Price, Promotion and Differentiation Effects of the Private-Label Invasion

by

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When the share of private-label processed foods and beverages increases, Ê
brand-name firms' prices tend to rise and their promotional activities fall. These results, Ê
derived from an analysis of recent grocery scanner data, are contradictory to widely held beliefs about the industry. Ê

Though discount brands and generics have been available since the late 1970s, company executives and industry experts maintain that their sales have increased dramatically in the past fifteen years. Consumers, who had long regarded generic foods and beverages as poor substitutes for name-brand goods, changed their views when high-quality private-label products were introduced in the late 1980s and early 1990s.

The substantial quality improvement of private labels resulted from technological advances and the production of private label products by name-brand firms. Examples include Campbell Soup (Vlasic pickles), Union Carbide (garbage bags), Hershey Foods (Ronzoni pasta), Del Monte (canned fruits and vegetables), and H.J. Heinz (soups). Over time, consumers became increasingly aware of these improvements. A 1997 Gallup Poll commissioned by the Private Label Manufacturers Association (PLMA) reported that 76 percent of consumers surveyed agreed that store brands were "brands just like national brands."

Private label shares are also said to have increased because supermarket chains learned that these products provide higher profits than national brands. In particular, private labels create loyalty to a particular supermarket chain rather than to a national brand: Customers return to Safeway if they prefer the chain's Select brands.

Stylized Facts About Private Labels

In addition to the assertion that private-label products have persistently and rapidly penetrated grocery markets since the late 1980s, newspaper articles and trade journals have regularly reported several stylized "facts" about the effects of this private-label invasion on prices, promotion and differentiation. Specifically, food industry executives and experts contend that name-brand firms responded to private label entry in three ways: Firms lowered prices, engaged in more promotional activities and further diversified their products.

Many national brand executives reported that the private-label "invasion" was killing brand loyalty, so that they had to cut prices to compete. Philip Morris gave this reasoning when it lowered its price for Marlboro cigarettes, Procter & Gamble when it reduced the price of Pampers diapers by a quarter, and Kraft General Foods when it lowered its cheese prices by eight percent. Many other firms reported that they lowered their prices indirectly by means of sales and discount coupons.

Name-brand manufacturers also reported increasing point-of-purchase promotional activities in response to the new competition. The share of promotional budgets allocated to point-of-purchase expenditures and advertising were 73 percent and 27 percent in 1992, compared to 62 percent and 38 percent respectively in 1960 (*Brand Marketing Supplement* to *Supermarket News*, June 2, 1997). From 1980 to 1992, U. S. food manufacturers' spending on promotional schemes, such as money-off offers and coupons, rose from half to three-quarters of total marketing budgets, while advertising's share fell from 44 percent to 25 percent (*Financial Times,* May 6, 1993).

Many managers stated that they increased the rate at which they innovate in response to the challenge of private labels. For example, firms introduced 22 percent more products in 1991 than in the previous year, releasing 16,143 new products, including 12,398 food products and 3,745 non-food products (*Minneapolis Star Tribune*, March 26, 1992). One might think of constantly providing new products as a flagpole strategy: "Let's run it up the flagpole and see who salutes." Products that are not accepted by consumers are quickly dropped. In recent years, an average of 27 percent of General

Table 1. Percentage Change in Price in Response to a Ten Percentage Point Increase in Private-Label Share

	All	Branded	Private Label
canned juices	0.2	**1.3**	**-1.4**
desserts	**0.6**	**0.6**	-0.4
frosting	**0.9**	**1.1**	-0.2
frozen baked goods	1.1	**2.2**	-1.0
frozen poultry	**3.4**	**3.5**	-0.2
gelatin mixes	2.6	**3.0**	-0.6
mustard and ketchup	**1.5**	**3.0**	-0.1
pickles and relish	**0.5**	**0.6**	**-1.1**
rice and popcorn cakes	0.2	**0.9**	**-1.5**
shortening and oil	**1.2**	**3.1**	**-0.7**
spaghetti/Italian sauce	**1.1**	**1.4**	**-1.5**
tea, ready to drink	**3.0**	**3.2**	0.7
tomato products	1.0	**4.3**	**-2.0**
yogurt	0.7	**1.9**	-0.5

A number in bold text indicates that one cannot reject the hypothesis that this price change is statistically significantly different from zero.

