The Moderating Roles of Relationship Quality and Dependency in Retailers' New Product Adoption Decisions

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ABSTRACT AND KEYWORDS	
Abstract	This study contributes to the retail adoption literature by explicitly focusing on the role of both profit-related and relationship variables in explaining new product adoption decisions by retailers, instead of considering either one of these groups of variables in isolation as has been done by previous retail adoption studies. Moreover, it specifically addresses how both relationship quality and a retailer's dependence on the manufacturer moderate the effect of profit drivers. Using a sample of 392 new product adoption decisions by four Dutch retailers, the authors estimate a random effects logit model to explain adoption decisions. The results show significant positive main effects of gross margin, consumer support, product uniqueness, relationship quality and the retailer's dependency on the manufacturer on the adoption decision. Moreover, the authors find that improved relationship quality tends to reduce the importance of both gross margin and consumer support in the adoption decision process, but surprisingly leads to a stronger impact of trade support. The moderating effect of the retailer's dependence on the manufacturer also differs between profit drivers, such that it decreases the positive impact of gross margin, consumer support and product uniqueness, and it increases the negative effect of store brand cannibalization.
Free Keywords	adoption, logit model, retail, relationship marketing, store brands, power
Availability	
Classifications	

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ABSTRACT

This study contributes to the retail adoption literature by explicitly focusing on the role of both profit-related *and* relationship variables in explaining new product adoption decisions by retailers, instead of considering either one of these groups of variables in isolation as has been done by previous retail adoption studies. Moreover, it specifically addresses how both relationship quality and a retailer's dependence on the manufacturer moderate the effect of profit drivers. Using a sample of 392 new product adoption decisions by four Dutch retailers, the authors estimate a random effects logit model to explain adoption decisions. The results show significant positive main effects of gross margin, consumer support, product uniqueness, relationship quality and the retailer's dependency on the manufacturer on the adoption decision. Moreover, the authors find that improved relationship quality tends to reduce the importance of both gross margin and consumer support in the adoption decision process, but surprisingly leads to a stronger impact of trade support. The moderating effect of the retailer's dependence on the manufacturer also differs between profit drivers, such that it decreases the positive impact of gross margin, consumer support and product uniqueness, and it increases the negative effect of store brand cannibalization.

Key-words: adoption, logit model, retail, relationship marketing, store brands, power

INTRODUCTION

Various articles consider consumers' new product adoption processes (e.g., Arts, Frambach, and Bijmolt 2005; Gielens and Steenkamp 2007; Prins and Verhoef 2007; Steenkamp and Gielens 2003; Wood and Moreau 2006), but literature on retailer's adoption decisions remains quite scarce (see Table 1 for an overview).

-- Insert Table 1 about here --

The first retail adoption studies appeared in the 1970s (Grashof 1970; Heeler, Kearney, and Mehaffey 1973; Montgomery 1975), but in the subsequent 30 years, few follow-up articles on this topic were published (Kaufman, Jayachandran, and Rose 2006; Rao and McLaughlin 1989; White, Troy, and Gerlich 2000). This dearth is remarkable; as Ataman, Mela, and Van Heerde (2008) show, of all the marketing mix elements, distribution is the most important for generating growth and building market potential for a new brand.

The earliest retail adoption studies (e.g., Heeler, Kearney, and Mehaffey 1973; Rao and McLaughlin 1989) mainly investigated the role of profit-related variables, such as gross margin, price, consumer support, and trade support. Kaufman, Jayachandran and Rose (2006) were the first authors to introduce relationship variables in the retail adoption literature. Thus far, they alone focus on the role of the relationship quality between the manufacturer and the retailer to explain a retailer's adoption decision without addressing profit-related variables. Our study contributes to this research stream by explicitly focusing on the role of both profit-related *and* relationship variables in explaining new product adoption decisions by retailers, instead of considering either one of these groups of variables in isolation as has been done by previous retail adoption studies. More specifically, this study extends the study by Kaufman, Jayachandran and Rose (2006) in two important ways.

First, beyond *relationship quality*, the only relationship variable included in the model of Kaufman, Jayachandran and Rose (2006), we also include the retailer's *dependence* on the manufacturer. Remarkably, despite the attention to power balances between retailers and manufacturers (e.g., Ailawadi 2001; Kumar and Steenkamp 2007), the direct influence of perceived supplier power on the retail adoption decision so far has been ignored.

Second, we explore the extent to which relationship quality *and* dependence moderate the effect of the profit-related explanatory variables on a retailer's decision to adopt a new product offering. Prior relationship marketing research indicates that a stronger relationship should improve relationship performance for the seller (e.g., Corsten and Kumar 2005; Kumar 1996; Morgan and Hunt 1994; Palmatier et al. 2006), leading to higher profits and potentially a lower need for more concrete, monetary (short-term) investments. For the retailer, stronger relationships might lead to more information sharing and therefore lower perceived risk about new product introductions. However, close relationships also might entail a dark side for the retailer, in that the manufacturer might invest less in the relationship than is optimal from the retailer's point of view (e.g., Grayson and Ambler 1999; Jap and Anderson 2005), while retailers also might adopt products that do not contribute to their category performance. Moreover, economic theory suggests that more powerful suppliers should be able to derive more profits from retailers (Farris and Ailawadi 1992; Messinger and Narasimhan 1995), such as by paying lower margins and lower slotting allowances to get their new product accepted. We therefore specifically investigate whether *relationship quality* and *retailer's perceived dependence on the manufacturer* moderates the effect of important profit drivers of a newly introduced product.

To achieve these contributions, we conducted a study in the grocery industry and gathered data about actual new product offerings of national brand manufacturers over a period

of 26 weeks. In total, we obtained data pertaining to 392 retail adoption decisions across four retail chains. In addition, we collected data from account and sales managers to check the face validity of our results. This rich data set enables us to provide both academic and managerial insights into retailers' adoption decisions.

In the next sections, we present the conceptual framework of our study and describe the hypotheses. Thereafter, we introduce the econometric model, discuss the data collection method, and present the estimation results. We end with a discussion of the implications of our research, research limitations, and directions for further research.

CONCEPTUAL FRAMEWORK

Figure 1 graphically summarizes our conceptual framework, and shows two main groups of variables that may lead to the adoption or rejection of new products, i.e. profit-related variables and relationship variables.

--- Insert Figure 1 about here ---

The dependent variable of concern is retail buyers' decisions to adopt or not adopt a new product offering. In principal, one may assume retail buyers look at economic arguments to adopt or not adopt a new product, and therefore consider the profit potential of a new product. To build a comprehensive set of profit-related variables, we build upon the retail adoption literature (e.g. Rao and McLaughlin 1989), consumer innovation adoption literature (Steenkamp and Gielens 2003), private label literature (e.g. Kumar and Steenkamp 2007; Pauwels and Srinivasan 2004) and the several studies that focus on slotting fees and allowances (e.g Bloom, Gundlach and Cannon 2000; Kuksov and Pazgal 2007; Lariviere and Padmanabhan 1997; Rao and Mahi 2003; Sudhir and Rao 2006). From this literature, we derive five main profit variables that may affect the decision to adopt or not to adopt a new product offering.

