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# Modeling the Effects of Advertised Price Claims: Tensile Versus Precise Claims?

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## Abstract

Department store chains use advertised price reductions as a major promotional tool to attract consumers to their stores. In advertising discounts, retailers typically use price claims that vary on two key dimensions. First, discounts may be specified either precisely (e.g., 60% off) or with nonspecific (*tensile*) information as in a range of discounts (e.g., 50–70% off). Second, discounts may be offered on an entire group (e.g., Sale on “All” items) or on a subset of an advertised group of items (e.g., “Save 50–70% on items marked with a yellow dot”—only items marked with a yellow dot qualify for the discount).

Our objective in this paper is to develop a conceptual framework to understand how consumers respond to tensile versus precise claims on a group of advertised items for different price image stores. Using a series of three experimental studies, we identify key variables that consumers use in forming an overall valuation of an advertised sale offer using a tensile versus a precise price claim. The studies also help us to link characteristics of the advertisement and the advertising store to the variables that affect a consumer’s valuation of a sale offer using such claims. Consequently, we are not only able to obtain an understanding of a consumer’s judgment process, but are also able to provide insights on how to design effective price claims by using variables that are under the retailer’s control.

We propose that consumers’ valuation of an advertised sale offer depends on their subjective assessments about the probability with which they will find a desirable item at a discounted price (called *subjective probability*), the size of that discount (called *subjective discount*), and the probability of liking the sale item. In Experiment 1, we hold the probability of liking the sale item *constant* (all sale items are identical) and collect data from consumer responses to price advertisements to determine how consumer assessments of subjective probability and subjective discount depend on the type of price claim (precise versus tensile) used, the advertised level of discount, and the fraction of stock *specified* to be on sale. Our results show that when the fraction of stock specified to be on sale is low (high), consumers responding to a tensile

claim are optimistic (pessimistic) about the discount they believe they will get, expecting a subjective discount greater (smaller) than the midpoint of the tensile range. Correspondingly, in responding to a precise claim, consumers expect a subjective discount equal to the advertised discount. There is also no difference in the subjective probability assessed for tensile and precise claims. Consequently, when the fraction of stock on sale is low (high) advertised deals with tensile claims are perceived to be more (less) attractive than with precise claims.

In Experiment 2 we examine the real-world case of consumer responses to price advertisements from two stores (that differ in price image) in which the fraction of items on sale is not specified but needs to be *inferred* and advertised sale items are comprised of three brands differing in quality. Our results show that the inferred fraction of stock is positively related to the store price image and negatively related to the advertised discount level. We find that the inferred fraction of stock on sale produces effects similar to the specified fraction of stock on sale. In addition, because we measure the perceived distribution of quality for sale items, we are able to examine its effects on consumers’ overall valuation of an advertised sale offer. We predict and find that there is a “threshold discount” level for each store above which tensile claims are more effective and below which precise claims are more effective. We also find that the threshold discount is greater for a store with a higher price image.

Finally, in Experiment 3 we apply our framework to sale offers where the entire advertised stock of items is on sale and show that consumer responses to precise versus tensile claims is a *special case* of our general analysis of consumer responses to advertisements in Experiment 2 in which a subset of the stock is on sale. Our work differs from previous research on tensile versus precise claims in both focus and substantive contexts. Our study also contributes to the literature studying the role of ambiguity in behavioral decision theory by examining the role of ambiguity in payoffs instead of probabilities.

(*Sales Promotions; Retailing; Retail Management; Pricing; Advertising*)