

<b>Institution: University of East Anglia</b>
<b>Unit of Assessment: 18 Economics and Econometrics</b>
<b>Title of case study: Improving Remedy Design in Merger Control for the Benefit of Consumers</b>
<p><b>1. Summary of the impact</b></p> <p>Competition authorities (CAs) often regulate mergers through the imposition of remedies. The research conducted by Lyons and Davies shows that the conventional emphasis on structural remedies does not adequately safeguard consumers' interests. Their recommendations have been adopted by CAs and are now enshrined in revised guidelines on merger remedies used by the European Commission and the UK Competition Commission. Their research was instrumental in changing guidelines published in 2008 on licensing agreements used in mergers involving IP Rights, and drawing attention to the necessary conditions for effective behavioural remedies. This has, for example, enabled consumer access to pharmaceuticals at lower prices.</p>
<p><b>2. Underpinning research</b></p> <p>Remedies are at the heart of an effective merger control regime, yet they had previously been the subject of very little academic research before this work by Bruce Lyons and Steve Davies (L&amp;D), professors at the University of East Anglia, where Davies has worked since 1981 and Lyons since 1985.</p> <p>Their research was motivated by the observation that mergers are rarely prohibited when reviewed by a competition authority. If competitive problems are found, they are ten times more likely to be allowed subject to 'remedy' than they are to be prohibited. It is, therefore, crucial to ensure that these remedies are effective in safeguarding the consumer. The standard remedy is an undertaking to divest a particular set of assets, providing access or license rights. With the latter, a key issue is the price at which access is provided or rights are licensed.</p> <p>L&amp;D began their work on EU merger control and remedies in 2002 (award [A] in section 3). In summer 2003, they were awarded European Commission funding for research into how remedies could be better specified in EU merger control [B]. As the research expanded, it was funded by the ESRC (through the University's Centre for Competition Policy [C]). The research developed a novel methodology for appraising merger remedies, including the development of simplified simulations. A key part of the research consisted of detailed quantitative case studies of a number of mergers, including ex post reviews of 'what happened next'. L&amp;D's focus was on paper &amp; paper products and pharmaceuticals mergers. This was in order to understand the breadth of issues from relatively homogeneous products to high research-and-development innovation markets. Access to confidential data normally inaccessible to academics was facilitated by an in-house descriptive study of problems of remedy implementation conducted simultaneously by the EC's Directorate General for Competition. The research drew on earlier empirical studies on contracts and transaction costs ([1], [2]) and weaknesses in EU merger control [3].</p> <p>Key results of L&amp;D's pioneering research [4] led to practical recommendations including:</p> <ol style="list-style-type: none"> <li>a) Licensing contracts can be an ineffective remedy because they result in a long-term relationship with a competitor who can raise the licensee's costs. <i>L&amp;D concluded that licences should specify clear and well defined terms (including duration and payments) that do not result in anticompetitive pricing.</i></li> <li>b) There could be disproportionately high transaction costs in applying remedies, particularly in relation to small businesses (e.g. a single pharmaceutical in a small national market, where there may be very few potential buyers). <i>L&amp;D recommended that remedy packages should be carefully designed to address issues of buyer fit and transaction costs. Behavioural remedies (e.g. price commitments) would sometimes be</i></li> </ol>

*the best option for isolated markets or small countries, and where large buyers have an incentive to monitor.*

- c) Divestiture trustees are instructed by firms, with the Commission's approval. L&D found a principal-agent problem that, in practice, impeded the restoration of competition. *L&D concluded that the Competition Authority should instruct Trustees directly.*

### 3. References to the research

#### *Publications:*

*(numbers in curly braces are citations from Google Scholar, accessed 1 July 2013):*

