



Destination discount: a sensible road for national brands?

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Abstract

Purpose – This paper aims to study the consequences of listing national brands in discounters. Is the discount channel a promising outlet for manufacturer brands? Is it an effective means to attract new buyers? Which combination of brand and discount destination at which price is best suited for this strategic move?

Design/methodology/approach – Based on a unique dataset (tracking grocery purchase behavior for a representative sample of German households) and employing both descriptive and multivariate statistical techniques, the authors examine the outcome for 134 national brands introduced in six discount chains in Germany between January 2003 and July 2004.

Findings – Both the manufacturer and discounter are able to grow their total performance in excess of the market following the introduction for the majority of the brands. Hence, potential cannibalization is more than offset by incremental revenues. It is found that, on average, close to 80 per cent of national brands' sales at a discounter is from new brand buyers. Discounters typically benefit less, as only 29 percent of brand sales are from new category buyers at their store.

Practical implications – Including manufacturer brands into a discount assortment will benefit both the manufacturers and the discounters. Examination of the substantial cross-brand differences reveals that manufacturers and discounters attract more new customers with brands for which market penetration is still modest. Also, discounters gain more from adding branded offerings in underperforming categories, and benefit from brands that enjoy higher customer loyalty. Finally, national-brand prices should be set carefully at discounters. It is advised to maintain their price premium even at a discounter.

Originality/value – Discounters are the fastest growing grocery format in Europe. Lately, many discounters add national brands to their private-label dominated assortment, a move widely discussed in media with substantial implications for grocery channel management. This study provides a comprehensive evaluation of that trend.

Keywords Discount retailing, National brands, Store brands, Store switching, New buyers, Cannibalization, Brand management, Consumer behavior

Paper type Research paper

Introduction

Hard discounters are the fastest growing format in grocery retailing in Europe (IGD Research, 2006). Besides using a simplified, “no-frills”, store format with very few added services, they rely strongly on own brands, and offer a smaller number of SKUs per category, far below the numbers typically offered in supermarkets (like Tesco, Carrefour or Rewe) and big merchandisers (like Wal-Mart) (Steenkamp and Kumar, 2009). This allows discounters to offer their products at highly competitive prices.

Lately, one of these strategic pillars has blurred: Many discounters increasingly sell national brands. For example, Lidl offers brands like Head & Shoulders from Procter

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& Gamble, Kleenex from Kimberly-Clark and Pepsi Cola (Dendooven, 2005). The introduction of national brands in a discount assortment is a much-debated issue. While potential benefits to both manufacturers and discounters are obvious – improving distribution coverage and enhancing assortment attractiveness, respectively – so are potential risks. Branded manufacturers, for example, are unsure about the incremental brand sales generated by the additional channel. Discounters, in turn, are unsure about the new brand's ability to generate incremental category revenues. If brand sales at the discounter come at the expense of sales at other retailers (harmful to the manufacturer), or cannibalize the existing product range (harmful to the retailer), benefits are limited, especially if margins are lower. Manufacturers likely also disenchant traditional retailers: when Ottakringer, one of the leading Austrian breweries, puts its beer on the shelves of Hofer (the Austrian Aldi subsidiary), the leading mainstream retailer Billa discontinued its sales for part of the Ottakringer range. The CEO of the second big mainstream player, Spar, threatened similar action (Die Presse, 2007).

While earlier studies on multichannel retailing focused on channel conflicts between competing mainstream retailers targeting the same end consumer (Bucklin *et al.*, 1997), it is not clear how regular retailers respond to the addition of national brands at price aggressive discounters. Such discounters are often perceived as a common enemy for both the manufacturer and their mainstream retail partners. A multichannel focus integrating both discounters (with their unique focus on a limited private-label assortment with very competitive prices) and mainstream retailers provides a setting on which extant channel literature offers little guidance. First, while earlier research on private label-national brand competition evaluated consumers' reaction to the addition of a private label in a brand-dominated assortment (e.g. Pauwels and Srinivasan, 2004), this study examines the opposite trend, namely how consumers react to more branded offerings in a private-label based discount assortment. Consumers may value the increased variety, but it could also be incongruent with their expectations regarding this channel. Second, in contrast to existing literature on multichannel strategies and channel competition among mainstream retailers (Bucklin *et al.*, 1997; Coughlan *et al.*, 2006), we assess to what extent consumers will switch channels once they find their branded offerings at a price-aggressive discounter. Affected mainstream retailers may retaliate by lowering support for the manufacturer's brands, or even (threat to) discontinue the relationship.

We study the consequences of listing national brands in hard discounters, and provide managerial guidelines when contemplating this decision. More specifically, we will deal with three key issues relevant for decision-makers:

- (1) Is the discount channel a promising outlet for manufacturer brands? What are the incremental gains for manufacturers and discounters? (Incremental Gains Issue).
- (2) Who shops for national brands at a discounter? Is it an effective means to attract new buyers, both to the brand and to the discounter? (New Buyers Issue).
- (3) Which combination of brand and discount destination at which price is best suited for this strategic move? (Strategy Selection Issue).

We structure the remainder of the paper along these questions. First, we discuss under which circumstances manufacturers and discounters gain from selling branded offerings at discount stores. Next, we advance the research approach, introduce the

data, and discuss our key findings. Finally, we present conclusions and recommendations, followed by limitations and future research areas.

Potential benefits and risks of brands in discounters

Incremental gains

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Manufacturer perspective. A strong argument for entering the discount channel is the increasing number of shoppers this format attracts. Estimates on the number of new discount stores to open in Europe within the next decade are double the number for “traditional” retailers (IGD Research, 2006). If discount stores continue to increase their share of trips, manufacturer brands available at mainstream retailers only will have fewer opportunities to reach shoppers. Second, traditional retailers increasingly rely on own brands, and demand better sourcing costs (Bloom and Perry, 2001). This trend is a “double jeopardy” to the manufacturer; not only do they lose shelf space to private labels, but their (reduced) sales suffer from lower margins. Encouraging discounters to carry their brands could compensate for these losses. Third, promoting brands in discounters is an opportunity to slow down private label growth, fueled mostly by discounters (Koll and Herbert, 2005).

