Should Marketers Use Price Partitioning Or Total Prices?

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Price partitioning means the division of a product's price into several components, provided that the components cannot be bought separately. Only some authors have analyzed the effects of price partitioning. They provide opposed recommendations on the question whether price partitioning is more advantageous than using total prices. In this paper we develop a theoretical background to explain the effects of price partitioning in more detail than it has been done in previous studies. Furthermore we present the results of a new empirical study according to which price partitioning leads to a less favorable product evaluation than does using total prices.

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ABSTRACT

Price partitioning means the division of a product's price into several components, provided that the components cannot be bought separately. Only some authors have analyzed the effects of price partitioning. They provide opposed recommendations on the question whether price partitioning is more advantageous than using total prices. In this paper we develop a theoretical background to explain the effects of price partitioning in more detail than it has been done in previous studies. Furthermore we present the results of a new empirical study according to which price partitioning leads to a less favorable product evaluation than does using total prices.

INTRODUCTION

Some products and services are divided into several (often two) components which are charged single prices but can only be bought in combination (Bertini and Wathieu 2005; Lee and Han 2002), e.g., a fitness club membership and the joining fee. Morwitz, Greenleaf, and Johnson (1998) call this strategy partitioned pricing and they refer to the larger price component as the base price and to the smaller component as the surcharge. Surcharges are most often monetary surcharges, but in some cases the surcharge is a percentage of the base price. From a consumer research perspective it is interesting to examine how consumers react to this pricing technique.

Product or price bundles must be distinguished from partitioned prices because a consumer buying a product bundle pays one total price for several products which can also be bought as separate items. Thus, the difference between price partitioning and price bundling consists in the fact that in the case of price partitioning there is one product which is divided into several (price) components which cannot be bought separately, whereas in the case of price bundling, several products, which can be bought separately, are combined and sold for only one total price.

Some authors assume that price partitioning increases consumers' demand if applied appropriately (Chakravarti et al. 2002; Morwitz, Greenleaf, and Johnson 1998; Xia and Monroe 2004). Other authors argue that all kinds of hidden pricing are disadvantageous because consumers might avoid purchasing products with unclear prices (Ayres and Nalebuff 2003; Lee and Han 2002). Beyond the contradictious findings of a few existing studies, research in marketing has paid only little attention to effects of price partitioning on consumers' attitudes and behavior although partitioned prices are commonly used in marketing practice. Therefore, we discuss arguments in favor of and against price partitioning and explain why the existing literature offers contradictious recommendations. By analyzing additional mediating variables in the relation between price presentation and product evaluation, which have not been analyzed in previous studies, our paper provides new insights in the mechanisms which underlie price partitioning effects and thus is an important contribution to the existing consumer research. Furthermore our research enables marketers to plan their pricing strategies more carefully when choosing between using total prices and price partitioning or when deciding which type of price partitioning to apply.

EMPIRICAL AND THEORETICAL BACKGROUND

We first sum up four previous studies on price partitioning. Then we present our theoretical research model which is supposed to explain effects of price partitioning in more detail than it has been done in the existing studies.

**Previous Research on the Effects of Price Partitioning**

Morwitz, Greenleaf, and Johnson (1998) found that price partitioning increases consumers' demand compared to all-inclusive prices. Lee and Han (2002) report from their findings that using partitioned prices can cause negative consumer reactions, which leads to a negative change of brand attitude. Chakravarti et al. (2002) found that a product with a partitioned price for its components was evaluated more favorably and chosen more frequently than the same product with a total price. Xia and Monroe (2004) report that price partitioning has positive effects on both consumers' price satisfaction and their purchase intentions. As the authors of the cited studies came up with contradictious findings, based on these findings, it is not possible to derive a clear recommendation on whether marketers should use or avoid price partitioning. Therefore, we present theoretical approaches which can be applied to price partitioning and provide additional insights in effects of price partitioning (versus using total prices) on product evaluation, which can serve to explain the differing findings of the previous studies, and which enable us to derive clear recommendations on the appropriateness of price partitioning compared to using total prices.

