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Consumer sophistication, word-of-mouth and "False" promotions

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ABSTRACT

Not all retail price promotions provide consumers with additional monetary value. For instance, a retailer might raise the retail price of an item just before a sale and then "promote" the product by listing the initial price as the sales price. This paper addresses the question "under what conditions would a firm give such a 'false' promotion and with what regularity?" with an analytical model composed of two competing retailers and two segments of consumers. The duopoly firms sell substitutable products in a finite number of periods to consumers. In each period, each firm can choose to offer a real promotion, a false promotion, or no promotion. One segment of consumers is sophisticated and is able to discern false promotions based on the two firms' promotional offerings. The other segment of consumers is naive and trusts each firm's claimed promotional offering. Sophisticated consumers pass information on the existence of false promotions via word-of-mouth (WOM) to a fraction of naive consumers.

We find that the possibility of offering false promotions can improve the payoffs for both firms, especially when the market is more competitive. Moreover, even when consumers can identify that a firm is offering a false promotion and pass this information to others, a firm still finds it optimal to offer such promotions from time to time. In general, the firm is more likely to offer false promotions in an environment with lower competition, fewer sophisticated consumers, and weaker WOM.

1. Introduction

Stores will be pulling out the stops on deep discounts aimed at drawing customers into stores. But retail-industry veterans acknowledge that, in many cases, those bargains will be a carefully engineered illusion.

– Susanne Kapner, "The Dirty Secret of Black Friday 'Discounts'", *Wall Street Journal*, November 25, 2013

Retail price promotions purport to provide extra value to consumers and these promotions often result in large increases in sales. However, not all retail price promotions provide consumers with additional monetary value. For instance, a retailer might raise the retail price of an item just before a sale and then "promote" the product by listing the initial price as the sales price. Such a practice was alluded to in above referenced *Wall Street Journal* article entitled "The Dirty Secret of Black

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Friday 'Discounts'" which states that retail discounts generally are not discounts at all – they are priced into it from the beginning. The article notes that "big retailers work backward with their suppliers to set starting prices that, after all the markdowns, will yield the profit margins they want". The net result is that between 2009 and 2012, the number of deals offered by 31 major department stores and apparel retailers has increased 63% and the average discount jumped to 36% from 25%, but the gross margins of the same retailers have remained flat at 27.9%.

The *Wall Street Journal* is not the only one to note such practices, and such practices are also observed for online retailers. For example, in December 2014, two consumers filed a class action lawsuit against online retailer Amazon.com, alleging the company's practice of stating a product's "listed price" as the price of some high priced, low volume competitor to mislead customers into believing they are saving money.[1] Specifically, the lawsuit claims that Amazon "cherry-picks the highest price it can find for the item and uses it to create a significant price discrepancy and the impression of considerable savings for its customers... The reality is that the Amazon price is no different than the price of competitors, and no discount is provided over Amazon.com' s everyday pricing." As the result, the savings are "illusory and/or grossly overstated".

Such practices of trying to set a higher reference price are also observed for store brands, where retailers have more control over the list price. For example, in July 2015, two consumers in California filed a federal class action suit alleging that discount department store Kohl' s offered phony discounts on items they bought — a Jennifer Lopez dress, a Sonoma robe and an Apt. 9 shirt —from three of Kohl's private-label or exclusive lines.[2] Their lawyers wrote in their initial complaint that "As a result... Plaintiffs and members of the proposed Class... received items of lesser value and quality than they expected and Kohl' s unlawfully, inequitable, and otherwise improperly was thereby unjustly enriched and benefited."

We label such practices as "false promotions" in that these price-promoting tactics make the promoted product seem more appealing to consumers than they would be, should they know the complete pricing history and/or available pricing options. A false promotion is formally defined in this paper as an advertised discount off a high price that never or rarely actually is charged by either the promoting store or some other referenced store. Correspondingly, there are two general types of false promotions, within-store false promotions and between-store false promotions. Within-store false promotions occur if the advertised regular price has never been the actual selling price in the same store; the Black Friday scenario falls into this category. Between-store false promotions occur when the regular price referred to in one store is consistently inflated to a level that has never been charged by that store or the vast majority of competitors. The Amazon scenario falls into this second category. Our game theoretic model results in equilibria that reflect both cases.

We acknowledge that false promotions as defined by us may not be viewed as illegal. The Federal Trade Commission (FTC)' s "Guidelines Against Deceptive Pricing" states that products should be sold at their regular prices before going on sale for a "reasonably substantial period of time". Likewise, the California Supreme Court ruled that retailers' misrepresentations about the price of goods are actionable if a consumer suffers economic harm when this consumer "purchased a product that he or she paid more for than he or she otherwise might have been willing to pay if the product had been labeled accurately." However, the FTC guidelines provide no definition of what constitutes a "reasonably substantial period of time", and the California Supreme Court leaves open the question of whether or not the consumers are deceived by such false promotions. Regarding the class action lawsuit against Amazon that is described earlier, Amazon says in its motion to dismiss the class action lawsuit that in the process of making their purchases, the plaintiffs expressly accepted Amazon's Conditions of Use (COUs) and the arbitration agreement within the COUs. Amazon has also cited its arbitration agreements in other class action lawsuits and courts have upheld those agreements.[3] When online retailers use such COUs to protect their actions, the legality of these pricing practice becomes unclear. Amazon also has a disclosure on its website stating the list price can have many origins: It can be the price on the product itself, it can be the price suggested by the manufacturer or supplier, or it can be Amazon' s guess as to what the list price should be, which "may or may not" represent the prevailing price "in every area on any particular day" (Streitfeld, 2016).

Given this uncertainty about the legality of what we define as "false promotions", there are important theoretical questions as to why and when such practices might exist. The purpose of our study is to investigate how false promotions affect consumer choices and in turn retailers' optimal strategy, and in the process contribute to both the theoretical and behavioral IO literature. Specifically, we address the following questions: First, assuming at least some consumers' attitudes towards false promotions are negative, could a firm still benefit from giving such false promotions? Second, in what conditions is the firm more likely to give a false promotion? Finally, what are the profit implications for the industry at large?

To address these questions, we construct an analytical model consisting of two segments of consumers and two competing retail firms. More specifically, we let the duopoly retail firms sell substitutable products in a finite number of periods to consumers. They can choose to sell their products at a regular price exogenously set by the manufacturer, offer real promotions, or offer false promotions. In the latter two cases the retail firms set the optimal discount rate as well as the type of promotion. The firms' choice of promotion strategies affects consumer knowledge on the existence of false promotions, which in turn affects consumer word-of-mouth (WOM) and subsequent choices. Both firms are forward-looking and maximize their discounted profit over a finite horizon. In each period, the consumers observe the claimed promotional offering, and then make purchase decisions to maximize their one-period utility. One segment of consumers is sophisticated

1 https://www.truthinadvertising.org/wp-content/uploads/2015/02/Fagerstrom-v-Amazon-notice-of-removal-and-complaint.pdf.

2 https://consumermediallc.files.wordpress.com/2015/07/3-15-cv-01624-jah-wvg.pdf.

3 http://topclassactions.com/lawsuit-settlements/lawsuit-news/50566-amazon-appeals-arbitration-list-price-class-action-dismissal/.