However, manufacturers also have concerns: if sales in the new channel come mostly from consumers who already buy the brand (store switchers), incremental benefits are limited. Another critical concern is price. Lower prices hurt margins (especially if other retailers strive to match discounter prices), reputation, and, in the end, customer equity: More buyers may not outweigh the lower price per transaction (Wiesel *et al.*, 2008; Ailawadi *et al.*, 2003). Finally, channel cannibalization harms established retailers’ performance, potentially triggering hostile reactions from existing retail partners, even to the extent that manufacturers “face the threat of being delisted by a mainstream retailer” (PlanetRetail, 2006, p. 11).

Discounter perspective. The discount channel has massively gained market share. For example, its share has reached 40 percent of German grocery sales in 2006, up from 30 percent five years earlier. In the same period, several Eastern European markets have seen discount shares double, e.g. Poland from 10 percent to 20 percent (IGD Research, 2006). Besides the persistent success of established chains like Aldi or Lidl, the increasing number of discount players further explains this trend. Growing within-format competition increases the need for differentiation, for example by offering an attractive portfolio combining both own brands and national brands. Pauwels and Srinivasan (2004) state that reserving too much shelf space for store brands may deter consumers as it limits choice. Moreover, national brands increase the appeal of a store to more profitable buyers, i.e. those customers that buy a mix of private labels and national brands (Corstjens and Lal, 2000; Dhar and Hoch, 1997). Total spend (Ailawadi and Harlam, 2004) as well as store loyalty (Ailawadi *et al.*, 2008) is lower among heavy private label buyers, offsetting the higher margins retailers typically earn from store brands (Sayman *et al.*, 2002; Pauwels and Srinivasan, 2004). By putting national brands on the shelves, such higher-contribution shoppers might be lured into the discounter.

Discounters also face risks. They are concerned about national brands’ “net” contribution to performance: If the majority of branded sales at their store is obtained from existing shoppers, the sales benefits may not justify the decision to add (more) manufacturer brands, since it will raise assortment complexity, holding and sourcing

costs. In-store brand switching is likely to hurt profitability since branded alternatives typically provide lower margins than own labels (Sayman *et al.*, 2002; Pauwels and Srinivasan, 2004). Finally, adding more expensive brands may increase consumers' reference price (Niedrich *et al.*, 2001) and increases discounters' dreaded dependence on powerful manufacturers (Bergès-Sennou, 2006).

Table I summarizes the arguments for and against listing national brands at discounters, both from the perspective of a manufacturer and a discounter, and highlights the importance of assessing whether the benefits indeed outweigh the potential risks.

Importance of new buyers

A primary objective of selling national brands at a discounter for both manufacturers and discounters is to reach additional customers. All purchases from new brand buyers are incremental to the manufacturer, hence, they do not harm established sales revenues, and have less potential to hurt existing retail relationships. Likewise, a discounter targets consumers that do not yet purchase the category (or do not even visit his store). Based on their past purchase behavior, national brand buyers at discount stores could be:

- *i.* in-store brand switchers, i.e. buyers that already purchased from the discount category;
- *ii.* new brand and store buyers, i.e. buyers that purchased other brands at other stores, or that never purchased in the discount category before; or
- *iii.* store switchers, i.e. buyers of the focal national brand at other retailers[1].

Groups (i) and (ii) represent new brand buyers beneficial to the manufacturer, while (ii) and (iii) represent new category buyers within the store beneficial to the discounter. Note that buyers in group (ii) benefit both the manufacturer and the discounter (see Table II). Next, we argue why reaching new customers through the added channel/brand is desirable, and why brand purchases at the discounter by existing customers is unlikely to contribute to incremental firm revenues.

Manufacturer perspective. Existing buyers benefit a manufacturer if they spend more on the brand as a result of its listing at a discounter, and/or if they purchase the same amount at higher prices[2]. While the former may be feasible as a result of lower

	Benefits	Risks
Manufacturer perspective	Attain higher market penetration Counter sales and margin pressure in traditional retail channels Counter private-label growth	Channel cannibalization Negative effect on margins Reputation damage Retaliation from existing retail partners
Discounter perspective	Continue current growth Differentiation within the discount segment – increased shopper loyalty Attract more profitable shoppers	Product cannibalization Complexity Manufacturer dependence Negative pressure on margins Blur discount position

Table I.
Benefits and risks when selling national brands at discounters

Table II.

National brand buyers at discount stores

Group	Description	Manufacturer	Discounter
(i)	In-store brand switcher: purchased other brands from the discount category	+ ^a	-
(ii)	New brand and store buyer: purchased other brands at other stores, or did not purchase in the category before	+	+
(iii)	Store switcher: purchased the national brand at other stores	-	+

Notes: ^aA “+” means these buyers are new to the firm and their brand sales are beneficial, while “-” implies these buyers are less desirable as they already purchase from the firm

prices and better distribution, higher average discounter prices for national brands are unlikely (Bell and Bucklin, 1999). To offset lower discount prices, substantially more purchasing from current brand buyers is needed which in turn may result in sales-damaging retaliation – reducing promotions or shelf presence, for example – by existing retailers (Geyskens *et al.*, 2002). Hence, incremental sales benefits accruing from existing brand buyers now switching to the discounter are unlikely.