New Research Model

In order to analyze the effects of price partitioning versus using total prices on product evaluation we consider the effects of three mediating variables between price presentation and product evaluation which have been mentioned in research on price partitioning before. Consumers' evaluation of the total price level (i.e. their satisfaction with the price, their evaluation of a price as being comparatively low or high) and their perceived complexity (versus clarity) of the price structure are supposed to be relevant variables in the context of price partitioning effects (Xia and Monroe 2004). Since the marketer's intent also is often mentioned in the field of price research (Campbell 1995; Maxwell 1995), we argue that different types of price presentation also have effects on a consumer's belief about the intention the marketer pursues with using a certain pricing technique (e.g. mislead the customer by using partitioned prices) and thus include the consumers' belief about the marketer's manipulative intent in our research model. The resulting model is shown in figure 1.

Price presentation is a nominal variable with five values: total price and four types of partitioned prices. The types of price partitioning considered in this paper are combinations of surcharge amount relative to the base price (low, high) and surcharge presentation (monetary, percentage) for prices consisting of two components. We do not consider prices which consist of more than two components because over-partitioning (i.e. offering separate prices

FIGURE 1
EFFECTS OF PRICE PARTITIONING VERSUS USING TOTAL PRICES
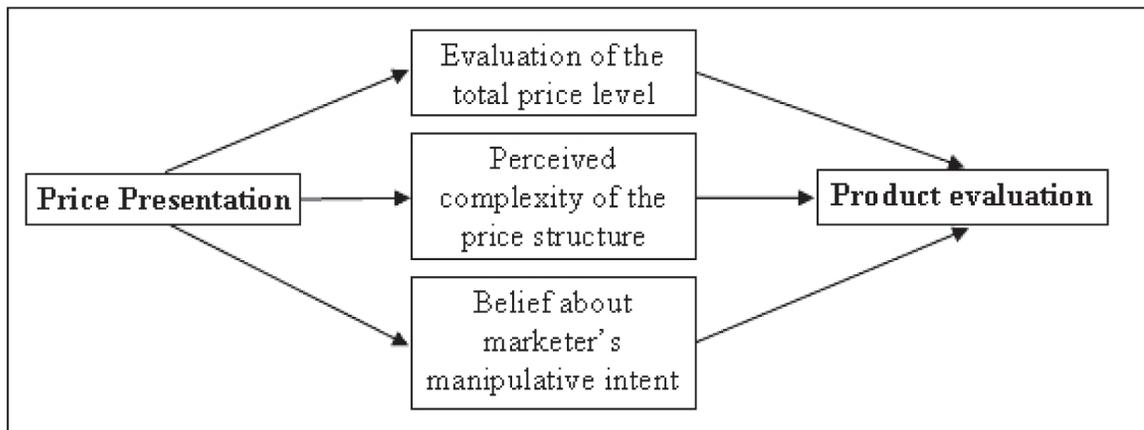
for many product components) has been found to be disadvantageous (Xia and Monroe 2004). In the following sections we discuss theoretical approaches to found the relations assumed in figure 1.

Effects of Price Presentation through Consumers' Evaluation of the Total Price Level on Product Evaluation

Consumers' evaluation of the total price level as being comparatively low (positive evaluation) or high (negative evaluation) is supposed to have a positive effect on product evaluation. We now discuss possible effects of price partitioning versus using total prices on consumers' evaluation of the total price level. Morwitz, Greenleaf, and Johnson (1998) used the anchoring and adjustment heuristic to predict a positive effect of price partitioning on product evaluation. Applying 'anchoring and adjustment' to the processing of partitioned prices means that people are exposed to two components of a single stimulus (base price and surcharge). Their estimation task consists in calculating the total price. According to Yadav (1994) the base price is noticed first and the estimated total price is supposed to be biased toward the base price because the surcharge is insufficiently processed. Thus, if consumers use the anchoring and adjustment heuristic to process partitioned prices, they are supposed to evaluate the total price level as being comparatively low (positive evaluation) which leads to a positive overall effect on product evaluation.