- [1] B. Lyons, "Contracts and Specific Investment: An Empirical Test of Transaction Cost Theory", *Journal of Economics and Management Strategy* (1994), 3(2), 257-78, {132}.  
Reprinted in O. E. Williamson and S. Masten (eds.) *The Economics of Transaction Costs* (1999), Elgar Critical Writing Readers.
- [2] B. Lyons, "Specialised Technology, Economies of Scale, and the Make-or-buy Decision: A Test of Transaction Cost Theory", *Journal of Economic Behaviour and Organization* (1995), 431-43, {131}.  
Reprinted in C. Menard (ed) *The International Library of the New Institutional Economics vol.4, ch.13*, (2004), Edward Elgar.
- [3] B. Lyons, "Reform of European Merger Policy", *Review of International Economics* (2004), 12(2), 246-61, {36}.
- [4] **S. Davies and B. Lyons, *Mergers and Merger Remedies in the EU: Assessing the Consequences for Competition*, Edward Elgar (2007), {32}.**

#### *Research grants supporting this research and reflecting its quality:*

- [A] European Commission DG Enterprise (€13,750) for the project "Post-merger study: efficiency effects of a global merger in the iron ore industry" (S. Davies and B. Lyons, 2002).
- [B] European Commission DG Enterprise (€78,600) for the project "Theoretical and empirical analyses of the competitiveness impact of remedies in EC Merger Control" (S. Davies and B. Lyons, 2003).
- [C] ESRC award for c£8m (2004-14) for a Centre for Competition Policy (S. Davies, M. Hviid, B. Lyons and C. Waddams, 2004).

### 4. Details of the impact

The research by L&D has influenced policy on merger remedies made by competition authorities across Europe; specifically:

- European Commission (DG Competition)
- UK Competition Commission and Office of Fair Trading.

The focus here is on documented evidence of influence on merger remedy guidelines – in particular on the specification of licensing agreements used as a remedy in mergers involving Intellectual Property Rights. This follows from research finding a) in section 2. It is highlighted because L&D's influence is clearly observable: the European Commission (EC) incorporated their recommendation into its 2008 guidelines.

The final revised 'Notice on Merger Remedies' was published in October 2008 ([I] in section 5). L&D were the only respondents to comment on the inadequacy of 'reasonable and non-discriminatory (RAND)' licensing in the draft guidelines [II]. In direct response to L&D's criticism, backed by their detailed research of pharmaceuticals market, the draft section 65 in the final Notice was replaced by a requirement for precise formulas:

"It has to be further ensured that the terms and conditions under which the licences are granted do not impede the effective implementation of such a licence remedy. If no clearly determined terms and conditions for the granting of licences exist in the market at stake, the terms and conditions, including the pricing, should be clearly apparent from the

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commitments (e.g. by way of pricing formulas). An alternative solution may be to rely on royalty-free licences.” Wording to this effect was also added to section 38.

In order to understand how this is a major impact, we trace how L&D’s research came to the attention of those responsible for determining EC policy. The EC had consulted on the revised draft Notice on Merger Remedies [III]. Section 65 of the draft included the following extract relating to licensing terms:

“As regards the terms and conditions, it may be appropriate to rely on commonly accepted licensing terms in the industry at stake, i.e., if appropriate, on RAND as used in some standardisation processes”.

L&D’s research had found that similar terms such as ‘adequate compensation’ and ‘normal and non-discriminatory commercial conditions’ “... are open to abuse leading to ineffective remedies. Much clearer guidance is necessary to determine commercial terms and licence duration such that competition will be fully restored” [4].

L&D submitted evidence on this to the consultation ([IV]), with extracts from [4] including: “Insufficient attention was also paid in several cases to licensing terms, concerning royalties, arbitration, and duration. While terms like ‘adequate compensation’, ‘supply the product at a price which will ensure that the third party distributor can compete effectively in the market’, and ‘normal and non-discriminatory commercial conditions’ are referred to in decisions, these are insufficient to ensure an effective remedy.”

The Commission draft [III] was changed in the final Notice [I] as a result of the submission [IV] based on L&D’s research published in [4]. The fact that this was a direct result of L&D’s research is corroborated by Dr Svend Albaek (adviser of the Chief Competition Economist’s Team in the European Commission) in the extract reproduced in [a]. There is further evidence that Commission practice has *actually* changed to the benefit of consumers as a result. The required licensing remedies must now be “irrevocable, exclusive and royalty free” (e.g. merger cases Teva/Barr M.5295; Abbott/Solvay M.5661).