Discounter perspective. Likewise, existing category buyers contribute to the incremental sales of a discounter only if they raise total category spending within the store. If existing category buyers only replace their private-label purchase with the brand, per-unit margin will suffer (Ailawadi and Harlam, 2004). It is difficult to raise consumers’ total category spending for most grocery products, as evidenced by the few and very small primary demand effects found for price (Narasimhan *et al.*, 1996; Nijs *et al.*, 2001). Hence, in-store brand switchers are unlikely to garner much incremental benefit.

Therefore, our analysis will focus on the ability of a national brand at a discounter to lure new buyers; that is, whether the manufacturer is able to benefit from buyer behavior (i) and (ii), and whether the discounter is able to elicit behaviors (ii) and (iii) in Table II.

Strategy selection

To study which context (which brand in which discount setting at what prices?) is most favorable to lure new buyers, we evaluate brand-, store-, and price-related determinants of consumers’ store and/or brand choice identified in previous literature. Table III summarizes for each determinant what impact we can expect on one or more of the three buyers groups, leading up to our expected net effect on the brand’s ability to acquire new manufacturer and/or discount buyers.

Brand-related variables. Brand penetration. Brand penetration reflects how large the pool of potential store switchers is (group iii) in comparison to new brand buyers (Narasimhan *et al.*, 1996). Evidently, if a product already reaches a significant part of the market, it becomes harder to attain new customers (Golder and Tellis, 2004). In contrast, low penetration brands are less prominent in consumers’ basket and more likely to reach new brand buyers after extending distribution coverage (Reibstein and Farris, 1995). Sales from store switchers (group iii) are harmful to the manufacturer but desirable for the discounter. We therefore hypothesize:

H1a. Manufacturers benefit less from adding high penetration national brands to a discounter’s assortment compared to low penetration national brands.

Variable	Buyers in group			Net effect	
	(i)	(ii)	(iii)	Manuf.	Disc.
<i>Brand-related variables</i>					
Brand penetration			↑	-	+
Brand loyalty			↑	-	+
<i>Store-related variables</i>					
In-store competition	↓	↓	↓	?	?
Store penetration	↑			+	-
<i>Price-related variables</i>					
Brand absolute price level			↑	-	+
Between-store price gap			↑	-	+
Within-store price gap with private label	↓	↑		?	+
Within-store price gap with competing national brands	↓	↑		?	+

Table III.
Framework for expected
relationships

H1b. Discounters benefit more from adding high penetration national brands to their assortment compared to low penetration national brands.

Brand loyalty. We expect brands commanding high levels of loyalty to attract more existing brand buyers that switch stores (group iii). Several studies have shown that the more loyal a consumer is towards a brand, the more likely this person will buy it in another store as well (Campo *et al.*, 2000; Emmelhainz *et al.*, 1991). Indeed, loyal brand buyers are typically more attached to the brand than to the store, and if they (believe to) realize cost savings, they have an incentive to switch stores (Broniarczyk *et al.*, 1998). Thus, adding national brands with a loyal customer base will bring in more new discount shoppers that switch from established retailers (Ailawadi and Harlam, 2004). Such buyers are again beneficial to the discounter, but not to the manufacturer:

H2a. Manufacturers benefit less from adding national brands with more loyal buyers to a discounter’s assortment compared to national brands with less loyal buyers.

H2b. Discounters benefit more from adding national brands with more loyal buyers to their assortment compared to national brands with less loyal buyers.

Store-related variables. Discounters aim to draw (category) non-buyers into purchasing (in the category) at their store. Earlier research on this effect focused on both demand- and supply-related factors (Mantrala *et al.*, 2009). Demand drivers relate to the number of brands (SKUs), or shelf space dedicated to a category. Regarding the supply-side, we evaluate store penetration.

In-store competition. In a typical discount category with no or a few manufacturer brands per category, an additional brand is likely to enhance a discounter’s assortment for two reasons. First, this brand will stand out more in a small assortment of low-priced alternatives, making it more likely to improve consumer’s assortment appreciation and reduce perceived risk of buying in the category (Kahn and Lehmann, 1991; González Mieres *et al.*, 2006). Second, discounters frequently sell merchandise “out of the box” (Deleersnyder *et al.*, 2007).

One additional brand may therefore increase shelf space allocated to the category substantially (Desmet and Renaudin, 1998). Improving assortment appreciation and enlarging shelf space enhances consumers' store switching tendency (Campo *et al.*, 2000; Dhar *et al.*, 2001).

Alternatively, adding a brand to a larger assortment that already appeals to most current store visitors (group i) may go unnoticed (Dhar *et al.*, 2001). Therefore, the opportunity to attract in-store brand switchers in (i) and buyers from other stores (groups ii and iii) will decrease if more (branded) offerings are already available (Sloot and Verhoef, 2008). While fewer new brand and store buyers in (ii) is undesirable for both parties, fewer in-store brand switchers in (i) are preferred by the discounter but not by the manufacturer. Alternatively, fewer store switchers in (iii) are beneficial to a manufacturer but not to a retailer. Which of these effects will dominate remains an empirical issue, and no formal hypothesis is advanced.

Store penetration. High store penetration for a category reflects a larger number of buyers already purchasing from the discount category. Whereas manufacturers benefit from a larger pool of buyers (group i), discounters have less to gain from adding a branded offering when store penetration is already high (Narasimhan *et al.*, 1996):

- H3a.* Manufacturers benefit more from adding national brands in categories with high discount store penetration compared to categories with low discount store penetration.
- H3b.* Discounters benefit less from adding national brands in categories with high discount store penetration compared to categories with low discount store penetration.

Price-related variables. Price has been put forward as an important and manageable marketing instrument that can "trigger" both brand (e.g. Gupta, 1988) and store (e.g. Rajiv *et al.*, 2002) switching. Apart from absolute prices, consumers typically assess the appeal of a brand's price by comparing it to some reference (Rajendran and Tellis, 1994). Brand price differences across stores are likely to affect consumer store choice. In contrast, for consumers to switch brands within a store, other product prices listed at the shop will serve as a reference.