'Averaging' might be another relevant strategy in the context of processing information about stimulus components. The studies of Troutman and Shanteau (1976) and Gaeth et al. (1990) show that people average bundle components so that minor components disproportionally contribute to the bundle's overall evaluation. Transferred to price partitioning the overestimation of the minor component (the surcharge) is supposed to lead to a higher estimate of the total price because both the valence of the components and the cognitive effort needed to determine the components' valence are considered. As the cognitive effort is not proportional to the price components' valence, the surcharge is ascribed a higher weight than it has in fact which results in 'averaging'. Using this processing strategy leads to an evaluation of the total price level as being comparatively high (negative evaluation) and thus to a negative overall effect on product evaluation.

Finally, the value function of the prospect theory (Tversky and Kahneman 1981) can also be used to explain the processing of stimulus components. Johnson, Herrmann, and Bauer (1999) report that total prices are more advantageous than partitioned prices because, based on the prospect theory argument, two single losses

subjectively weigh more heavily than one total loss which objectively corresponds to the sum of the single losses. Thus, based on this argument, consumers are supposed to evaluate the total price level of a partitioned priced product as being comparatively high (negative evaluation) which also leads to a negative overall effect on product evaluation.

Considering the three fields of research presented above which can be applied to gain further insights in possible mechanisms underlying the effects of price partitioning on product evaluation, we have conflicting assumptions on possible effects of price partitioning compared to using total prices because one theoretical approach suggests that partitioned prices are more beneficial than total prices whereas according to the other two approaches partitioned prices should not be used. The extent of difficulties in processing partitioned prices consumers perceive might explain why consumers unconsciously choose one of the three strategies to process price information and to evaluate the total price level (Morwitz, Greenleaf, and Johnson 1998). We assume that consumers use the anchoring and adjustment heuristic to process partitioned prices if they have considerable difficulties in processing the price components (i.e. in the case of a percentage surcharge). In this case they disregard the surcharge or only process it insufficiently which leads to the calculation of a low total price and thus to the evaluation of the total price level as being comparatively low (positive evaluation). However, if consumers do not perceive major difficulties in processing the surcharge (i.e. in the case of a monetary surcharge), they might try to process both components more accurately on the basis of 'averaging' or by applying the value function which results in the calculation of a comparatively high total price und thus in the evaluation of the total price level as being comparatively high (negative evaluation). These considerations lead to:

H1a: When using a percentage surcharge, price partitioning leads to a more favorable evaluation of the total price level than does using total prices.

H1b: When using a monetary surcharge, price partitioning leads to a less favorable evaluation of the total price level than does using total prices.

In order to explain effects of different surcharge amounts relative to the base price we cannot use the 'difficulty argument' because 'processing difficulty' is defined by the type of mathematical operation (addition versus multiplication) needed to execute

(Morwitz, Greenleaf, and Johnson 1998). Such effects can rather be explained by a cost-benefit approach. In the case of a low surcharge, the benefit of knowing the exact total price is low. Thus consumers might not be interested in processing the surcharge (Xia and Monroe 2004) and they might evaluate the total price level as being comparatively low. If the surcharge is high, consumers might judge the benefit of knowing the total price higher than the mental costs of processing the two price components (Xia and Monroe 2004) and consequently, they might calculate the total product price and thus evaluate the total price level as being comparatively high. Based on these considerations we derive:

H2: When using price partitioning, a low surcharge leads to a more positive evaluation of the total price level than a high surcharge (provided that the objective total price is the same in both cases).

With regard to the effect of the evaluation of the price level on product evaluation we assume:

H3: The more positive consumers' evaluation of the price level, the more positive is their product evaluation.

Effects of Price Presentation through 'Perceived Complexity of the Price Structure' and 'Belief about Marketer's Manipulative Intent' on Product Evaluation

The construct 'perceived complexity of the price structure' mirrors the fact the consumers perceive prices as being more or less transparent. As consumers expect marketers to use transparent prices, they might be dissatisfied when the price structure is more complex (less transparent) than they have expected (Lee/Han 2002). Presumably the price structure of a partitioned price is more complex than the one of a total price because in the first case there are at least two components which have to be processed. The dissatisfaction resulting from the unexpectedly high complexity will be transferred to the product and thus lead to a negative attitude toward the product. This argument might especially hold in the case of percentage surcharges (compared to monetary surcharges) because they make partitioned prices even less transparent. These considerations lead to:

H4: Generally, partitioned prices are perceived as being more complex than total prices. Consumers evaluate partitioned prices consisting of a base price and a percentage surcharge as being even more complex than prices consisting of a base price and a monetary surcharge.