Gross margin and *trade support* are part of the negotiation process, observable by the retail buyer (i.e. no uncertainty). However, the retailer is uncertain about the expected sales volume and the cannibalization effect and therefore must use several indicators to assess these effects. For example, the launch strategy might help create consumer demand (Steenkamp and Gielens 2003), because *marketing activities targeted at consumers* have a positive effect on retailer adoption (Rao and McLaughlin 1989; White, Troy, and Gerlich 2000). *Product uniqueness* also may indicate expected sales quantity, in that unique products are more innovative, not just me-too products similar to existing offerings (e.g., Steenkamp and Gielens 2003; Villas-Boas 1998). As a proxy for cannibalization of existing products within the assortment, we use the expected *cannibalization effect on store brand sales*, because store brands now represent an important element of retailers' strategies that provide additional profits (Kumar and Steenkamp 2007; Pauwels and Srinivasan 2004).

In addition to the profit-related variables, we explicitly take into account relationship variables for the following three reasons. First, collaborative relationships are common in the fast moving consumer goods industry (e.g., Corsten and Kumar 2005), which is the focus of this study. Second, relationship quality has been shown to be important in explaining retail adoption decisions (Kaufman, Jayachandran and Rose 2006). Third, previous research on marketing channels acknowledges the important role of relationship quality *and* retailer's dependence in marketing channel relationships (Ailawadi 2001; Geyskens, Steenkamp, Scheer and Kumar 1996; Jap and Anderson 2007; Palmatier et al. 2007). In line with these arguments, we include two relationship variables, i.e. relationship quality and a retailer's dependence.

Prior research indicates that relationship variables may influence the decision making of buyers (e.g., Bolton, Lemon and Verhoef 2008; Grayson and Ambler 1999; Wuyts, Verhoef and

Prins 2009). More specifically, relationship variables may distract attention from core attributes of services or products. We therefore explicitly investigate the moderating effect of the relationship variables on the strength of the influence of the profit drivers. By including both relationship variables and profit drivers in our model, and exploring the interaction effects between the relationship variables and the profit-related variables, we contribute not only to existing literature on retail adoption but also to relationship marketing and channel power literature. The moderating effects provide empirical insights into *why* good relationships provide direct performance consequences for the supplier, as proven in prior relationship marketing literature (Palmatier et al. 2007). In the same vein, we contribute to channel power literature, in that we specifically show that greater retailer dependence on the supplier reduces the need of offering e.g. a higher gross margin to ensure new products are accepted by retailers.

Finally, we also include control variables (see Figure 1), such as price, perishability, and category role, in accordance with prior research and interviews with both retailers and manufacturers (e.g., Rao and McLaughlin 1989). We provide the anticipated effects of the control variables in Table 2, whereas the next section discusses our hypotheses for the main effects of the profit-related variables (H1-5), followed by the hypotheses related to the main effects of relationship variables (H6-7). Subsequently, we focus on our expectations of the interaction-effects of the profit-drivers with relationship quality (H8) and relationship dependency (H9) respectively.

-- Insert Table 2 about here --

HYPOTHESES

Main Effects: Profit Drivers

Gross margin. The expected gross margin provides an important determinant of a retailer's expected profit, such that an increase in gross margin should lead to a greater probability of retailer adoption. However, Montgomery (1975) and White, Troy, and Gerlich (2000) do not find a significant main effect, and Rao and McLaughlin (1989) report a significant negative impact of gross margin. Still, we hypothesize:

H_1: The higher the gross margin, the greater the probability that the retailer adopts the new product.

Trade support. Manufacturers often pay slotting fees and allowances to retailers when they launch new products to persuade those retailers to stock, display, and support the products (Bloom, Gundlach, and Cannon 2000). White, Troy, and Gerlich (2000) define slotting fees as upfront cash payments to retailers that accept new product offerings, whereas slotting allowances are free or discounted orders for new products. In general, these fees and allowances help mitigate the risks associated with new product acceptance by passing information down to the retailer and shifting costs up to the manufacturer (Lariviere and Padmanabhan 1997; Rao and Mahi 2003; Sudhir and Rao 2006; White, Troy, and Gerlich 2000). We hypothesize:

H_2: The larger the amount of support directed at the retailer, the greater the probability that the retailer adopts the new product.

Consumer marketing support. In addition to trade support, consumer marketing support influences a retailer's decision to adopt a new product offering. The promotional support directed at the consumer increases consumer pull and can be regarded as an incentive, or even a benefit, for the retailer (Corstjens and Corstjens 1995). Recent studies show that more consumer

marketing support (e.g., advertising, consumer promotions) leads to faster adoption and more trial (e.g., Steenkamp and Gielens 2003). The increase in consumer demand for the new product increases the retailer's willingness to carry the new product (Rao and McLaughlin 1989; Reibstein and Farris 1995; White, Troy, and Gerlich 2000). We therefore hypothesize:

H_3: The larger the amount of consumer marketing support, the greater the probability that the retailer adopts the new product.

Product uniqueness. Product uniqueness refers to the extent to which the new product differs from existing products within a category, which may indicate expected sales quantity. Unique products can create their own niches, reshape customer preferences, and differentiate themselves from other products (Gielens and Steenkamp 2007). When unique products join the assortment, they have positive impacts on category sales (De Clerck et al. 2001). As Villas-Boas (1998) shows, retailers adopt products sooner when the manufacturer increases the differences among currently offered products. Therefore, new products with less uniqueness are less likely to be adopted, because they tend to be me-too offerings. Furthermore, literature on assortments suggests that if a new product is similar to other products in the assortment (i.e., low level of uniqueness), the retailer's adoption of the new product would lead to assortment redundancy and duplication, which increases the choice effort of consumers and may cause lower category sales (Kahn and McAlister 1997; Sloot, Fok, and Verhoef 2006). In turn, we expect that retailers accept unique products sooner than they do products that are similar to already offered products and formulate the following hypothesis:

H_4: The more unique the new product, the greater the probability that the retailer adopts the new product.

Cannibalization of store brand. Store brand market shares have reached record highs in Western economies and should continue to grow (Kumar and Steenkamp 2007). Yet retailers likely cannot survive without national brands, which build traffic and often are more innovative (Kumar and Steenkamp 2007). Store brands benefit retailers through their higher margins and because they increase the retailer's margins on national brands (Pauwels and Srinivasan 2004) by enhancing the retailer's position in relation to manufacturers (e.g., Ailawadi 2001). If a new national brand cannibalizes the store brand, the retailer's profitability may suffer. We hypothesize:

H_5: The more the new product cannibalizes the store brand, the lesser the probability that the retailer adopts the new product.

