Gaining an edge in head-to-head competition

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Pairs of dominant retailers in direct competition - Macy's and Gimbel's, Saks and Bloomingdale's, Dick's and Sports Authority - are always trying to find an edge over their rival. Money back guarantees, or MBGs, and personalized pricing strategy, or PPS, work well for monopoly retailers. But how do they affect duopolies?

In "Compete in Price or Service? - A Study of Personalized Pricing and Money Back Guarantees," to be published in the March issue of the *Journal of Retailing*, Professor Bintong Chen, of the Southwestern University of Finance and Economics in Chengdu and the Lerner College of Business and Economics at University of Delaware, and Professor Jing Chen of the Rowe School of Business at Canada's Dalhousie University, employed game theory to investigate how price, profit, and customer welfare fared when retailers compete.

The authors established a model of competing retailers who are vertically differentiated in their ability to present the product and serve their customers - one is higher-quality. The results have practical implications on the sustainability of adopting MBG and/or PPS. As information technology improves, PPS is becoming feasible and more attractive to retailers. The results imply that only early adopters benefit from switching to PPS. As more retailers follow suit, the price competition intensifies and they may all end up losing profit. MBG, on the other hand, seems to be a better strategy for competing retailers; when both retailers switch from no customer returns to MBG, at least one of them and perhaps both will profit from the switch. Furthermore, since MBG is a dominant strategy under competition, all retailers are forced to switch from no returns to MBGs, whether they benefit or not, as long as their net salvage values are positive. "This incidentally provides another convincing explanation of the popularity of the MBG customer returns policy," the authors point out.

The results also reveal how each retailer responds and reacts to the other retailer's adoption of PPS or MBG. A retailer decreases its price when adopting PPS and increases its price when adopting MBG, and cuts its price when its competitor adopts either PPS or MBG. "This is because when either retailer switches from uniform pricing to PPS, it will cut its own average price and force the competitor to cut its (average) price at the same time," the authors write. MBG, as a service strategy, increases the customer's perceived value of the product, which motivates the retailer to increase the price. The improved service, however, puts pressure on the competitor and forces a price reduction. Consequently, PPS intensifies, and MBG mitigates, the price competition, and PPS reduces the likelihood that both retailers will benefit from offering MBGs.

More information: Bintong Chen et al, Compete in Price or Service?—A Study of Personalized Pricing and Money Back Guarantees, *Journal of Retailing* (2017). DOI: 10.1016/j.jretai.2016.12.005

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