The ESRC Centre for Competition Policy (CCP), at the University of East Anglia, undertakes competition policy research, incorporating economic, legal, management and political science perspectives, that has real-world policy relevance without compromising academic rigour.

FOR MORE INFORMATION

The full working paper (10-3) and more information about CCP and its research is available from our website: www.uea.ac.uk

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[3] For example Davis, P. (2006), Coordinated effects merger simulation with linear demands, Competition Commission Working Paper. http://www.competitioncommission.org.uk/our_role/analysis/coordinated_effects_merger_sim.pdf.