Main Effects: Relationship Variables

Relationship quality. Relationship quality entails an overall assessment of the strength of the relationship, typically conceptualized as a composite that captures different but related facets of a relationship (Palmatier et al. 2007). Crosby, Evans, and Cowles (1990) define relationship quality as the extent to which the retailer believes the manufacturer has a high integrity and has confidence in the manufacturer's future performance because the level of past performance has been satisfactory (Corsten and Kumar 2005; Jap and Anderson 2007; Palmatier, Dant, and Grewal 2007). Palmatier et al. (2007) report that relationship quality relates positively to financial relationship outcomes; it also may influence the outcome of retailers' new product adoption decisions, because retailers likely respond positively to manufacturers they trust and with which they have satisfactory relationships (Geyskens, Steenkamp, and Kumar 1998, 1999).

Kaufman, Jayachandran, and Rose (2006) show that trusted manufacturers are more successful in getting retailers to adopt their products, so we hypothesize:

H_6: The higher the quality of the relationship between the retailer and national brand manufacturer, the greater the probability that the retailer adopts the new product.

Retailer's dependence on the supplier. Finally, an ongoing discussion pertains to whether power has shifted from manufacturers to retailers (Ailawadi 2001). One way of gaining power over another channel member is to create a dependency relationship (Bloom and Perry 2001). Relationship dependence refers to "the need to maintain a relationship to achieve goals by one of the two parties" (Palmatier, Dant, and Grewal 2007, p. 175); we focus specifically on the retailer's dependence on the manufacturer. The more important it is for the retailer to maintain the relationship with the manufacturer, the more likely it is to include that manufacturer's new products in its assortment. Powerful manufacturers also might threaten retailers (i.e., stop supplying the brand) if the retailer will not adopt the product. We therefore hypothesize:

H_7: The higher the retailer's dependence on the manufacturer, the greater the probability that the retailer adopts the new product.

Moderation Effects of Relationship Quality and Dependence

Interactions with relationship quality. We hypothesize that relationship quality moderates the effect of the profit drivers of retail adoption, such that the absolute effects become smaller. We consider three rationales for this claim. First, in various contexts (i.e., market research agencies, apparel industry), existing personal relationships might cause relationships to become stale because attention shifts from economic efficiency to relationship continuance (Grayson and Ambler 1999; Moorman, Zaltman, and Deshpandé 1992). Some authors refer to this shift as the

potential dark side of close relationships between two exchange parties (e.g., Grayson and Ambler 1999). If maintaining the relationship becomes the dominant objective, retailers might pay less attention to the profit consequences of their adoption decision, which suggests profit drivers, such as gross margin and consumer marketing efforts, might have less influence on the retailer's adoption decisions for products offered by manufacturers with which it enjoys high relationship quality.

Second, in line with the preceding argument, the economic sociology literature emphasizes the concept of socially embedded relationships, including both positive and negative effects (e.g., Portes and Sensenbrenner 1993). Specifically, embedded relationships can act as constraints and may even become liabilities. Uzzi (1997) acknowledges that overly embedded relationships may stifle economic action when the social aspects of the relationship supersede the economic imperatives. Therefore, in high-quality relationships with manufacturers, retailers might focus less on (economic) profit optimization, and the impact of profit indicators on retailers' new product adoption decisions might decline.

Third, Bolton, Lemon, and Verhoef (2008), on the basis of social psychological literature, suggest that the so-called rose-colored glasses effect prevents satisfied customers from considering actual delivered service quality at the contract level when they decide on a service upgrade. In our study context, high relationship quality may detract attention from the actual characteristics of the new product offer. We offer the following hypotheses:

H_8: Relationship quality, in an absolute sense, reduces the effect of (a) gross margins, (b) trade support, (c) consumer market support, (d) product uniqueness, and (e) store brand cannibalization on retailers' new product adoption decisions.

Interactions with retailer's dependence on supplier. From an economic perspective, the more powerful exchange partner should be able to exercise its power and achieve more profits. Empirical research fails to support this claim though, because little evidence indicates shifting profits from manufacturers to more powerful retailers (Farris and Ailawadi 1992; Messinger and Narasimhan 1995). Kim and Staelin (1999) analytically show that this shift might occur, because increased competition among retailers may force them to pass through at least some extra profits from manufacturers (e.g., higher slotting allowances) to consumers.

In this study, we are mainly interested in how retailers' dependence on suppliers moderates the impact of the profit drivers of retail adoption. We focus first on the moderating effect on trade support, because this variable receives the widest attention in prior research on channel power. According to Ailawadi (2001), slotting allowances reflect greater retailer influence in new product introductions, and large retailers likely receive higher allowances than small ones. Kuksov and Pazgal (2007) analytically show that more retailer bargaining power (less dependence) increases the incidence and the magnitude of slotting allowances. Therefore, in case of product introductions by more powerful manufacturers, which can make retailers more dependent on them, trade support becomes a less important factor in the retailer's adoption decision process (negative interaction effect).

Our argumentation regarding the interaction effect between retailer's dependence and gross margin follows the reasoning that more powerful retailers should be able to gain better deals. A dominant retailer has the power to dictate retail prices (Geylani, Dukes, and Srinivasan 2007), but manufacturers can raise the wholesale price for relatively weak retailers. Therefore, when a retailer is more dependent on a manufacturer, gross margins will become less important in the adoption decision (negative interaction effect).

The moderating effect of dependence on other profit drivers is less clear. However, we reason that more powerful manufacturers might be able to get products introduced, regardless of whether the product lacks uniqueness or consumer support, or even if it cannibalizes on the store brand sales. Retailers might simply accept these products, because they are afraid that other competing retailers will sell the new product instead. Therefore, our hypothesis is as follows:

H_9: Retailer's dependence on the supplier reduces the positive effects of (a) gross margins, (b) trade support, (c) consumer support, and (d) product uniqueness, and the negative effect of (e) store brand cannibalization on retailers' new product adoption.

DATA COLLECTION

Research Context

By following a thorough procedure, we have been able to construct a unique data set on *actual* retail adoption decisions. The data we use in this study is obtained via a large Dutch retailer. This retailer has four separate retail chains that compete in the same national market but differ in size (small/large) and strategy (service/discount). Within this retail company the buying department is responsible for all retail adoption decisions with regard to the four retail chains. The buying department consists of two separate departments. The first one is the Unit Fresh Products, which is responsible for buying all fresh and convenience products. The second one is the Unit Packaged Products, which is responsible for buying dry grocery products, drinks, frozen food and drogmetics. Each unit is responsible for approximately 50% of the turnover of the retailer, although the percentage varies per retail format. As the focus of this study is retail adoption decisions with regard to national brand manufacturers, the study was conducted within

the Unit Packaged Products. This unit consists of seven buyers, each of whom is responsible for buying decisions of a specific set of product categories. All seven buyers participated in the research.

Questionnaire Design

On the basis of our literature review and interviews with all seven participating buyers, the buying directors of the participating retailer, and three buying directors of other retailers, we developed a 10-page questionnaire in Dutch (See Table 3 for a description of all measures).

