



Journal of Indian Business Research

Price discount framings on product bundles with shipping surcharges in the Indian market: Examining the weighted-additive and reference-dependent models

Arvind Sahay Sumitava Mukherjee Prem Prakash Dewani

Article information:

To cite this document:

Arvind Sahay Sumitava Mukherjee Prem Prakash Dewani , (2015),"Price discount framings on product bundles with shipping surcharges in the Indian market", Journal of Indian Business Research, Vol. 7 Iss 1 pp. 4 - 20

Permanent link to this document:

<http://dx.doi.org/10.1108/JIBR-05-2014-0026>

Downloaded on: 31 January 2016, At: 17:29 (PT)

References: this document contains references to 38 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 144 times since 2015*

Users who downloaded this article also downloaded:

Veena Vohra, (2015),"Organizational environments and adaptive response mechanisms in India", Journal of Indian Business Research, Vol. 7 Iss 1 pp. 21-44 <http://dx.doi.org/10.1108/JIBR-01-2014-0001>

Edwin Love, Erica Mina Okada, (2015),"Construal based marketing tactics for high quality versus low price market segments", Journal of Product & Brand Management, Vol. 24 Iss 2 pp. 172-181 <http://dx.doi.org/10.1108/JPBM-11-2013-0444>

Irfan Bashir, Chendragiri Madhavaiah, (2015),"Consumer attitude and behavioural intention towards Internet banking adoption in India", Journal of Indian Business Research, Vol. 7 Iss 1 pp. 67-102 <http://dx.doi.org/10.1108/JIBR-02-2014-0013>



Access to this document was granted through an Emerald subscription provided by emerald-srm:393177 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Price discount framings on product bundles with shipping surcharges in the Indian market

Examining the weighted-additive and reference-dependent models

Arvind Sahay and Sumitava Mukherjee

*Department of Marketing and International Business,
Indian Institute of Management, Ahmedabad, India, and*

Prem Prakash Dewani

*Department of Marketing Management, Indian Institute of Management,
Lucknow, India*

Abstract

Purpose – The purpose of this paper is to study how consumers process price frames of product bundles (product plus surcharge) and discount offers to weigh contentious positions between the weighted-additive and the reference-dependent models. Further, some research suggests bundling, while others suggest partitioning to be a more effective pricing strategy. This research evaluated the relative influences of different price frames to examine which model is supported and what are the boundary conditions for price framing.

Design/methodology/approach – Two online studies were conducted on Indian adults who had prior experiences of online purchases. They were asked to judge attractiveness of bundles (product along with shipping surcharge). Discounts were shown on the product, the surcharge or on the overall bundle either as partitioned prices or as a bundle.

Findings – Across two studies on low- and high-priced products, discounts on shipping surcharge increased attractiveness of the bundle compared to a similar discount on the product or on the overall bundle, supporting the reference-dependent model. Further, for a low-priced product, bundling increased attractiveness, while for a high-priced product, partitioning was more attractive.

Research limitations/implications – More research is needed to examine whether these results translate to other kinds of products, surcharges or discount promotions and in different populations.

Originality/value – This research makes important contributions to theoretical and practical aspects of bundling and partitioned pricing research. It also adds much needed data about evaluation of product bundles with shipping surcharges among Indian customers.

Keywords India, Online retail, Bundled pricing, Discount framing, Partitioned pricing, Shipping surcharge

Paper type Research paper



Introduction

The e-commerce industry in India grew at a phenomenal rate of 88 per cent in 2013 ([The Economic Times, 2013](#)) and is posed to touch \$8.8 billion in 2016 ([Thamizhvanan and Xavier, 2013](#)) growing to about \$76 billion by 2021 ([Bose, 2013](#)). Products sold online represent wide categories like apparel, electronics, furniture, beauty products, foot wear,

books, bags, accessories, jewellery and even grocery items. Growing markets open up newer customer segments and allow companies to offer a variety of price structures dynamically. It also poses new challenges for marketing.

In the expanding online sales market, product(s) need to be bundled with additional surcharges like shipping costs to account for the added service (delivery to the customer's address). Some companies employ a threshold-based pricing strategy where a charge is levied for lower-priced products, while costlier products are delivered free (like FlipKart.com and other online companies in India offered free shipping on product bundles above 500 INR but added 50 INR as shipping charges otherwise). Threshold-based shipping sometimes result in less favourable customer attitudes when order value is below the free-shipping threshold (Koukova *et al.*, 2012). Free shipping remains one predominant offer made by many companies. Amazon (Amazon.in) offered free shipping for all products after it entered the Indian online retail market to gain market share (Bose, 2013), but later added threshold-based shipping surcharges a year later. Hence, while surcharges have become a necessary part for a range of products and services, the nature of discounts offered on surcharges could be an important marketing strategy beyond traditional discounts mainly offered on products. The question that we address in this paper is how does a consumer process and react to different discounts and price frames in an online product bundle that has a shipping surcharge as a bundle component?