Brand absolute price level. The more expensive a product, the more it pays off to engage in elaborate information search to make a conscious, well-grounded purchase decision. Cheaper products are more often bought on the spot without careful (cross-store) evaluations (Ratchford, 1982). Thus, there is a bigger incentive to switch stores for expensive brands because of higher potential savings in absolute terms. The higher number of store switchers in group (iii) for more expensive brands is undesirable for a manufacturer, but benefits the discounter, so we hypothesize:

- H4a.* Manufacturers benefit less from adding more expensive national brands to a discounter's assortment compared to less expensive national brands.
- H4b.* Discounters benefit more from adding more expensive national brands to their assortment compared to less expensive national brands.

Between-store price gap. A small between-store price gap, implying a discount price of the brand near its mainstream retailer price, provides little incentive to switch stores (group iii) (Deleersnyder *et al.*, 2007). Also, consumers who regularly shop at different

stores (so-called cherry-pickers) will have a smaller incentive to buy the brand at the discounter (Fox and Hoch, 2005). The opposite holds for larger between-store price gaps that induce store switching:

- H5a.* Manufacturers benefit less from a larger between-store price gap between the regular retailer and the discounter compared to a smaller between-store price gap.
- H5b.* Discounters benefit more from a larger between-store price gap between the regular retailer and the discounter compared to a smaller between-store price gap.

Within-store price gap with private label. Meredith and Maki (2001) found that people are more inclined to choose a cheaper product when the price spread is larger. This results in fewer in-store brand switchers (group i) when larger price differentials between the low-priced own label and the more expensive national brand exist. In addition, higher-priced national brands typically appeal to a different shopper segment previously less likely to purchase at the limited discount assortment (Desai, 2001; Rhim and Cooper, 2005). Such buyers (group ii) are beneficial to manufacturer as well as discounter. The absence of in-store brand switchers, however, does not benefit the manufacturer. Hence, we formulate a directional relation for the discounter only:

- H6b.* Discounters benefit more from a national brand with a larger within-store price gap with their private labels than from a national brand with a smaller within-store price gap.

Within-store price gap with competing national brands. In line with the above reasoning, price-sensitive shoppers will be inclined to stay with their cheaper branded variant if a newly-added national brand is priced higher. Again, this makes the national brand less attractive to current discount buyers (group i), but more likely to cater to the unfulfilled needs of non-category buyers at the discounter (group ii). While the increased probability of reaching new customers and the lower probability to divert from current discount buyers are both to the advantage of the discounter, the latter is not desirable for a manufacturer. Again, we only hypothesize a discounter effect:

- H7b.* Discounters benefit more from a national brand with a larger within-store price gap with other national brands than from a national brand with a smaller within-store price gap.

Method

Incremental gains

Both manufacturers and discounters aim to improve their total performance by extending the discount assortment with well-known national-brands. However, their objectives are not aligned; while manufacturers judge success based on performance improvement of their brand across all retail chains, retailers focus on total category performance (Deleersnyder *et al.*, 2007). To assess the incremental impact of a national brand listing, and to account for the various influences listed in Table I, we first assess if brand's total sales across all retailers (manufacturer perspective), and store's

category sales (discounter perspective) are indeed larger compared to the period prior to the brand listing. A one-year after launch evaluation seems adequate for consumers to familiarize with the new assortment, and has been argued to be a fair period to evaluate the success of a new introduction (Steenkamp and Gielens, 2003). To separate the impact due to volume as opposed to price changes, we compare both volume and value sales evolution following the introduction.

Since external factors impact post introduction growth (e.g. new product introductions, price changes in the category), this aggregate success measure has its limits in distilling the unique impact of a brand introduction on performance. We therefore benchmark changes against category trends.

Ability to attain new buyers

We assess for each brand listing what fraction of total brand sales at the store is obtained from new customers. For this purpose, we examine the purchase history of all national-brand buyers at the discounter: dependent on a buyer's pre-introduction behavior, he/she is classified as a new or existing customer based on past purchases along two dimensions: her/his purchase history regarding the manufacturer brand at other stores (store switcher or not?); and her/his purchase history within the discounter's category (in-store brand switcher or not?). Next, we determine how much new buyers spend on the focal national brand at the discounter during the (one year) post introduction period. Finally, dividing brand (volume) sales from all identified new buyers (S^{NEW}) by total brand (volume) sales at the discounter (S) will reveal what fraction or share of brand sales volume at the discounter comes from new buyers, s^{NEW} . Thus, for each new brand listing at the discounter, we obtain two performance metrics capturing its success for the manufacturer and discounter, respectively.

This proportion or share approach provides a standardized basis for comparing brands across a broad range of categories and stores that vary in size and/or value, while it is not confounded with factors like advertising or category growth affecting total brand sales levels at a store (cf. Dhar *et al.*, 2001). Moreover, as our comparison reference is the same for both manufacturer and retailer (i.e. total national-brand sales at the discounter), it is possible to determine who benefits relatively more from a brand listing.

Strategy selection

Next, we link both performance metrics to the various drivers outlined before. These measures, expressing the percentage sales from new buyers, is bounded in the range of zero to one. To link a non-normally distributed proportion to a set of explanatory variables in a linear model, several transformations have been proposed (Piepho, 2003). In line with other marketing applications (Hanssens *et al.*, 2001), we estimate a robust (linearized) model using the logit transformation ($\ln(s^{NEW}/1 - s^{NEW})$) on our dependent measures to ensure logical consistency for all values of s^{NEW} .