--- Insert table 3 about here ---

We pre-dominantly used multi-items scales to measure the core variables in our model. Only variables, such as gross margin and cannibalization on the store brand, were measured with single item scales. We used existing scales, which were originally developed in Dutch (i.e. relationship quality and dependence), and scales that comes from English sources. For the latter scales we followed the usual procedures of translation and back translation. We pretested the questionnaire over two weeks and for six new product offerings. Moreover, we verified that all participating buyers understood all questions correctly. By following this procedure, we optimized the questionnaire and acquainted the purchasers with the survey. To increase their commitment to the project, the buying directors wrote letters to the buyers, explaining the importance of the research.

Data Gathering Process

The data was collected on a weekly basis, during a period of 26 weeks. The buyers of the Unit Packaged Products were asked to evaluate weekly each new product offering by a

national brand manufacturer during that week. In total 98 new product offerings, i.e. products that had not been previously offered to the chain were evaluated by the participating buyers. For each of the 98 offered products the responsible buyer provided information on the adoption per retail chain (yes/no), resulting in 392 retail adoption decisions (98 product offerings x 4 retail chains).

Our variables are measured at different levels. First, we have measures at the product-retail chain level. At this level the buyer provides specific answers about a product offering for each of the four retail chains separately, i.e. product-retail chain specific answers. Examples include new product adoption, gross-margin, and product price. Second, we have data at the product level. These data only differ between product offerings and do not differ between the four retail chains. Examples include relationship quality and relationship length. Finally, one variable (retail format) is measured at the retail chain level, which only differs between retail chains. The level of the data is provided in the last column of Table 3.

Descriptive Statistics

In total, 29 suppliers, representing both small (e.g., Daelmans Banket, Struik, Remia) and large (e.g., Unilever, Reckitt Benckiser, Sara Lee/DE) manufacturers, offer 98 new product offerings to all four retail chains during the data collection period. The number of new product offerings per manufacturer ranges from 1 (Kimberly-Clark) to 9 (Boas and HJ Heinz).

Examples of new product offerings include Mars Delight, Coolbest Vitaday Light, Pringles Thai Dip Sauce, and Cillit Bang Powder. In Table 4, we provide an overview of the number of new product offerings and their acceptance rates across product categories. Almost 70% of the new products are either canned foods/sauces (e.g., rice, soup, vegetables, olive oil, tomato sauce) or snacks (e.g., chips, biscuits, chewing gum, chocolates).

- Insert Table 4 about here -

Table 4 reports an average adoption rate for the new product offerings in our study of almost 66%, though huge variation exists across product categories and retailers, ranging from 25% for care and paper products to 93% for the products in the breakfast category, and from 41% to 85% for the different retail chains. The more service-oriented retail chains show significantly higher adoption rates than the two discount formulas.

The average adoption percentage we find matches the 65% adoption rate reported by Kaufman, Jayachandran, and Rose (2006) but is higher than the 32% that Rao and McLaughlin (1989) report. To determine whether our average adoption rate of 66% is representative of the Dutch market, we conducted a follow-up survey among 85 account managers of national brand manufacturers in the surveyed market and asked them what percentage of new products they offered last year were accepted by the retailers in this market. The 37 out of the 85 managers who answered this question reported a 68% average acceptance rate across all Dutch retailers, close to our average of 66%.

ECONOMETRIC MODEL

Because the dependent variable in our model is binary (i.e., decision to adopt or not adopt a new product offering), we use a logit model to assess the effect of the determinants. We possess observations about 392 new product adoption decisions (p), assessed by seven buyers (b), who are responsible for buying decisions at four different retail organizations. Thus, we have four observations for 98 introduced products, because we measure adoption decisions at the retail chain level. In turn, we must account separately for unobserved heterogeneity due to new products and buyers. We include a random effect in our model to account for heterogeneity on

the product level. To account for the buyer-specific effects, we include six buyer dummies. Mathematically, our model therefore can be formulated as follows:

$$\begin{aligned} Y^{*}_{p,b} &= \beta_{0,p} + \beta_1 X + \beta_2 B + \xi_{p,b} \\ \beta_{0,p} &= \beta_0 + U_p \end{aligned}, \qquad (1)$$

where $Y^{*}_{p,b}$ is the underlying latent variable that reflects the utility of the new product introduction p for the retailer, $\beta_{0,p}$ is the random constant with $U_p \sim$ i.i.d. $N(0,\sigma^2)$, X is the vector of included determinants, β_1 is a vector of the related coefficients, B is a vector of the six buyer dummies, β_2 is a vector of the dummy coefficients, and $\xi_{p,b}$ is the error term i.i.d. N(0,1). We use LIMDEP 8.0 with 100 Halton draws to estimate the logit model (Greene 2003).

We do not include the fixed effects of retailers, because retail format (discount versus service) already appears in our model, so retail dummies would create perfect collinearity.

ESTIMATION RESULTS

The averages, standard deviations, and correlation coefficients for all variables included in our model appear in the Appendix. The majority of the correlation coefficients are less than .50; three correlation coefficients are just above .50, which implies multicollinearity is not a severe issue. We report the estimation results of our logit models in Table 5; the third column displays the model with only control variables, the fourth column added the main effects to that model, while the last column includes the estimation results of the model with all hypothesized main and interaction effects[1].

-- Insert Table 5 about here --

[1] We estimated different models to assess whether our estimation results are robust. We checked possible multi-collinearity effects. We estimated two separate models: (i) a model with only interaction effects with relationship quality and (ii) a model with only interaction effects with relationship dependence. The results of these models were pretty similar with the results of the full model.

Model Fit

The model with control variables only (Model I) is outperformed by the model that also includes the main effects (Model II), which in turn is outperformed by the full model (including main and interaction effects, i.e. Model III). The fit of both model II and III is good. The McFadden R^2 of model II is .68, whereas that of the full model is .82. The increase in fit also appears in the lower Akaike Information Criterion statistic in the full model (.52 versus .40). In the next section we concentrate on the results of the full model, because the fit statistics show that the full model is a substantially better model than the model with main effects only.

Including a random effect significantly increases model fit but only when we exclude any interactions ($p < .01$). The likelihood difference between the full model with no random effect and one with a random effect is not significant ($p > .05$), which indicates the interaction effects capture much of the unobserved product heterogeneity.

Finally, with regard to the fixed effects, our results show five significant effects in all three models ($p < .05$). Therefore, adoption rates appear to vary between buyers, which may result from both buyer differences and general category differences.

Hypothesis Tests: Main Effects

The fifth column of Table 5 shows that gross margins ($\hat{\beta} = 269.62$; $p < .01$), consumer support ($\hat{\beta} = 70.95$; $p < .01$), product uniqueness ($\hat{\beta} = 19.08$; $p < .01$), relationship quality ($\hat{\beta} = 13.63$; $p < .01$), and relationship dependence ($\hat{\beta} = 56.11$; $p < .01$) all indicate a significant, positive relationship with new product adoption. However, the effects of trade support ($\hat{\beta} = -11.39$; $p > .05$) and store brand cannibalization ($\hat{\beta} = 5.59$; $p > .05$) appear not to be significant.

