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Brand Equity and Vertical Product Line Extent

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Abstract

This paper addresses the question of how the vertical structure of a product line relates to brand equity. Does the presence of "premium" or high-quality products in a product line enhance brand equity? Conversely, does the presence of "economy" or low-quality products in a product line diminish brand equity? Economists and marketing researchers refer to variation in quality levels of products within a category as "vertical" differentiation, whereas variation in the function or "category" of the products is referred to as "horizontal" differentiation. Much of the existing research on the relationship between product line structure and brand equity has focused on the horizontal structure of the product line and has been primarily concerned with *brand extensions*—what happens when the product line of a brand is extended horizontally into new categories? Researchers have been concerned primarily with how the extension fares, but the effect of the extension on the *core* products is also important. There is an analogous question of what happens when the product line of a brand is extended vertically, either "up market" or "down market." This question of vertical extensions is part of the more general issue of how the vertical structure of a product line relates to brand equity.

The specific research questions addressed in this paper are: (1) do "premium" or high-quality products enhance the brand equity associated with the other products in the line? (2) Conversely, do "economy" or low-quality products diminish the brand equity associated with the other products in the line? These research questions are relevant to three managerial issues in product-line strategy. First, what are the costs and benefits of including "down market" products within a brand? Second, what are the implications of including high-end models within a brand? Third, when should high-end and low-end products be offered under an existing brand umbrella and when should these products be offered under separate brands?

We address these research questions empirically through an analysis of the models and brands within the U.S. mountain bicycle industry. We use price premium above that which can be explained by the physical characteristics of the bicycle as a metric for brand equity. We then test several hypotheses related to the relationship between extension of the product line upward and downward and the price premium commanded by the brand. We further support this analysis with a simple laboratory experiment. The analysis reveals that price premium, in the lower quality segments of the market, is significantly positively correlated with the quality of the lowest-quality model in the brand's product line; and, that for the upper quality segments of the market, price premium is also significantly positively correlated with the quality of the highest-quality model in the brand's product line. The results of the analysis are supported by the outcome of an experiment in which 63 percent of the subjects preferred a product offered by a high-end brand to the equivalent product offered by a low-end competitor. These results imply that managers wishing only to maximize the equity of their brands would offer only high-quality products and avoid offering low-quality products. However, this result must be moderated by the overall objective of maximizing profits. Maximizing profits is likely to involve a tradeoff between preserving high brand equity (and therefore high margins) and pursuing the volume typically located in the lower end of the market. One of the most significant implications of this research is that product line managers need to be mindful not just of the incremental cannibalization or stimulation of sales of products that are immediate neighbors of an extension to the product line, but also the effect of such an extension on the brand equity in other, possibly quite different, parts of the product line.

(*Brand Equity*; *Price Premium*; *Product Line Extent*; *Product Line Breadth*; *Product Variety*; *Brand Strategy*; *Bicycle Industry*)