To examine how well the hypothesized variables are able to explain a national brand's potential to attract new buyers, we regress the (transformed) dependent variable against the predictors brand penetration (BPENE), brand loyalty (BLOY), in-store brand competition (SCOMP), store penetration (SPENE), absolute price level (PABS), between-store price difference (PDSTO), within-store price difference with the private label (PDPL) and with competing brands (PDCNB), resulting in (1):

$$\begin{bmatrix} \ln \left(\frac{s_{M,i,j}^{NEW}}{1-s_{M,i,j}^{NEW}} \right) \\ \ln \left(\frac{s_{D,i,j}^{NEW}}{1-s_{D,i,j}^{NEW}} \right) \end{bmatrix} = \begin{bmatrix} a_M \\ a_D \end{bmatrix} + \begin{bmatrix} b_{M,1} & \dots & b_{M,8} \\ b_{D,1} & \dots & b_{D,8} \end{bmatrix} \begin{bmatrix} BPENE_j \\ BLOY_j \\ SCOMP_j \\ SPENE_j \\ PABS_j \\ PDSTO_j \\ PDPL_j \\ PDCNB_j \end{bmatrix} + \begin{bmatrix} \gamma_{M,i} + \mu_{M,i,j} \\ \gamma_{D,i} + \mu_{D,i,j} \end{bmatrix} \quad (1)$$

with $s_{M,i,j}^{NEW}$ and $s_{D,i,j}^{NEW}$ the percentage of brand volume sales at a discounter obtained from customers new to the manufacturer (M), and new to the discounter (D), respectively, and index i and j referring to the store and brand, respectively. Store random effects control for potential store differences in (1), with $\gamma_{.,i}$ capturing store deviations from the mean, and $\mu_{.,i,j}$ the random error component. Note that in estimating the models, we follow common econometric practice and log-transform all independent variables to eliminate problems of skewed variables and outliers (Ruppert and Aldershof, 1989).

Data

We study national brands sold at discounters in Germany, the home of successful international chains like Aldi and Lidl, and one of the countries with the highest discount share approximating 37 percent of total national grocery sales in 2007 (Europanel, 2008). Data are extracted from GfK’s consumer hand-scan panel in Germany, registering all grocery purchase transactions made across 115 grocery categories by over 20,000 households between January 2002 and July 2005. The data provider matches its panel members with the German population on demographics (e.g. age, profession of the head of the household, family income and composition, and place of residence), guaranteeing a stratified national sample of German consumers at all times. Different datasets from this source have already been used in earlier studies (e.g. Ailawadi *et al.*, 2008).

Detailed information on the composition as well as any adjustment in the assortment of a German grocery store can be observed through these purchase records. For the purpose of our study, six major German discounters were screened across the 115 categories, to identify when an existing national brand already available at other retailers becomes (permanently) included in the assortment of the discounter between January 2003 and July 2004[3, 4]. In total, 134 permanent NB listings introduced in one of six major German discounters are detected[5]. The product introductions took place in a variety of food, beverage, household, and personal care categories. The discount chains include Aldi, Lidl, Penny, Plus, Netto and Norma, accounting for 36 percent of total German grocery sales in 2007. Table IV shows their respective market share and the distribution of the 134 national brand introductions across these chains.

Table IV.
Distribution of national
brand listings analyzed in
this study

Discounters	ms ^a	n	Listings	
				%
Aldi	14.8	7		5.2
Lidl	10.0	22		16.4
Penny	3.6	34		25.4
Plus	3.5	23		17.2
Netto	2.7	35		26.1
Norma	1.4	13		9.7
	36	134		

Notes: ^aStore market share in total German grocery sales in 2007
Source: Europanel (2008)

Our sample includes, for instance, the introduction of Dr Oetker dessert mixes in Plus in March 2004, and Gillette shaving cream from Procter & Gamble in December 2003 in Lidl.

For each brand introduction, sales, volume and buyer information related to consumer purchases one year before and one year after the introduction were obtained at the brand, store and national level. Various other measures were derived from the panel data, including (brand and store) penetration, brand loyalty, in-store competition and prices. All measures were obtained from purchase information on panel members that took part in the consumer panel during the entire data period. Details on the operationalization of our independent variables are provided in the Appendix. Table V summarizes descriptive statistics and indicates that our national brands show considerable variation on each of these predictors.

Results

Incremental gains

Table VI summarizes value and volume sales growth for our brand listings. Note that the relevant benchmark for allocation to a cell is growth in the post introduction year relative to German category growth.

Manufacturer perspective. Out of 134 national brands, 110 (82 percent) grow total German brand sales in excess of the market in both volume and value terms during the

Variable	Measurement unit	Mean	SD
<i>Brand-related variables</i>			
Brand penetration	%	10.27	11.13
Brand loyalty	%	15.82	14.71
<i>Store-related variables</i>			
Number of competing offerings	Number	13	11
Retailer category penetration	%	18.17	14.02
<i>Price-related variables</i>			
Brand absolute price level		1.21	0.81
Between-store price gap	€	1.05	0.35
Within-store price gap with private label	ratio	1.76	1.08
Within-store price gap with competing national brands	ratio	1.24	1.12

Table V.
Summary statistics

year following their discounter introduction (see Cell 1). Only 14 brands (10.5 percent) showed lower volume and value growth than their category peers. This suggests that manufacturers mostly benefit from having their brands listed at a discounter. To grow value sales without corresponding volume growth (Cell 2), average price paid must increase, which is unlikely when a brand becomes available at a low-priced discount store (Lal and Rao, 1997)[6]. Indeed, only six brands (4.5 percent) were able to grow sales in excess of the market without corresponding volume growth. The more likely scenario in a discount context, i.e. volume growth accompanied by lower value growth as a result of price pressure from both the discounter and other retailers, is rare: four brands (3 percent) grew their volume in excess of the market without corresponding value growth (Cell 3).