Thus, we find support for H_1, H_3, H_4, H_6, and H_7 in the model with interaction variables, but we do not find support for H_2 and H_5.

Hypothesis Tests: Interaction Effects

In the model with interaction variables, we test the interaction effects between the profit drivers and (1) relationship quality and (2) retailer dependence. Overall, we find that the model with the interaction variables supports 10 of our 17 hypotheses, and find two other significant effects but with signs opposite our expectations.

With regard to relationship quality, we find support for two out of five hypotheses (H_{8a}, H_{8c}); that is, relationship quality lowers the effect of both gross margins ($\hat{\beta}$ = -25.42; $p < .01$) and consumer support ($\hat{\beta}$ = -9.75; $p < .01$) on retailers' adoption decisions. In the context of a good relationship, lower margins suffice, and less consumer support appears necessary to achieve retail adoption. Remarkably, our results show a positive, significant interaction effect between trade support and relationship quality ($\hat{\beta}$ = 7.77; $p < .05$), which suggests that manufacturers with a good relationship need more trade support to get their new product adopted by their retailer partners.

With regard to retailers' dependence on the manufacturer, Table 5 shows that the retailer's dependence on the manufacturer also lowers the effect of gross margins ($\hat{\beta}$ = -59.99; $p < .01$) and consumer support ($\hat{\beta}$ = -10.44; $p < .01$), in support of H_{9a} and H_{9c}, while no significant interaction effect emerges between trade support and retailer's dependence ($\hat{\beta}$ = -2.32; $p > .05$), indicating a lack of support of H_{9b}. We also find significant, negative interaction effects of dependence with product uniqueness ($\hat{\beta}$ = -5.89; $p < .01$), in support of H_{9d}, and store

brand cannibalization ($\hat{\beta}$ = -3.06; $p < .01$), indicating a sign opposite the hypothesized one (H_{9e}). This implies that gross margin, consumer support and product uniqueness are less relevant for the retailer's product acceptance when the retailer perceives its greater dependence on the manufacturer, but they are more reluctant to adopt new products that might cannibalize their store brand. This latter result, opposite to our expectations, might be explained by the fact that if a powerful supplier confronts a retailer with a new product that could hamper private-label sales, the adoption would increase the supplier's power. By making the retailer even more dependent on the manufacturer, this adoption eventually may lead to lower national brand margins for the retailer (e.g., Ailawadi and Harlam 2004; Pauwels and Srinivasan 2004). Moreover, retailers usually earn higher margins on private labels (Ailawadi and Harlam 2004), so accepting a new product from a powerful supplier that cannibalizes store brand sales could worsen the retailer's profit in two ways: First, it directly reduces profits through the losses among high margin store brands, and second, it indirectly reduces profits earned from the national brand because of the increased dependence on the manufacturer.

Effects of Control Variables

The control variables reveal consistent effects across the three models, and all significant coefficients indicate the expected signs. Specifically, high-priced new products, new products that entail category growth, and products introduced in important categories are more likely to be adopted, whereas perishable products are less likely. Furthermore, the market share of the manufacturer that introduces the brand and the length of the retailer's relationship with this manufacturer relate positively to new product adoption. Finally, the adoption of the new product by a competing chain fosters adoption, and retail chains with a service focus tend to adopt the new product more than those with discount formulas.

DISCUSSION

Our results provide new insights into the drivers of retailers' adoption decisions. Most previous retail adoption studies show that variables such as gross margin, trade and consumer support, and product uniqueness help explain a retailer's decision to adopt a new product offering (Rao and McLaughlin 1989; White, Troy, and Gerlich 2000), and Kaufman, Jayachandran, and Rose (2006) find a significant effect of relationship quality on retail adoption decisions, though only for moderately attractive products. Our study underscores the importance of focusing on relationship characteristics in terms of both quality and dependence, as well as the traditionally used explanatory variables (e.g., gross margin).

In particular, we demonstrate that the main effects of both manufacturer–retailer relationship quality and the retailer's dependence on the manufacturer help explain a retailer's adoption decision; we also show that these relationship variables moderate the effects of profit drivers of new products. The interaction effects model with both relationship quality and dependence proves significantly stronger than the model that includes the main effects only. That is, a model that focuses solely on the profit drivers of new product adoption decisions (e.g., Rao and McLaughlin 1989) or only on the role of relationship quality (Kaufman, Jayachandran, and Rose 2006) omits the interesting and important interplay among these variables.

Moderating Role of Relationship Quality

Prior relationship marketing literature (e.g., Palmatier et al. 2007) shows that good relationships have direct performance consequences for the supplier. We extend these findings by offering insights into *why* good relationships benefit manufacturers when they offer new products to retailers. Specifically, better relationship quality helps reduce the need to offer higher

margins for new products. This finding provides clear support to the notion of potential dark sides of close relationships with suppliers (e.g., Grayson and Ambler 1999; Jap and Anderson 2005); these retailer dark sides save the manufacturer money.

However, a good relationship also might benefit the retailer. We find a positive interaction effect between relationship quality and trade support, which actually contrasts with our expectation. We tentatively argue that manufacturers that have good relationships want to maintain them by providing their retailer partners with more trade support; alternatively, retailers with good relationships with manufacturers might be in a better position to require slotting fees and allowances.

Moderating Role of Retailer Dependence

Retailer dependence on a manufacturer moderates the impact of profit drivers; specifically, more dependent retailers pay less attention to margins and consumer support in new product adoption decisions. These findings contribute to our understanding of how increasing manufacturer power causes improved performance. Furthermore, we find that more dependent retailers are less likely to accept a new product, especially when this new product cannibalizes their store brand. Previous research only notes the relevance of store brands for creating more retailer profits by reducing their dependence on the manufacturer (e.g., Pauwels and Srinivasan 2004). Our results extend this research stream by showing that more dependent retailers carefully consider store brand cannibalization effects to prevent even more dependence in their relationship.

MANAGERIAL IMPLICATIONS

Retailers' adoption of new products is essential for sufficient distribution; therefore, manufacturers must understand how they might influence these decisions. We find that product uniqueness, consumer support, and gross margins increase the probability of new product adoption. Therefore, creating unique products, investing in consumer support, and increasing retailers' margins represent important tactics.

However, investing in more advertising or giving higher margins may decrease brand manufacturers' profits; instead, firms tend to invest in good relationships with the retailer. For example, Procter & Gamble and Wal-Mart have developed a long-term, close relationship, and Unilever makes special trade deals with AHOLD. Relationship quality also fosters adoption and provides manufacturers with an opportunity to provide lower margins on the new product and invest less in consumer support. In this way, investing in good relationships is a kind of dual benefit for manufacturers: It directly induces retail adoption, and it makes the new product introduction less costly. However, to ensure strong relationship quality, manufacturers should invest more in trade support.