With regard to the effect of perceived complexity of the price structure on product evaluation we assume:

H5: The more consumers perceive the price structure as being complex, the more negative is their product evaluation.

Moreover, consumers are supposed to think about the reasons a marketer has for applying partitioned prices instead of total prices (e.g., masking an excessive price). When faced with partitioned prices consumers are believed to ascribe a higher manipulative intent to the marketer than when faced with total prices because they might assume that the marketer tries to mislead them by using several price components. This assumption leads to a comparatively unfavorable evaluation of the product. This argument rather applies to percentage surcharges than to monetary surcharges because many consumers might neither be able nor willing to calculate the correct total price in the case of a percentage surcharge

and they might have the impression that the marketer tries to mislead his customers even more by using a percentage surcharge (Morwitz, Greenleaf, and Johnson 1998). Based on this argument we derive:

H6: Generally, in the case of partitioned prices, consumers feel more being manipulated than in the case of total prices. In the case of a percentage surcharge, consumers even ascribe a higher manipulative intent to the marketer than in the case of a monetary surcharge.

With regard to the effect of consumers' belief about the marketer's manipulative intent on product evaluation we assume:

H7: The more consumers feel being manipulated by the marketer, the more negative is their product evaluation.

Summarizing the theoretical considerations presented above, the effects of price partitioning compared to using total prices on product evaluation are supposed to be rather negative because the negative effects seem to outweigh the positive effects. The above derived hypotheses on the effects of price partitioning versus using total prices are tested in a new empirical study which is presented in the next section.

NEW EMPIRICAL STUDY

Experimental Design and Measures

In our empirical study we used partitioned prices which consisted of two components and total prices. We chose test stimuli which were familiar to the respondents and which were regularly bought by them. Furthermore, the examples were chosen in compliance with the condition that both total and partitioned prices were realistic for these products or services. The authors of the previous studies on effects of price partitioning used surcharges ranging from 6 per cent to 43 per cent. Based on this specification we chose 5 and 40 per cent as low and high surcharges. We kept the total product prices approximately the same across conditions (i.e. line by line, the total prices are about the same, see table 1).

We created short scenarios containing product and price information to put the respondents in purchase situations which were as realistic as possible. The scenarios we used for the total price condition are shown in table 2 in a shortened version. All scenarios started with the words "Imagine, you would like to buy/ get …". The scenarios for the partitioned price conditions were the same but with single prices for the two components as listed in table 1.

The measures for the model variables and the correlations (for two items) as well as the Cronbach Alpha values (for three and more items) are shown in table 3.

In order to determine if the single items can be aggregated to the respective construct, we calculated Cronbach's Alpha if three or more items were used to measure one construct and bivariate correlations if two items were applied to measure a certain construct because Cronbach's Alpha is not appropriate for two item scales (Hulin and Cudeck 2001). The high correlation and Alpha values show that the construct values can be calculated as arithmetical means of the single indicators for each construct. These arithmetical means will be used in the analyses presented subsequently. In order to prove that the constructs can be clearly separated from each other, the correlations between the constructs are summarized in table 4.

The correlations between the constructs are moderate indicating that the constructs can be clearly separated from each other.