Discounter perspective. Table VI offers the same results in terms of discounters' ability to grow category demand in excess of the market after the brand introduction. Again, in most instances, both value and volume grow more than the national category benchmark as reflected by the majority of brands in Cell 1 (60.5 percent). The opposite, growth below market average in both value and volume is more frequent than for the manufacturer, and was the outcome for roughly one quarter of the introductions in Cell 4 (23 percent). This is a first indication of relatively more switching within than across stores.

With respect to the discounter's store price image, we confirm that average prices paid for their category increased by 2.1 percent. Further analysis reveals that the price paid for the established discount offers before and after the brand listing remained stable, and the category price change is due to the addition of the manufacturer brands. Even though 2.1 percent increase seems low, keep in mind that the new brand, on average, accounted for only 10 percent of discounter category sales in the post introduction year.

In sum, for both the manufacturer and the discounter, the majority of brand listings results in value and volume net or incremental growth above the national benchmark.

Ability to attain new buyers

Our results show that if a larger part of national-brand sales at a discounter comes from new brand buyers, growth is higher, both national-brand growth ($r = 0.14$; $p < 0.10$), and discounter-category growth ($r = 0.35$; $p < 0.01$). Fortunately for the manufacturer, the biggest part of total brand sales (volume to avoid potential bias from price movements) at the discounter comes from new customers. Across all 134 listings, an average 80 percent is from consumers that did not purchase the brand in other stores before (buyer groups i and ii in Table II). For discounters, sales from new

		Volume growth	
		Above market	Below market
Sales growth	Above market	Cell 1	Cell 2
		Manufacturer: 110 (82%)	Manufacturer: 6 (4.5%)
	Below market	Discounter: 81 (60.5%)	Discounter: 18 (13.5%)
		Cell 3	Cell 4
	Manufacturer: 4 (3%)	Manufacturer: 14 (10.5%)	
	Discounter: 4 (3%)	Discounter: 31 (23%)	

Table VI.
Number of brand listings
by sales and volume
growth

category buyers are lower. On average, only 29 percent of national-brand sales at their store is from new category buyers (groups ii and iii), while the remaining part reflect consumers who already purchased in the category.

Yet, these averages mask important differences across individual listings. For example, only 28 percent of (volume) sales for Always pantyliners, a Procter & Gamble brand introduced at Lidl in November 2003 came from new brand buyers, making it a comparatively less successful new listing for the manufacturer. Alternatively, 19 percent of Always sales at Lidl are obtained from existing category buyers that switch brands. Therefore manufacturers and discounters should carefully select brands to sell at discount outlets.

Strategy selection

After the logit transformation, our two dependent measures are linked to the proposed drivers of consumer store- and brand-switching behavior using the models in (1)[7, 8]. Inspection of the correlation matrix revealed that the largest absolute correlation between the predictors is below 0.70, and the largest variance inflation factor was 3.21, well below the critical value of 5 advocated in Judge *et al.* (1988). Hence, multicollinearity is no major concern. For several new listings, no private label or competing national brand was available in the discount category (14 and 3 cases, respectively). Therefore, we estimate our main models omitting the within-store price differentials, while these variables were tested in a separate analysis on a reduced sample. Finally, store-random effects are used to control for unobserved store differences in both models. The variance components for the store and individual listings were significant in the manufacturer and the discounter model (all p -values < 0.10)[9].

As is evident from Table VII, brand characteristics turn out important in both equations. Brand penetration has the expected negative effect in the manufacturer

Predictors (all log-transformed)	New to manufacturer ^a (unstandardized coefficients)	New to discounter ^a (unstandardized coefficients)
Intercept	2.10 ***	- 1.18 ***
Brand penetration	- 0.93 ***	- 0.14 ***
Brand loyalty	0.26	0.41 ***
In-store brand competition	- 0.08	0.05
Store penetration	0.11	- 1.32 ***
Brand absolute price level	0.16	0.03
Between-store price gap	- 0.71 **	0.04
		(0.19)
Within-store price gap vs private label ^b	0.13	0.19*
Within-store price gap vs competing national brands ^c	- 0.27	0.33 ***

Notes: ^aA logit transformation $\ln(s^{NEW}/1 - s^{NEW})$ on the dependent s^{NEW} is used, with s^{NEW} the share of brand sales at the store from new buyers; ^bDue to missing observations for this variable, the corresponding estimates are derived from a limited data sample with 120 observations; ^cDue to missing observations for this variable, the corresponding estimates are derived from a limited data sample with 131 observations; ***Significant at 1 percent; **Significant at 5 percent; *Significant at 10 percent; p -values are one-tailed for directional effects, and two-tailed otherwise (see Table III)

Table VII.
Results on the percentage sales from new buyers

model ($b_{M,1} = -0.93, p < 0.01$), but unlike our expectation, also the discounter is less likely to attain new buyers for high penetration brands ($b_{D,1} = -0.14, p < 0.01$). A negative effect in the manufacturer model is consistent with more store switchers (iii), confirming *H1a*. However, if this is the only group that is affected, the discounter should benefit (see Table III). As both parties suffer, it seems that fewer buyers in group (ii) are attained with highly penetrated brands at discounters.

Second, consistent with *H2b*, brand loyalty has a significant positive impact in the discounter model ($b_{D,2} = 0.41, p < 0.01$), but no impact in the manufacturer model ($b_{M,2} = 0.26, p > 0.10$). The absence of a negative impact in the manufacturer model suggests that this relationship is not only driven by store switchers (iii), but that more buyers in group (ii) are also attracted by high-loyalty brands. The absence of many store switchers for high-loyalty brands could be attributed to the finding that loyal brand buyers are less price sensitive (Krishnamurthi and Raj, 1991) and may not search for their favorite brand at a price-aggressive discounter. Moreover, if such a niche brand is able to appeal to an untapped consumer segment at the store that so far refrained from purchasing in the (discount) category (group ii), it benefits both the manufacturer and the discounter.