Beyond investing in good relationships, manufacturers should aim to become more powerful and make retailers more dependent, especially as current trends move the other way. Large retailers around the globe, such as Wal-Mart and Carrefour, achieve greater turnover than even the largest global brand manufacturer Nestlé (Kumar and Steenkamp 2007). This trend enhances retail adoption probabilities, and similar to relationship quality, it also lowers the effect of gross margins and consumer support on adoption. To achieve retailer dependence, manufacturers could define explicit strategies, such as creating strong brands. Unilever's strong (global) brands, such as Dove, Lipton, and Knorr, dominate within and across categories.

Simultaneously, the manufacturer has reduced its number of brands and delisted small (often local), less powerful brands (Kumar 2005).

Retailers also should realize how they make adoption decisions. Our results potentially point to the dark sides of close and dependent relationships with manufacturers, because in these cases retailers tend to pay less attention to the level of consumer support and the gross margins in the adoption decision. Although good relationships with manufacturers are not bad, in that they might help retailers in various ways (i.e., more effective category management, information sharing), our results also clearly show that retailers with good manufacturer relationships should consider the merits of each new product introduction more carefully. For example, introducing less unique products might make the category less attractive, and cannibalization of store brands may directly affect retailer profits and increase dependence on the manufacturer.

Our results also suggest that more dependent retailers focus less on margins and consumer support for the new product. As a consequence, these retailers probably earn lower profits. Moreover, a successful new product introduction might enhance the position of the manufacturer with regard to the retailer. Thus, retailers should be careful in allowing themselves to become too dependent on a single manufacturer. In particular, they should avoid adopting products that cannibalize one of their power sources, namely, store brands. These dependent retailers may, however, face a difficult issue, in that not adopting interesting new products from powerful suppliers could have a negative effect on their competitive position in a category, while becoming more dependent may lead to lower profits on the (newly introduced) products.

RESEARCH LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH

This study contains several following limitations. First, we limit our investigation to the grocery industry in one country (i.e., The Netherlands). Additional studies should focus on

retailers in other industries, such as the consumer electronics industry, and in other countries to determine whether our results generalize beyond the current setting. Second, we focus only on the decision to adopt, not to the subsequent success of the new product. It would be interesting to follow new products over time and determine whether the relationship between the manufacturer and the retailer (i.e., quality and dependence) leads to differences in the success of new products, such as remaining on the shelf for a longer period. Third, the antecedent of new product adoption might not be totally exogenous. For example, manufacturers might offer higher margins or more trade support for products that they expect to suffer from lower adoption probability. We do not take this potential endogeneity into account.

Beyond these limitations, our study provides some interesting avenues for further research. Our results show rather mixed results regarding the influence of relationship quality and dependence as moderators of the profit-generating variables. Although we uncover some interesting and important findings and highlight the dark side of close and dependent relationships, some of the results indicate signs contradictory to our expectations, and not all our hypotheses receive support. Further research therefore should attempt to find more evidence for the proposed theories about the role of relationship quality and dependence in retailers' adoption decision processes.

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Table 1

OVERVIEW OF PREVIOUS RETAIL ADOPTION STUDIES

Study	Data / Analysis	Independent Variables	Key Findings
Grashof (1970)	Computer simulations to investigate hypothetical performance outcomes of different product addition and deletion criteria	Chain characteristics, item characteristics, market shares, financial variables (sales, gross margin, net profit, etc.), price, handling costs	Criteria employed by a supermarket chain to evaluate the items it stocks directly affect the evaluation of those items and therefore the mix of products carried by the chain. Different management goals on part of the chain management lead to emphasis on different goods. Records of sales, costs, and profit are most important criteria used for the evaluation of items currently stocked; the major source of information about new items comes from the form completed by the supplier. Most important qualitative criterion appear to be the newness of the product.
Heeler, Kearney, and Mehaffey (1973)	Survey data from a Canadian retailer for 67 new product selection decisions	Advertising, number of competing chains carrying the product, introductory allowance, product velocity, gross profit percentage, percentage and time of discount on payables, volume rebate, minimum order requirement, POS material, number of competing items stocked, retail representatives in area	Of three models tested (compensatory, conjunctive, disjunctive model), the compensatory model appear to best describe retailers' new product adoption decisions. Significant positive effects for supplier advertising, time discount on payables, and gross profit percentage. The number of competing items stocked appears to negatively influence the new product adoption decision.
Montgomery (1975)	Buyer reactions to 124 hypothetical new products, analyzed by discriminant and gatekeeper analysis	Promotion, company reputation, quality of product and packaging, newness, introductory allowances, acceptance by competition, growth margin, advertising, competition with private label, extent of distribution, presentation characteristics, category volume and growth potential, ease of finding shelf space, item cost	Results of discriminant analysis show that six most important variables to discriminate between accepted and rejected products are product compete with private label, item cost, category volume potential, packaging, adoption by competitors, and product newness. A gatekeeping analysis shows the importance of promotion and advertising.
Rao and McLaughlin (1989)	Survey data from a U.S. retailer for 1,031 new product selection decisions	Gross margin, profit, opportunity cost, firm and brand competition, product uniqueness, vendor effort, marketing support, terms of trade, price, category growth, synergy	Positive significant effect of number of competing firms, product uniqueness, and expected category growth. Negative significant effect of gross margin and bill back option.
White, Troy, and Gerlich (2000)	Survey data from a regional supermarket chain for 245 new product selection decisions (5-month period)	Introductory allowances, slotting fees, estimated profit, gross margin, couponing and sampling program, planned advertising, manufacturer reputation, retail competition, category sales volume, category growth, product uniqueness, number of competing brands	Introduction allowances (IA) and slotting fees (SF) do not have a significant main effect on new product acceptance but show significant interaction effects with risk-reducing and risk-enhancing factors, especially IA. Relation between IA and new product acceptance is moderated by marketing strategy and market-related variables but not by financial variables. Findings regarding SF are much less supportive of retailers' claims that SFs offset perceived risks and costs of carrying new products
Kaufman, Jayachandran, and Rose (2006)	Survey data from two grocery retailers for 210 new product selection decisions (6 week resp. 3 week period for retailer A/B)	Firm–firm relationship quality, buyer–salesperson relationship quality, product attractiveness	Buyer–salesperson and firm–firm relationship quality have greater influence on new product acceptance at modest levels of the new product's attractiveness than for very unattractive or very attractive products.