TABLE 1
EXPERIMENTAL DESIGN

Product	Total product Price	Low surcharge (5 per cent)		High surcharge (40 per cent)	
		Monetary surcharge	Percentage surcharge	Monetary surcharge	Percentage surcharge
Mobile phone contract basic fee + price for minimum of call units (monthly)	€ 20.00	€ 19.00 + € 1.005	€ 19.00 + 5%	€ 14.30 + € 5.70	€ 14.30 + 40%
Sauna entrance + water park ticket	€ 18.00	€ 17.20 + € 0.80	€ 17.20 + 5%	€ 12.90 + € 5.10	€ 12.90 + 40%
Concert ticket + advance sale charge	€ 50.00	€ 47.60 + € 2.40	€ 47.60 + 5%	€ 35.70 + € 14.30	€ 35.70 + 40%
Hotel + visitors' tax	€ 80.00	€ 76.20 + € 3.80	€ 76.20 + 5%	€ 57.20 + € 22.80	€ 57.20 + 40%
Oil change service + car oil	€ 150.00	€ 142.80 + € 7.20	€ 142.80 + 5%	€ 107.10 + € 42.90	€ 107.10 + 40%

TABLE 2
SCENARIOS

Mobile phone Contract	Sauna entrance plus water park ticket	Concert ticket plus advance sale charge	Hotel plus visitors' tax	Oil change plus car oil
Buying a two-year mobile phone contract, monthly basic fee including a monthly minimum of required call units: € 20.	Using only the sauna area of a water park, but not the pools, pools are not separated from the sauna area, have to pay for both the pool and the sauna entrance, total price for 2 hours: € 18.	Visiting a concert, want to buy a ticket in advanced sale, ticket price including advance sale charge: € 50.	Planning a stay at a three-star hotel in Spain, bed and breakfast price per night including visitors' tax: € 80.	Car oil change, total price for oil change service including high-quality oil: € 150.

Procedure and Results

175 respondents (86 men, 89 women) participated in our study in 2004 in Germany (35 participants per experimental group). Each participant evaluated all five test stimuli in the same manipulation condition, for example all five products with a partitioned price consisting of a base price and a low monetary surcharge. Using five examples per person served as a sample multiplier. The respondents read the first scenario, evaluated the first product, and indicated their evaluation of the total price level, of the complexity of the price structure and their belief about the marketer's manipulative intent (statements on 7-point scales). They then read the second scenario, completed the corresponding scales and so on. Finally, correspondents provided their involvement in the product categories which was needed to judge the comparability of the product categories, their age and gender. The order of the scenarios varied from person to person to control for order effects.

The five experimental groups were structurally equal with regard to age ($F=1.606$, $p>.10$) and gender (chi square=3.887, $p>.40$). In order to analyze the effects of price presentation on the mediator variables and on the target variable 'product evaluation', we used univariate models with 'price presentation' as independent variable and 'evaluation of the total price level', 'perceived complexity of the price structure', and 'belief about marketer's manipulative intent' as dependent variables in a first step. In a second step we applied a regression analysis to analyze the effects of the mediator variables on product evaluation. In a last step we conducted tests of mediation to prove that the assumed mediators indeed mediate the relation between 'price presentation' and 'product evaluation'. Using structural equation models instead of the three steps of analyses chosen here would have had the advantage that all effects could have been tested simultaneously. However, using structural equation models is not possible in the constellation

TABLE 3
MEASURES

Model variable	Statement	Alpha/Correlation
Evaluation of the total price level (P)	In general, this product is well-priced Compared with similar products' prices, this price is well-priced. This price is attractive.	.954
Perceived complexity of price structure (C)	The presentation of the price is unclear. I cannot notice this price at a glance.	.619
Belief about marketer's manipulative intent (M)	My friends would judge this price as being an unfair price. This supplier demands an unfair price.	.481
Product evaluation (E)	This offer appeals to me. This offer is attractive. This offer is convincing. This offer is worth the money.	.956
Product category involvement (I)	Before buying … I gather a lot of product information. When buying … I choose it very carefully.	.698

TABLE 4
CORRELATIONS

Model variable	P	C	M	I
Evaluation of the total price level (P)				.013
Perceived complexity of the price structure (C)	-.347			.123
Belief about marketer's manipulative intent (M)	-.427	.714		.077
Product evaluation (E)	.741	-.395	-.635	.111

considered here, because these models which are based on correlations or covariances require metric input data and the independent variable 'price presentation' (total price, four forms of price partitioning) is only nominal.

We now present the univariate analyses conducted in the first step. As the respondents proved to have different levels of involvement for the single product categories which had been intended to be used for sample multiplication, we integrated involvement as a metric covariate in the models to control for the involvement effect. The mean values and further results based on the pooled sample (across the five products) are shown in table 5.