With respect to the store-related variables, the number of competing alternatives at the store has no direct effect on a brand's ability to attract new buyers, neither in the manufacturer ($b_{M,3} = -0.08, p > 0.10$), nor the discounter ($b_{D,3} = 0.05, p > 0.10$) model. The expected higher number of in-store brand switchers (group i) from listing branded goods in categories where the store has a higher penetration was partly supported. The negative significant impact in the discounter model ($b_{D,4} = -1.32, p < 0.01$) suggests more in-store brand switchers as posited in *H3b*, but a non-significant effect in the manufacturer model ($b_{M,4} = 0.11, p > 0.10$) indicates that also other buyer groups are responding to the new listing.

Finally, price results show that managers should worry more about relative price spreads as opposed to brands' absolute price levels. The effect of absolute price was not supported ($b_{M,5} = 0.16, p > 0.10$ and $b_{D,5} = 0.03, p > 0.10$), but significant effects were found for all relative price differences. Consistent with *H5a*, less expensive branded offerings at a discounter compared to regular retailers (i.e. larger between store price gap) attract store switchers (iii), which is undesirable for a manufacturer ($b_{M,6} = -0.71, p < 0.05$). The between-store price gap variable had the expected positive sign in the discounter model, but fails to reach significance ($b_{D,6} = 0.04, p > 0.10$). Alternatively, larger price differences between manufacturer and store brands at a discounter result in relatively fewer in-store brand switchers (i) and/or more new category buyers at the store (ii) that are both beneficial to the retailer ($b_{D,7} = 0.19, p < 0.10$), supporting *H6b*. Finally, in line with *H7b*, larger price differences with competing branded offerings at the discounter result in less sales from existing discount buyers (i) and more new buyers in (ii), ($b_{D,8} = 0.33, p < 0.01$). In sum, several brand-, store-, and price-related variables should be taken into account by management when extending the discount assortment with established branded offerings.

Discussion

Its continuing growth over the past years has made the discount channel an increasingly attractive new outlet for manufacturers to sell their brands. Concurrently,

many discounters seem more open than ever to add popular national brands to their private label-dominated assortment. Still, both suppliers and discounters worry about several drawbacks, especially if national-brand sales at discounters draw from their existing customer base. Manufacturers fear that discount sales are diverted from their established retail shops, and thus, contribute little to total brand revenues while upsetting existing channel partners. Discounters, in turn, worry that branded sales merely come at the expense of other, possibly more profitable offerings in their assortment.

This study sheds light on three unexplored managerial issues when manufacturers sell their brands through a discount channel. First, during the year following the introduction, both the manufacturer and the discounter are able to grow their total firm performance in excess of the market for the majority of the 134 cases in our sample. That is, the majority of brands outpaced national market growth (> 80 percent of cases), as did the majority of discount categories (> 60 percent cases). Hence, the benefits from selling branded offerings through a discount channel seem to outweigh potential cannibalization losses. Second, the results show that this is indeed a successful strategy to attain new brand buyers. On average, 80 percent of national brand revenues at discounters are obtained from new brand buyers, and thus, are incremental to manufacturers. This figure should reduce manufacturers' worries about severe channel cannibalization and may be helpful in negotiations with established retail clients. Discounters, however, attract fewer new customers. On average, only 29 percent of branded sales at their store are obtained from new category buyers. These results confirm prior findings that consumers are typically more loyal to stores than to brands (Sloot *et al.*, 2006).

Finally, not all brands are beneficial, nor did all brands benefit equally. Large variation across individual cases strongly suggests that managers should be diligent when evaluating a brand's potential before sending it to the discount shelves. In fact, brands beneficial to the manufacturer are not necessarily beneficial to the discounter, and only half of the 134 cases (51 percent) in our sample were able to simultaneously grow manufacturer and discounter total performance. Typically, a discounter can choose among numerous candidates to fill the limited brand slot(s) available at their store, but large manufacturers can also be selective.

Managerial recommendations

We advise manufacturers not to enter their biggest or "flagship" brands, but to go with an alternative for which current market penetration is still modest. Such brands have a bigger potential to reach "untapped" consumer segments without attracting existing brand buyers at other stores. If possible, brand managers should also monitor relative price differences with the discount channel (by either choosing brands that allow for the "right" premium or via effective negotiation): to limit store switching, discount selling prices should be closely aligned with prices at regular retailers. One way to achieve this is by keeping wholesale prices for discounters sufficiently high.

Fortunately, also the discounter has an incentive to keep national brand prices sufficiently high. A larger price difference *vis-à-vis* his current offerings limits (in-store) brand switching, and increases the marginal category revenues by reaching new buyers. The price differential is not the only factor where both parties' interests align. Discounters also benefit from less penetrated brands, as high penetration brands lead

to substantial in-store brand switching. Moreover, discounters should add branded alternatives with a loyal customer base in categories where they are still relatively weak. This finding is consistent with the observed weak performance of many discounters in high involvement or “risk” categories, where consumers seem to prefer well-known manufacturer brands over (inferior) secondary brands or private labels (Batra and Sinha, 2000).