Table 2

OVERVIEW OF CONTROL VARIABLES AND HYPOTHESIZED INFLUENCE ON RETAILERS' ADOPTION DECISION

Level	Variable	Hypothesized Influence	References
Product variables	Price	Positive	Rao and McLaughlin 1989
	Relaunch (no / yes)	Positive	Interviews with retail managers
	Perishability	Negative	Chiang and Wilcox 1997; Corstjens and Corstjens 1995
Category variables	Expected category growth due to new product	Positive	Rao and McLaughlin 1989; Corstjens and Corstjens 1995
	Importance of category for retailer	Positive	Dhar, Hoch, and Kumar 2001
Retailer variables	Retail format / Level of service orientation	Positive	Sloot, Verhoef, and Franses 2005
	Competing retailers already carrying the new product	Positive	Abrahamson and Rosenkopf 1997; Bronnenberg and Mela 2004; Rao and McLaughlin 1989
Manufacturer variables	Category share of manufacturer with retailer	Positive	Bronnenberg and Mela 2004
Relationship variables	Length of the relationship	Positive	Jap and Anderson 2007

Table 3
DESCRIPTION AND OPERATIONALIZATION OF VARIABLES

Variable	Operationalization	Sources	Measure-ment level
Dependent variable			
Adoption	Is the new product offering adopted? No=0; Yes=1	Rao and McLaughlin 1989	Product - Retail chain
Independent variables			
Profit-drivers:			
Gross margin	What is the gross margin on this product? …% gross margin	Rao and McLaughlin 1989; White, Troy, and Gerlich 2000.	Product - Retail chain
Trade support	4 items (formative scale), Planned terms of trade: • quantity discounts, • free cases, • introduction discount, and • slotting fee (5-point scale: 1 = no plans, …, 5 = to a large extent)	Bloom, Gundlach, and Cannon 2000; Larieviere and Padmanabhan 1997; Rao and Mahi 2003; White, Troy, and Gerlich 2000; Rao and McLaughlin 1989	Product – Retail chain
Consumer support	4 items (formative scale), Manufacturer's plan for: • discounts, • samples, • premiums, and • supermarket displays (5-point scale: 1 = no plans, …, 5 = to a large extent)	Reibstein and Farris 1995; Corstjens and Corstjens 1995; Rao and McLauglin 1989	Product – Retail chain
Product uniqueness	• Compared to other articles in this product group, the offered new product is unique • The offered new product has a high me-too appearance (reverse scale) • The offered new product has characteristics that other products in this product category does not have (5-point scale: 1 = strongly disagree, …, 5 = strongly agree) Cronbach's alpha = .72	Kahn and McAlister 1997; Villas-Boas 1998; Steenkamp and Gielens 2003.	Product – Retail chain
Store brand cannibalization	To what extent cannibalizes the new product offering on the private label of the retailer? (5-point scale: 1 = to a very small extent, …, 5 = to a very large extent)		Product
Relationship variables			
Relationship Quality	• This manufacturer keeps promises • We can trust the sincerity of this manufacturer • If this manufacturer gives us advice, we know he tries to give the best advice • When making important decisions, this manufacturer keeps in mind our	Geyskens et al 1996; Geyskens, Steenkamp, and Kumar 1998.	Product

	interests • We can count on the fact that this manufacturer take into account how his future decisions will affect us • If we present our problems to this manufacturer, we know that she will react understandingly (5-point scale: 1 = strongly disagree, …., 5 = strongly agree) Cronbach's alpha = .86		
Dependency of retailer on manufacturer	• If we want to replace this manufacturer with another manufacturer, it would entail additional costs • The turnover and profit generated by products of this manufacturer are difficult to replace (5-point scale: 1 = strongly disagree, …, 5 = strongly agree) Correlation = .55	Geyskens et al. 1996; Gilliland and Bello 2002; Steenkamp and Gielens 2003; Messinger and Narasimhan, 1995	Product
Control variables:			
Price of the product	What is proposed consumer price in Euros?	Rao and McLaughlin 1989	Product – Retail chain
Perishability	• It is easy for consumers to store additional items of this product at home • The offered new product is not perishable on a short term • The offered new product is strongly perishable (reverse coded) (5-point scale: 1 = strongly disagree, …, 5 = strongly agree) Cronbach's alpha = .76	Chiang and Wilcox, 1997; Corstjens and Corstjens, 1995	Product
Re-launch	Is the new product offering a re-launch? No=0; Yes=1 ((n = 57)	Interviews with retail managers	Product
Category growth expectations	To what extent do you expect a positive effect of this new product on the growth of the volume of this category? (5-point scale: 1 = very small positive effect, …, 5 = very strong positive effect)	Rao and McLaughlin 1989; Corstjens and Corstjens 1995	Product – Retail chain
Category role	What is the importance of this category for the retailer? (dummy-variable: 0 = not important category, 1 = important category (destination category))	Dhar, Hoch, and Kumar 2001	Product – Retail chain
Market share of manufacturer with retailer	What is the market share of the manufacturer in the product group to which the new product belongs? ….. %	Bronnenberg and Mela, 2004	Product
Retail format	0 = price oriented formula; 1 = service oriented formula	Sloot, Verhoef, and Franses 2005	Retail chain
Adoption by competing retailers	How many of the four most important competing retailers have already adopted the new product offering? (4-point scale: 1, 2, 3 or all 4 most important competing retailers)	Abrahamson and Rosenkopf, 1997; Bronnenberg and Mela, 2004	Product – Retail chain

Length of relation	How many years are you doing business with this manufacturer? … years.	Jap and Anderson 2007	Product

Table 4
OVERVIEW OF NEW PRODUCT OFFERINGS AND ACCEPTANCE RATES ACROSS PRODUCT CATEGORIES.