The mean values show that consumers evaluate the total price level as being lower (favorable evaluation), but the complexity of the price structure and the marketer's manipulative intent as being higher when price partitioning is applied instead of using total prices. The overall effect of price partitioning compared to using total prices on product evaluation is negative because the mean value of product evaluation is highest in the case of a total price and is lower in all conditions of price partitioning considered here. In order to test the hypotheses H1, H2, H4, and H6 we applied t statistics and we additionally report the results of Scheffé tests (p_S) to show that these are in line with the t statistics (p_t).

We now look closer at the effects of price partitioning versus using total prices on the evaluation of the total price level. Using partitioned prices with percentage surcharges leads to a signifi-cantly more positive evaluation of the price level than using total prices (low surcharge: 4.67-3.47: $t=6.53$, $p_t<.001$, $p_S<.001$; high surcharge: 4.38-3.47: $t=5.84$, $p_t<.001$, $p_S<.001$). Thus H1a is supported. However, H1b is not supported because contrarily to the assumption of H1b, the evaluation of the price level is more positive when using partitioned prices with monetary surcharges than when using total prices.

With regard to H2 the mean values of the evaluation of the total price level show that at least descriptively low surcharges lead to a more favorable evaluation of the total price level than do high surcharges. The difference of the mean values is highly significant for the case of monetary surcharges, but only significant at the .10 level for the case of percentage surcharges (monetary surcharge: 4.41-3.59: $t=5.26$, $p_t<.001$, $p_S<.001$; percentage surcharge: 4.67-4.38: $t=1.47$, $p_t<.10$, $p_S<.10$). Thus, H2 is widely supported.

The basic assumption of H4 was that partitioned prices are perceived as being more complex than total prices. This assumption is at least descriptively supported by the mean values and the pairwise differences are significant in three of four cases (3.51-2.97: $t=3.96$, $p_t<.001$, $p_S<.001$; 2.99-2.97: $t=.13$, $p_t>.10$, $p_S>.10$; 3.77-2.97: $t=4.96$, $p_t<.001$, $p_S<.01$; 5.11-2.97: $t=11.65$, $p_t<.001$, $p_S<.001$). The second part of H4 consisted in the assumption that, if only considering partitioned prices, consumers evaluate partitioned prices with a percentage surcharge as being even more complex than partitioned prices with a monetary surcharge. The

TABLE 5
RESULTS OF THE UNIVARIATE MODELS WITH INVOLVEMENT AS COVARIATE

Dependent variable	Total price	PP LM	PP HM	PP LP	PP HP	*F* value effect PP	*F* value covariate I	R^2
Evaluation of the total price level[1]	3.47	4.41	3.59	4.67	4.38	17.27 ($p<.001$)	1.47 ($p>.10$)	.07
Perceived complexity of the price structure[2]	2.97	3.51	2.99	3.77	5.11	76.27 ($p<.001$)	14.54 ($p<.001$)	.27
Belief about marketer's manipulative intent[3]	3.03	3.05	3.39	3.60	4.50	36.49 ($p<.001$)	4.53 ($p<.05$)	.15
Product evaluation[1]	4.11	3.54	3.54	3.65	3.53	8.10 ($p<.001$)	5.04 ($p<.05$)	.05
N	175	175	175	175	175			

PP: partitioned price, L: low, H: high, M: monetary surcharge, P: percentage surcharge, I: product category involvement
[1]: 1=very unfavorable evaluation, …, 7=very favorable evaluation
[2]: 1=low complexity, …, 7=high complexity
[3]: 1=low manipulative intent, …, 7=high manipulative intent