A significant body of marketing research has shown that beyond customer preferences, attractiveness depends on framing of price information (e.g. Janiszewski and Cunha, 2004; Johnson *et al.*, 1999; Hamilton and Srivastava, 2008; Morwitz *et al.*, 1998; Yadav and Monroe, 1993; Yadav, 1994). Customers are often presented prices in an "all-inclusive" manner (bundled pricing) or prices of separate components are listed individually (partitioned pricing). Online retail companies can either present a bundled price of 1,100 INR that includes shipping charges or as a partitioned price of 1,000 INR for the product along with a shipping surcharge of another 100 INR. Further, for strategic advertising, discounts can be offered on the product or the surcharge or on the overall bundle. It is not yet clear how these different discount frames when presented in a bundled or partitioned manner influence attractiveness of the offers for products.

Two models have been proposed to explain how consumers evaluate product bundles with discounts, when prices are partitioned – the weighted-additive model (Yadav and Monroe, 1993) and the reference-dependent model (Janiszewski and Cunha, 2004), but discrepant evidences have been reported. The weighted-additive model proposes that discounts on the focal product of the bundle (which is typically priced higher) is more effective, while reference-dependent model proposes that similar amounts of discount on the smaller, lower-priced product is more attractive if the lower-priced product is perceived as a comparatively negative component. Hamilton and Srivastava (2008) explored this issue using bundles with mandatory components (like auto parts and labour to service the car) and found that beyond predictions from these models, preferences are also based on the nature of the components rather than relative sizes of the component. However, they had used only partitioned price frames, and no explicit discounts were provided keeping the question of weighted-additive versus reference-dependent open for different price discount frames (Janiszewski and Cunha, 2004). Little research has looked at these models from the perspective of product bundles with surcharges. Sheng *et al.* (2007a, 2007b) showed that one of the boundary

conditions that can consolidate some contradictory results of bundled and partitioned pricing is the relative significance of the surcharge to the base price. These authors found that when the surcharge is low compared to the base price, partitioned pricing increase the attractiveness of the bundle and vice-versa, mediated by perceived fairness of the surcharge. However, it is not clear how discount frames offered on product bundles with surcharges are perceived.

We advance the literature on pricing frames in multiple ways. We consider whether the ratio of the two prices in the bundle (product and shipping surcharge) influence consumer evaluations from a reference-dependent or a weighted-additive standpoint with anchoring and adjustment. [Yadav and Monroe \(1993\)](#) used a higher-priced bundle involving computers and peripherals, while [Janiszewski and Cunha \(2004\)](#) used a lower-priced bundle involving pizza and chicken wings. Thus, we examine whether bundles with relatively high or low expenditures have similar effects. We also test a boundary condition by examining effect of low versus high ratios of product to surcharge prices to align previous contentions between partitioned versus bundled presentation formats. This would advance a more nuanced understanding of the theory and would also recommend practical implications for marketing professionals.

Our contribution, thus, is twofold, one theoretical and one managerial. First, we assess the following: which one of weighted-additive or reference-dependent model applies in the evaluation of bundles using the context of a product with a shipping surcharge. In doing so, we resolve a contradiction in the literature by providing some boundary conditions to existing theory. Second, we show how:

- a change in the ratio of prices of the components of the bundle; and
- relatively high and low-priced main item in a bundle compared to the shipping surcharge, influence customer responses to different discount frames and bundle frames.

Specifically, as far as we are aware of, no research has examined explicitly the outcomes of offering discounts on products, surcharges and overall bundle (product plus surcharge) in two different price framing formats (bundled versus partitioned).

Price framing and theoretical models for product bundles

Price can play two important roles –an informational role related to quality ([Rao and Monroe, 1988](#)) and a sacrificing role related to the amount being spent ([Erickson and Johansson, 1985](#)). The bundled versus partitioned pricing strategy in product purchases with shipping surcharge influence the weight attached to different roles of price ([Volckner et al., 2012](#)). Different strategies can be explored in pricing a bundle. One can keep a higher margin for products or for surcharges and accordingly frame price offers. The company can partition the prices and present the product and shipping surcharges separately or as a bundled price. Partitioning prices lead people to underestimate or ignore surcharges and lowers perception of the total cost ([Morwitz et al., 1998](#)). Later, behavioural findings have also found more evidence showing that partitioned pricing makes a bundle more attractive than combined/bundled pricing ([Clark and Ward, 2008](#); [Lee and Han, 2002](#); [Kim, 2006](#)). Research suggests that customers anchor on the base price and insufficiently adjust for the surcharges that result in lower perceptions of the total price ([Morwitz et al., 1998](#)). Such an insufficient adjustment for surcharges has also been observed among eBay bidders and buyers evaluating bundles ([Clark and Ward,](#)

2008; Yadav and Monroe, 1993). The positive evaluation of partitioned pricing of multi-component bundles is moderated by the components partitioned, as attention is directed to attributes of individual partitions (Chakravarti *et al.*, 2002).

