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CCP Centre for Competition Policy

Market-Share Contracts with Asymmetric Information

July 2007
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CCP Policy Briefing

BACKGROUND

- In Europe and the US there has been considerable debate over the competitive effects of market-share discounts, fidelity rebates, all-units discounts (also known as rollback rebates) and bundled rebates when employed by dominant firms.
- While the European Commission has tended to presume that such forms of behaviour, when employed by a dominant firm, are anti-competitive, in the US the authorities and the courts have been more circumspect.
- This paper provides insights into all such forms of behaviour when used by a dominant firm in a setting of asymmetric information.

METHODOLOGY

- This paper starts with a standard screening model in which the dominant firm seeks to induce its retailer to reveal the true state of demand and augment it by allowing the retailer to purchase, in addition to the dominant firm's product, a substitute good that is competitively supplied.
- In the basic model there are two goods, A and B, which are imperfect substitutes. Good A is produced at a marginal cost by a manufacturer; good B is produced at a marginal cost and sold competitively by numerous identical suppliers. There is one buyer, a retailer that buys goods A and B and resells them to final consumers. At stage 1, the manufacturer offers the retailer a menu of contracts which specify quantity targets. At stage 2, the retailer observes the state of demand and purchases the most profitable combination of goods A and B. The first task is to assess how the results of this scenario might change if the retailer were allowed in addition to purchase a second good, good B, supplied by a competitive market. The answer depends on whether the manufacturer can offer a menu of quantity targets only, or whether in addition it can offer a menu of market-share targets.
- Various extensions of the model are considered, introducing a combination of bundling and exclusive dealing, fidelity rebates, and all-units discounts.
    - Bundling: combining two or more products into one deal, one of them usually a competitively supplied product.
    - Fidelity rebates: discounts offered either expressly or implicitly in return for a buyer placing a minimum share of its total purchase requirements with a given supplier.
    - All-units discounts: discounts that arise when, on reaching a given quantity target, the buyer qualifies for a discount not only on the additional units purchased but also on all the units purchased up to the target.

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KEY FINDINGS

- Unlike in standard screening models, the buyer's reservation utility from trading with the dominant supplier is not independent of the state of demand; in this model, the option of trading with the competitive fringe is worth more in the high-demand state than in the low-demand state. The model requires only that the relative to the low-demand state the high-demand state increases the retailer's outside option (to purchase only the substitute good) sufficiently.
- Intuitively, if the retailer's outside option is more profitable than purchasing under the manufacturer's contract in the low-demand state, then the manufacturer no longer has and incentive to distort demand downwards in the low-demand state.
- Even when the full-information outcome cannot be achieved, we find that market-share contracts are still always profitable for the manufacturer when they are feasible. Specifying both a quantity and a market-share target in the same contract five the manufacturer more instruments with which to influence the retailer's behaviour.
- With respect to welfare, in short, the welfare effects of market-share contracts are ambiguous: the findings do not support the presumption in European law that market-share targets are harmful, and neither is there support for the view that such targets are typically beneficial.

POLICY ISSUES

- Competition authorities are for the most part concerned that the adoption of market-share contracts by a dominant firm will lead to a crowding out of competitors or the denial of scale economies to smaller rivals.
- In the absence of market-share contracts the retailer compensates for the fact that its purchases of good A are distorted downward by buying more of good B than it otherwise would. By employing a market-share contract, the manufacturer can prevent this, causing the output of good B to fall relative to what it would have been. By itself, this effect is harmful to consumers and social welfare.
- However, market-share contracts can mitigate the manufacturer's asymmetric information, reducing the incentives for the manufacturer to distort downward its own quantity in the low-demand state. Thus there is often a tradeoff for consumers and for welfare.

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 (CCP Working Paper 07-13) and more information about CCP and its research is available from our website: www.ccp.uea.ac.uk

ABOUT THE AUTHORS

- **Adrian Majumdar** is a Partner at RBB Economics. Prior to taking his post at RBB in 2004, he was the Deputy Director of Economics at the Office of Fair Trading (OFT). In addition to his work, he is studying for a PhD at CCP.
- **Professor Greg Shaffer** teaches in the Simon School of Business at the University of Rochester. He visited CCP for 6 weeks from May-June 2007 to work with various members on buyer power and welfare effects in vertical markets and mergers. His research employs game-theory models to examine issues in pricing policies, antitrust and regulation, distribution channels, vertical restraints, principal-agent theory, and oligopoly models of strategic competition.