TABLE 6
RESULTS OF THE SOBEL TESTS OF MEDIATION

Test of mediation for the dummy variable	Evaluation of the price level	Perceived complexity of the price structure	Belief about marketer's manipulative intent
total price	$z=5.24, p<.001$	($z=.69, p>.10$)	($z=.05, p>.10$)
low monetary surcharge	$z=20.03, p<.001$	($z=.14, p>.10$)	$z=4.91, p<.001$
high monetary surcharge	$z=4.28, p<.001$	$z=7.70, p<.001$	($z=.90, p>.10$)
low percentage surcharge	$z=4.68, p<.001$	$z=9.88, p<.001$	$z=1.35, p<.10$
high percentage surcharge	$z=18.75, p<.001$	$z=10.66, p<.001$	$z=10.99, p<.001$

mean values show that descriptively, percentage surcharges lead to the perception of a higher price structure complexity than do monetary surcharges, but the difference is only highly significant in the case of a high surcharge amount (low surcharge: 3.77-3.51: $t=1.45, p_t<.10, p_S<.10$; high surcharge: 5.11-2.99: $t=11.54, p_t<.001, p_S<.001$). Thus, taken together, H4 is widely supported.

The basic assumption of H6 again was that being confronted with partitioned prices, consumers generally feel more being manipulated than when being confronted with total prices. This first part of H6 is descriptively supported by the mean values and the pairwise differences are significant in three of four cases (3.05-3.03: $t=.14, p_t>.10, p_S>.10$; 3.39-3.03: $t=2.58, p_t<.01, p_S<.01$; 3.60-3.03: $t=3.58, p_t<.001, p_S<.001$; 4.50-3.03: $t=8.41, p_t<.001, p_S<.001$). With regard to the second part of H6 the mean values of the belief about the marketer's manipulative intent show that percentage surcharges lead to a higher perceived manipulative intent than do monetary surcharges (low surcharge: 3.60-3.05: $t=3.49, p_t<.05, p_S<.05$; high surcharge: 4.50-3.39: $t=6.35, p_t<.001, p_S<.001$). Thus, H6 is widely supported.

We now present the second step of our analyses which consisted in proving that all three mediator variables have significant effects on product evaluation. The results of a regression analysis ($R^2=.86$) show that the evaluation of price level has a strong and significantly positive effect on product evaluation ($\beta=.36, t=8.26$,

$p<.001$). Thus, consumers show a more positive evaluation of the product with an increasing positive evaluation of the price level and therefore, H3 is supported. Perceived complexity of the price structure has a significantly negative effect on product evaluation as assumed in H5 ($\beta=-.22, t=-6.27, p<.001$) which means that the more consumers perceive the price structure as being complex, the more negative is their product evaluation. The belief about the marketer's manipulative intent also influences product evaluation significantly negatively ($\beta=-.34, t=-8.31, p<.001$) which means that the more consumers feel being manipulated by the marketer, the more negative is their product evaluation supporting H7.

Finally we show that the variables which were assumed to be mediator variables are indeed mediator variables by conducting separate tests of mediation for each mediator variable following the recommendations of Baron and Kenny (1986). As regression analyses need to be conducted to test the mediating effects of the considered variables, the independent variable 'price presentation' (five nominal values: total price, low/high monetary/percentage surcharge) has to be transformed into five dummy variables to be appropriate for the regression analysis. Having five independent variables we consequently have to conduct five tests of mediation for each mediator variable. Using the Sobel test (Sobel 1982) leads to the results summarized in table 6.

Most of the tests lead to significant results indicating that the chosen variables indeed mediate the relation between price presentation and product evaluation.

Summarizing the findings of all conducted analyses, the results show that price partitioning has effects on product evaluation through different paths. The path through the evaluation of the price level has a positive sign, whereas the other two paths through perceived complexity of the price structure and belief about the marketer's manipulative intent have negative signs. The negative signs of the latter paths seem to outweigh the positive sign of the first path.

CONCLUSION

The starting point of our investigation has been the fact that the authors of existing studies on effects of price partitioning came up with contradictious findings. Our study was intended to have a closer look at the mechanisms which underlie price partitioning effects. The results of our study show that price partitioning leads to a more favorable evaluation of the total price level, but to a higher perceived complexity of the price structure and to a higher perceived manipulative intent of the marketer than does using total prices. The overall effect of price partitioning on product evaluation proved to be negative compared to using total prices which is due to the fact that the negative effects of price partitioning through perceived complexity of the price structure and manipulative intent outweigh the positive effect through the evaluation of the total price level. The contradictious findings of previous studies might be traced back to the fact that the authors did not analyze all of these paths. Thus, summing up our results, we can say that marketers should not use partitioned prices because the disadvantages of this pricing technique outweigh the advantages. Provided that a marketer has to use partitioned prices for some reason (e.g. because partitioned prices are common or regulated by law in his industry), we can derive from our findings that monetary surcharges should be preferred over percentage surcharges because when applying monetary surcharges, prices are perceived as being less complex and the marketer is supposed to have a lower manipulative intent than in the case of percentage surcharges.