While impact on UK competition guidelines is less straightforward to document, it is no less significant. Lyons was a part-time member of the UK Competition Commission (2002-11) and, because of his research on merger remedies, was invited to be a founding member of its Remedies Standing Group (2002-06) and to join its Economics Advisory Committee (2008-11). During this period he was able to influence Commission thinking, and its revised guidelines (October 2008, [V]). As a result, Lyons has input his research knowledge into discussions and commented on drafts prior to consultation. This is acknowledged by Peter Freeman CBE, QC, Chairman of the Competition Commission 2006-11 in the extract reproduced in [b].

Because of his research on merger remedies, Lyons was also invited to give seminars on this topic to competition authorities across Europe. He disseminated his knowledge on remedy design, and likely influenced subsequent actions:

- March 2006 – Central European Competition Initiative in Budapest
- January 2008 – UK Competition Commission
- May 2009 – Norwegian Competition Authority, Bergen
- Sept 2010 – Norwegian Competition Law Association, Sandefjord

Finally, in addition to the impact of L&D research on merger remedy guidelines, one of the novel simulation methodologies developed in [4] has been adopted by the OFT for screening relevant mergers and justifying actual decisions ([c]).

## 5. Sources to corroborate the impact

- I. Commission notice on remedies acceptable under Council Regulation (EC) No

139/2004 and under Commission Regulation (EC) No 802/2004 - 2008/C 267/01  
(October 2008)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:267:0001:0027:EN:PDF>

- II. EC consultation responses (including by L&D) can be seen at:  
[http://ec.europa.eu/competition/mergers/legislation/merger\\_remedies.html](http://ec.europa.eu/competition/mergers/legislation/merger_remedies.html)
- III. Original draft of the above notice (April, 2007), which was later modified as a result of L&D's research  
[http://ec.europa.eu/competition/mergers/legislation/draft\\_remedies\\_notice.pdf](http://ec.europa.eu/competition/mergers/legislation/draft_remedies_notice.pdf)
- IV. L&D's response in particular:  
[http://ec.europa.eu/competition/mergers/legislation/files\\_remedies/lyons\\_davies.pdf](http://ec.europa.eu/competition/mergers/legislation/files_remedies/lyons_davies.pdf)
- V. Merger Remedies: Competition Commission Guidelines – CC8, November 2008  
[http://www.competition-commission.org.uk/rep\\_pub/rules\\_and\\_guide/pdf/cc8.pdf](http://www.competition-commission.org.uk/rep_pub/rules_and_guide/pdf/cc8.pdf)

*Extracts from testimonials (full text is available):*

- [a] Svend Albaek (27/03/13) – antitrust adviser to the Chief Competition Economist in the European Commission (current position). “The work of Steve Davies and Bruce Lyons on merger remedies (published in a book on Mergers and Merger Remedies in the EU) was known to the staff of the DG Competition at the time of drafting the final version of the Commission’s Merger Remedies Notice. The contribution of Davies and Lyons proved very helpful, in particular in highlighting the pros and cons of different pricing structures for licences.”
- [b] Peter Freeman (28/11/12) – former Chairman of the UK Competition Commission (until 2011). “The CC was fortunate in having direct access to the advice and expertise of Professor Lyons, who played an active role in the formulation of the CC’s thinking, particularly on the design and use of divestiture remedies and the need for mixed packages of behavioural and structural measures. Although the CC clearly also had access to advice and assistance from a variety of sources, it is likely that Professor Lyons’ work had a significant impact on the CC’s output and effectiveness in this important field of activity.”
- [c] Amelia Fletcher (28/03/2012) – former Chief Economist of the OFT (through mid-2013). L&D’s work “on analysing mergers in Cournot markets with capacity constraints has been drawn upon in a number of OFT merger cases, including Prince Minerals/Castle (2009) and Kingspan/CRH (2010)”.