Limitations and future research

Our analysis is subject to some limitations that call for more research in this area. First, ideally, our relative category-level measures should be complemented with absolute monetary brand sales or margins. A brand’s total sales or profit in a discounter may be sufficiently high to compensate for substantial brand or store switching problems. Second, our analysis focuses strongly on new buyers, and treats discounter sales obtained from current buyers as a “shift” in firm income from one source to the other. However, this shift becomes more worrisome if consumers switch from high to low profitable brands and/or stores. While we found a first indication that prices for branded products are lower at discounters (on average, 5 percent), future research should assess to what extent sales losses in other retailers are larger than the revenues firms can recoup at a discounter. Unfortunately, no margin data is currently available to analyze the profit impact from the national brand activities at discount stores. Third, even though store-switching behavior across all established retailers turned out to be small (on average, 20 percent of buyers switch store), some stores may suffer proportionally more. Thus, further research should bring more clarity if this is the case, and for what store type (other discounters, or upscale retailers?). Fourth, our scope was limited to Germany geographically. It may be worthwhile to study the phenomenon of brands in discounters in other countries. However, our sample includes the assortment adjustments at Aldi and Lidl, two leading discounters that are operative in almost any major European grocery markets. Given the similarity between their discount operations across countries, we believe that the results found in German are also representative for Aldi and Lidl stores in other countries.

Fifth, apart from sales effects, both parties’ image may suffer: Manufacturers worry about the effect of a more “downmarket” channel on their brand’s reputation, discounters “discount” image may suffer (Burt, 2000). Hence, future research should also focus on brand equity effects for the manufacturers, and store equity implications for the discounters. Sixth, besides listing brands permanently, discounters often sell national brands for a limited time. Such activities provide manufacturers with an opportunity to tap into new consumer segments, and allow the discounter to signal a dynamic assortment. Given that exposure to potential buyers is short, and buyers cannot find it when revisiting the store, we posit that these activities are likely to trigger different reactions from consumers than the permanent listings examined in this study. We suggest more research investigating the impact of this common promotional assortment tactic. Finally, the current study was concerned with listings, but discounters also remove brands from the assortment. This induces switching behavior as buyers can no longer find their preferred brand on the shelves. Again, buyers may decide to switch to other retailers, switch to alternative offerings within the discount assortment, or they may be lost to both channel partners.

Notes

1. Buyers who shop across multiple stores could be both in-store brand switchers and store switchers if they already purchased in the discount category for other brands before, while also purchasing the focal national brand at other retailers. In the remainder of the text, we argue for each of the buyer groups in (i) to (iii) separately why they are likely to adjust their purchases following a new listing at the discounter. We have no reason to expect any different relationship if buyers belong to multiple groups.
2. The argument builds on revenue as the indicator of manufacturer benefits, while in reality (hard to obtain) margin information should guide the decision-making process. Typically, manufacturer margins are lower in a discount channel (IGD Research, 2006). Hence, large benefits from switchers are even less likely.
3. This more limited data window is required for two reasons: to ascertain that the brands are established brands at other retailers now introduced at the discounter, and have not been in its assortment before (e.g. brands temporarily out-of-stock); and it allows us to evaluate and compare brand performance in the year prior with one year post launch.
4. Note that only permanent listings, defined as brands that remain in the assortment of the retailer for at least 6 months are included in our sample. Temporary or promotional offerings available for a shorter period are discarded, as consumer's motivation to purchase such products can differ substantially from permanent listings.
5. Most national brands in our sample get introduced in one of the six discounters, even though 13 brands were added at multiple discounters. In those instances, the introduction always took place at a different point in time.
6. This relationship need not hold when benchmarking against the category (i.e. if all other brands cut prices significantly, value could increase in excess of the market while volume remains stable), but category prices were stable: the average ratio of category prices post-introduction to pre-introduction was 0.99.
7. Some of our listings were observed to have a dependent value in the manufacturer model at the upper boundary (i.e. proportions that equal one), and the proposed logit transformation cannot be applied. To overcome this, we follow common practice and subtract a small positive number c from one each time this value is observed (Piepho, 2003). The value c was set to 0.005, but smaller or larger values for c did not alter our key findings.
8. All results in this section are based on volume shares as dependent measures in equation 1, but the same findings are obtained when value shares are used.
9. The between-stores variance proportion is 0.29 in the manufacturer model, and as high as 0.65 in the discounter model, suggesting that a fair amount of the variation in the (transformed) dependent variables among the listings exists across stores (Singer, 1998).

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Appendix. Variable measurement

Brand-related variables

To avoid potential endogeneity problems, brand-related information is derived from data for the year prior to the brand introduction at the discounter.

Brand penetration. The fraction of the total market that is purchasing the focal brand. The market is approximated by the total number of category buyers.

Brand loyalty. Behavioral brand loyalty – as opposed to attitudinal loyalty – is reflected in consumers' repurchase behavior (Dick and Basu, 1994). In line with this conceptualization, loyalty is measured as a brand's within-household market share (see Bucklin *et al.*, 1998). Accordingly, we determine total category expenditures from all brand buyers, and assess the percentage spent on the focal national brand.

Store-related variables

Number of competing offerings. Following Boatwright and Nunes (2001), brand competition at the store is quantified by the number of competing branded offerings present on the shelves during the post introduction year.

Store penetration. The fraction of total number of category buyers in the market purchasing from the category at the discounter.

Price-related variables

Retail price information is obtained from data for the year after the listing. In line with Nijs *et al.* (2001), average unit prices are derived by dividing total annual value sales by the corresponding volume sold.

Brand absolute price level. Obtained by multiplying average unit prices with the most common package size sold at the discounter.

Between-store price gap. Price difference of a national brand between the mainstream retailers and the discounter in question is quantified by the ratio of the (sales weighted) average national brand price charged across all regular retailers to the price charged at the discounter. Hence, higher values reflect a larger between store price gap (i.e. more beneficial price at the discounter).

Within-store price gap with private label. The ratio of the national brand price to the discounter's private label price (if available) on equivalent units. Higher values represent a larger price gap with the private label. This is conceptually similar to the operationalization by Dhar and Hoch (1997).

Within-store price gap with competing national brands. The ratio of the focal national brand price at the discounter (if available) to the (sales weighted) average national brand price of competing (non-private label) offering(s) at this store.

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