As starting points for further studies we suggest analyzing price partitioning effects in field experiments in retail stores because up to now, such effects have only been analyzed in simulated experiments. Using field experiments one could especially analyze how consumers decide between two comparable products with one product having a total price and the other product having a partitioned price. Moreover, it might be interesting to examine price partitioning effects for very low or very high priced products because the products considered in the study here are medium-priced. Furthermore, it might be helpful for practitioners to know whether there are special conditions under which using price partitioning might be beneficial, e.g., when a third party is responsible for one of the single price components.

REFERENCES

Ayres, Ian and Barry Nalebuff (2003), "In Praise of Honest Pricing," *MIT Sloan Management Review*, 45 (1), 24-28.

Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51, 1173-1182.

Bertini, Marco and Luc Wathieu (2005), "Price Format and the Evaluation of Multicomponent Goods," *Working Paper* #05-087, Harvard Business School: http://www.hbs.edu/research/pdf/05-087.pdf.

Campbell, Margaret C. (1995), "Perceptions of Price Unfairness: Antecedents and Consequences," *Journal of Marketing Research*, 36 (2), 187-199.

Chakravarti, Dipankar, Krish, Rajan, Paul, Pallab, and Joydeep Srivastava (2002), "Partitioned Presentation of Multicomponent Bundle Prices: Evaluation, Choice, and Underlying Processing Effects," *Journal of Consumer Psychology*, 12 (3), 215-229.

Gaeth, Gary J., Levin, Irwin P., Chakraborty, Goutam, and Aron M. Levin (1990), "Consumer Evaluation of Multi-Product Bundles: An Information Integration Analysis," *Marketing Letters*, 2 (1), 47-57.

Hulin, Charles and Robert Cudeck (2001). "Cronbach's Alpha on Two-Item Scales," *Journal of Consumer Psychology*, 10 (1+2), 55.

Johnson, Michael D., Herrmann, Andreas, and Hans H. Bauer (1999), "The Effects of Price Bundling on Consumer Evaluations of Product Offerings," *International Journal of Research in Marketing*, 16 (2), 129-142.

Lee, Yih Hwai and Cheng Yuen Han (2002), "Partitioned Pricing in Advertising: Effects on Brand and Retailer Attitutes," *Marketing Letters*, 13 (1), 27-40.

Maxwell, Sarah (1995), "What Makes a Price Increase Seem "Fair"?," *Pricing Strategy and Practice*, 3 (4), 21-27.

Morwitz, Vicki G., Greenleaf, Eric A., and Eric J. Johnson (1998), "Divide and Prosper: Consumers' Reactions to Partitioned Prices," *Journal of Marketing Research*, 35 (4), 453-463.

Sobel, Michael E. (1982), "Asymptotic Intervals for Indirect Effects in Structural Equations Models," in *Sociological Methodology*, ed. Samuel Leinhart, San Francisco: Jossey-Bass, 290-312.

Troutman, C. Michael and James Shanteau (1976), "Do Consumers Evaluate Products by Adding or Averaging Attribute Information?," *Journal of Consumer Research*, 3 (3), 101-106.

Tversky, Amos and Daniel Kahneman (1981), "The Framing of Decisions and the Psychology of Choice," *Science*, 211, 453-458.

Xia, Lan and Kent B. Monroe (2004), "Price Partitioning on the Internet," *Journal of Interactive Marketing*, 18 (4), 63-73.

Yadav, Manjit S. (1994), "How Buyers Evaluate Product Bundles: A Model of Anchoring and Adjustment," *Journal of Consumer Research*, 21 (2), 342-353.