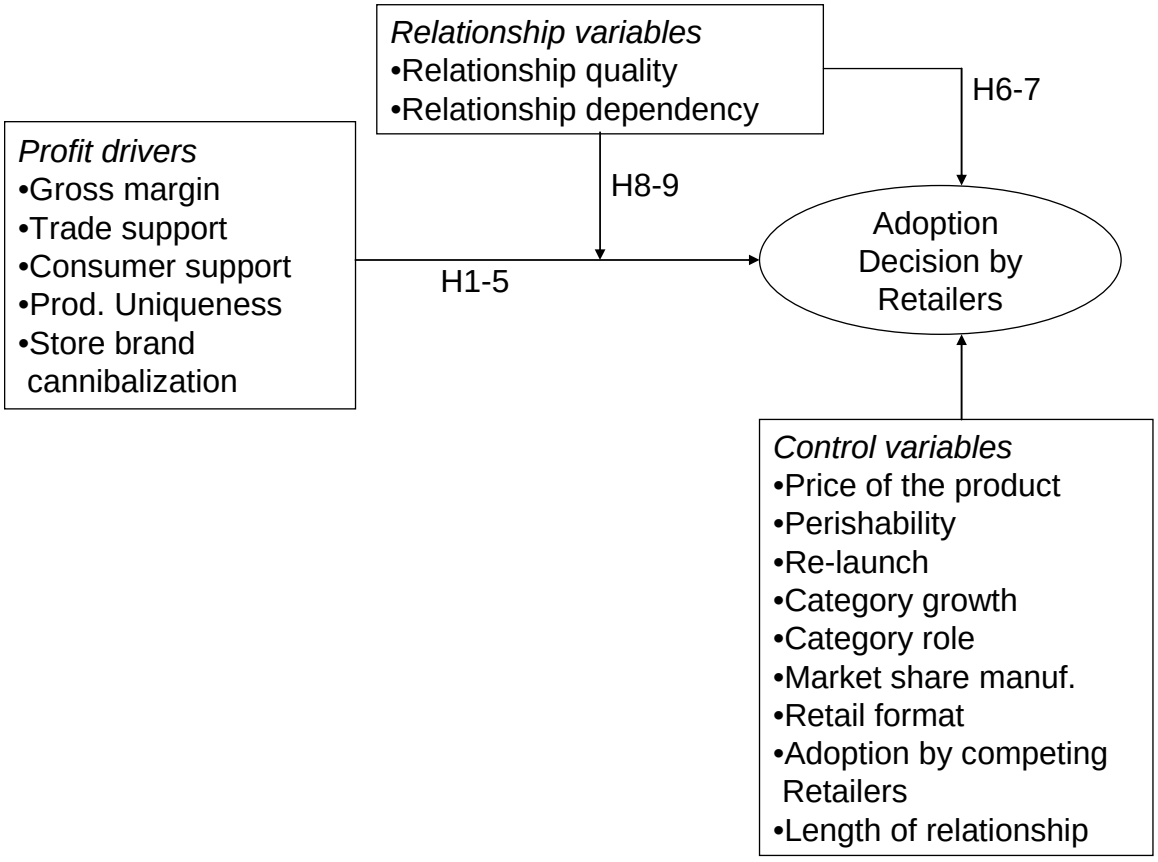
Product Category	**Number of New Products Offered**		**Number of New Product Adoption Decisions**	**Number of Adopted New Products Across the Four Retail Chains**	
	Nr.	*%*	*Nr.*	*Nr.*	*%*
Milk products / frozen product	1	1.0	4	2	50.0
Breakfast	8	8.2	32	30	93.8
Canned food / sauces	43	43.9	172	111	64.5
Snacks	25	25.5	100	72	72.0
Drinks	9	9.2	36	20	55.6
Detergents	7	7.1	28	18	64.3
Care products / Paper products	5	5.1	20	5	25.0
Total	*98*	*100*	*392*	*258*	*65.8*

Table 5:
ESTIMATION RESULTS

Variable	Hypothesis (Effect)	(I) Model with control variables	(II) Model with main effects	(III) Full Model
		Coefficient	Coefficient	Coefficient
Profit drivers				
Gross margin	1 (+)		-4.98[b]	269.62[a]
Trade support	2 (+)		4.58[a]	-11.39
Consumer support	3 (+)		2.24[a]	70.95[a]
Product uniqueness	4 (+)		.1.63[a]	19.08[a]
Store brand cannibalization	5 (-)		-.22[b]	5.59
Relationship quality	6 (+)		-.81[b]	13.63[a]
Retailer's dependence	7 (+)		-2.97[a]	56.11[a]
Interactions with relationship quality				
Gross margin	8a (-)			-25.42[a]
Trade support	8b (-)			7.77[b]
Consumer support	8c (-)			-9.75[a]
Product uniqueness	8d (-)			.14
Store brand cannibalization	8e (+)			.54
Interactions with retailer's dependence				
Gross margin	9a (-)			-59.99[a]
Trade support	9b (-)			-2.32
Consumer support	9c (-)			-10.44 [a]
Product uniqueness	9d (-)			-5.89[a]
Store brand cannibalization	9e (+)			-3.06[a]
Control Variables				
Price of product	-/+	2.12[a]	2.45[a]	3.22[a]
Perishability	-	-3.34[a]	5.45[a]	-5.83[a]
Relaunch (no/yes)	-	-.141[a]	.00	-.93
Category growth	+	1.47[a]	2.81[a]	3.65[a]
Category role	+	2.51[a]	2.29[a]	3.41[a]
Market share manufacturer with retailer	+	.10[a]	.12[a]	.11[a]
Retail format (0=discount, 1=service)	+	5.83[a]	5.84[a]	6.36[a]
Adoption by competitors	+	1.99[a]	1.89[a]	3.27[a]
Length of relation retailer – manufacturer	+	.57[a]	1.30[a]	1.51[a]
Buyer Dummies				
Buyer 1		1.52	-.58	-.2.81
Buyer 2		8.72[a]	17.41[a]	17.26[a]
Buyer 3		9.35[a]	17.64[a]	21.79[a]
Buyer 4		13.37[a]	19.91[a]	20.55[a]
Buyer 5		9.89[a]	12.07[a]	13.35[a]
Buyer 6		-4.46[a]	-8.45[a]	-5.25[b]
Constant		-21.80[a]	-28.11[a]	-276.39[a]
Standard deviation constant		3.81[a]	2.91[a]	.02
Log L		-94.37	-78.73	-44.11
AIC		.57	.52	.40
McFadden R^2		0.62	0.68	.82

[a] $p < .01$; [b] $p < .05$.

Figure 1
CONCEPTUAL FRAMEWORK



Appendix

MEAN SCORES, STANDARD DEVIATIONS, AND CORRELATIONS FOR THE INDEPENDENT VARIABLES

	Mean	S.D.	GM	TS	CS	PU	CSB	RQ	DEP	PRI	PER	REL	GRO	ROL	MS	FT	AC	RL
Gross margin	.276	.075	1.000															
Trade support	1.402	.474	-.049	1.000														
Consumer support	1.969	.712	.015	.524**	1.000													
Product uniqueness	3.134	.780	.146**	.027	-.032	1.000												
Cannibalization	1.540	.805	-.211**	-.287**	-.187**	-.277**	1.000											
Relationship quality	3.573	.490	.233**	.056	.202**	.163**	-.350**	1.000										
Retailers' dependency	3.082	.802	-.341**	.203**	.171**	-.203**	.277**	-.004	1.000									
Price	1.891	1.142	-.012	.167**	-.087	.175**	-.110*	.060	.105*	1.000								
Perishability	3.340	.381	.018	.136**	.258**	.151**	-.290**	.047	-.091	.139**	1.000							
Relaunch	.220	.412	.104*	-.101*	-.214**	-.314**	.097	-.262**	-.237**	-.054	-.075	1.000						
Category growth	2.750	.901	-.148**	.209**	.322**	-.074	.291**	.062	.481**	.230**	.124*	-.275**	1.000					
Category role	.54	.499	.195**	.186**	.260**	.145**	.092	.112*	-.091	-.110*	.181**	-.001	-.051	1.000				
Market share man.	28.148	25.795	-.080	.274**	.369**	.111*	-.123*	.098	.177**	-.044	.348**	-.214**	.317**	.185**	1.000			
Formula type	.500	.501	.022	-.003	.048	.000	-.019	.000	.000	.003	.000	.000	.017	.205**	.000	1.000		
Adoption by competitors	2.590	1.254	-.019	.116*	.353**	-.016	.111*	.001	.227**	.110*	-.037	-.037	.199**	.174**	.191*	.000	1.000	
Relationship length	3.242	4.489	-.059	.511**	.294**	.219**	-.112*	.093	.289**	.407**	.234**	.234**	.450**	.079	.156**	.000	-.014	1.000

** $p < .01$; * $p < .05$.

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