Mills' sales volume has come from products five years old or less (*Food Engineering*, December 1999).

Statistical Study

To assess the validity of this conventional wisdom, we conducted statistical tests based on Information Resources Incorporated (IRI) InfoScan™ data. IRI obtains information on all items scanned at cash registers from 11,300 local grocery stores from across the United States. The research uses monthly data (December 1996-January 1999) from 32 randomly selected food categories.

Averaging over the 32 categories, the revenue share of private-label and generic items is 14.3 percent and the quantity share is 19.0 percent. There is large variation, however. Private-label and generic goods are nearly two-thirds of the quantity share of frozen poultry, but only one percent of pickles and relish, 0.6 percent of hot cereal sales and 0.5 percent of shortening and oil.

Have private-labels continued to substantially and rapidly penetrate food and beverage sectors? We found that the quantity share of private-labels (and generic goods) is increasing in fewer than half of food and beverage categories, but this share is growing at double digit annual rates in one in four categories. The categories with rapid growth, however, tend to be those with relatively small private label shares.

How do prices respond to private-label entry? We found that—contrary to conventional wisdom—the prices of name-brand goods tend to rise as the share of private-label products increases (even after controlling for other factors in a statistical analysis). We examined the price effect for each of the eight top-selling name brand firms in each category. For every company in every industry, results indicated that private-label entry induced no change or an increase in branded price. This result was also true of the average prices of all the remaining branded companies (those that were not among the top eight).

While this result may seem counter-intuitive, there are several economic theories that predict that branded prices may actually rise when generics or private labels enter. We briefly discuss two of them. First, when a substantially low cost alternative enters, price-sensitive consumers switch to the generic or private-label product. Remaining consumers have revealed themselves as brand loyal, and price insensitive. Therefore, the name-brand firm raises its price to take advantage of the price-insensitivity to these loyal customers. Second, as private labels invade, branded firms may compete by raising product quality. Especially if it is more costly to produce higher quality goods, this response leads to increased name-brand prices.

Do private-label prices and overall market prices rise with increased private label penetration? We

Because some consumers prefer name-brand products, their manufacturers can charge prices above those for private labels. Photo by Julie McNamara

found that an increase in private label share has no affect or decreases the price of private label goods. This effect tends to balance or dominate the branded price effect discussed above, and the overall price level usually (but not always) remains unchanged.

Table 1 shows the price effects of a ten-percentage point increase in private-label share on the overall, branded and private label prices for some of the most clear-cut examples. The spaghetti/Italian sauce category is a typical example. The table shows that a ten-percentage point increase in private label share would cause the overall average price to rise 1.1 percent, the brand-name prices to rise by 1.5 percent and the prices of private-label products to fall by 1.5 percent.

Do name-brand firms engage in sales (i.e., price reductions) or non-price promotions in response to the private-label invasion? We found that name-brand firms either make no change or have fewer sales as the share of private-label brands increases. As private labels expand, name-brand firms are also substantially less likely to engage in nonprice promotions using feature ads and displays. Indeed, in many cases (rice and popcorn cakes, yogurt, mustard and ketchup, hot cereals and butter) these decreases in non-price promotions are very large.

Do name-brand firms attempt to differentiate their product lines in response to private-label entry? Specifically, do branded firms increase the number of items they sell when private labels penetrate the market? We found that differentiation, as measured by items per firm, does not in general increase with private-label competition. Specifically, an increase in private-label share had no statistically significant affect on number of items sold per firm in most categories, a statistically significant positive effect in one, and a statistically significant negative effect in six categories. Of course, it is still possible that name-brand firms increasingly modify their products' characteristics or raise quality of existing products.

Summary and Conclusions

The conventional wisdom is that private labels continue to rapidly enter processed food and beverage industries, and that name-brand firms defend their brands by lowering prices, engaging in additional promotional activities, and increasingly differentiating their products. However, we found that these beliefs are generally false. Private label shares are only currently increasing in approximately 40 percent of the study's categories. When private labels do enter, branded firms increase their prices, hold fewer sales, offer fewer non-price promotions, and reduce the number of items for sale.

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