However, mental accounting (Thaler, 1985) proposes that multiple losses are perceived as harsher than a single loss of equivalent financial value, implying that an all-inclusive price is probably viewed as more preferable compared to a partitioned one. Indeed, mentioning every component's price individually increases the impact of unfavourable monetary losses (Burman and Biswas, 2007; Johnson *et al.*, 1999; Yadav and Monroe, 1993). This is more pronounced for customers who perceive companies are drawing a premium from surcharges (Schindler *et al.*, 2005). For both bundled and partitioned prices, one can offer discounts on the base component (primary product) or secondary surcharges (like shipping charges) or on the overall bundle. Where should one offer the discount – on the product price or the shipping surcharge or on the overall price? Large online retailers like Amazon and BestBuy.com often separate the product price from shipping charges and also offer promotional discounts on products or shipping. Some kinds of framed discounts can give rise to vulnerable negative quality inferences (Darke and Chung, 2005). Hence, understanding how customers process different price frames is of importance to a range of industries and service providers. Previous research has generated a wealth of important insights, but there remains some confusion and anomalous positions (Drumwright, 1992). In general, types and presentations (DelVecchio *et al.*, 2009) of surcharges are influential factors (Xia and Monroe, 2004).

The predominant models for evaluation of discounted products in a bundle are the weighted-additive model (Yadav and Monroe, 1993; Yadav, 1994) and the reference-dependent model (Janiszewski and Cunha, 2004), but these models make different predictions. The weighted-additive model predicts that discounts on more important items are most influential, while reference-dependent model predicts discounts on the most negatively valued item influences the overall evaluation. Some studies argue that simultaneously both are operating at the same time (Gaeth *et al.*, 1990).

The experiments conducted by Yadav (1994) were based on the weighted-additive model. According to this model, the consumer decides the weights for each item (w_i) depending upon the importance of the item and eventually sums up the utility of each item with the weight ($w_i \times u_i$) to arrive at an overall evaluation of the bundle ($\sum w_i u_i$). This model assumes that one of the components in the bundle will be naturally more important (focal item) and would receive the highest weight during bundle evaluation (Yadav, 1994). Buyers adjust their evaluations insufficiently from their evaluation of the focal/anchor item. Hence, the prediction from such a model is that the impact of price discount will be highest when it is offered on the most important (focal) item in the bundle.

An alternative model that explains price discount framing is the reference-dependent model (Janiszewski and Cunha, 2004). This model is based on prospect theory's value function (Tversky and Kahneman, 1991) that is steeper for losses than it is for gains. As loss portion is steeper, if discount is offered on the lesser valued item, then the bundle would be valued more positively. Assigning a discount on the item which is evaluated negatively would reduce the pain of losses. Further, a discount offered on a hedonic component in a bundle is more effective than a similar discount on a utilitarian component (Khan and Dhar, 2010).

Applying these models on product bundles with surcharges, one can predict how decision processes might be operating. In a product bundle with shipping surcharges, the product presumably is the more important item, while the shipping surcharge is a secondary expense that most people prefer not to pay (Lewis *et al.*, 2006). Shipping and handling surcharges are often perceived as an additional loss (Schindler *et al.*, 2005; Sheng *et al.*, 2007a, 2007b). Customers are twice as sensitive to changes in shipping charges compared to changes in price of products, indicating that shipping surcharges are seen to be more affective in nature and possibly falling in a “loss domain” (Smith and Brynjolfsson, 2001). If the surcharge is seen as a less positive aspect of a bundle and the main product is the focal item, the weighted-additive model should predict that a discount offered on the primary item, the product, would increase attractiveness of the bundle. The reference-dependent model, on the other hand, should predict that a discount on the shipping surcharge would make the offer more favourable:

- H1a.* According to the weighted-additive model, bundles with a discount on the primary product will be perceived as more attractive.
- H1b.* According to reference-dependent model, bundles with a discount on the secondary less valuable or loss portion of the bundle (like shipping surcharge) will be perceived as more attractive.

One goal of this research was to examine which of these hypotheses are supported when prices are bundled or partitioned in the domain of online retail.

In contexts, where the weighted additive model appears to work, the relative prices of the components in the bundle have been quite different. For example, Yadav and Monroe (1993) considered a computer, a printer and a table as a bundle where the relative prices of the components in the bundle would be about 10:2:1. In contrast, studies finding support for the reference-dependent model (Janiszewski and Cunha, 2004) have used items where the ratio is closer (2:1). Also, based on the price, it makes the product (computers) used by Yadav and Monroe (1993) a comparatively high involvement purchase compared to the product (pizza) used by Janiszewski and Cunha (2004). We intend to keep the involvement of products fairly similar (like common consumer goods purchased for daily use) to make a closer comparison between the models.

Previous research has also shown that partitioning a surcharge draws attention to its price and attributes (Bertini and Wathieu, 2008). When the ratio of the price of the product to the surcharge is relatively low, difference between the product and surcharge is less and hence the surcharge should draw relatively more attention. This should lower attractiveness of bundle if it uses a partitioned price format which draws attention to the surcharge:

- H2a.* For a product with shipping surcharge, where the ratio of the product price to the shipping surcharge is relatively low, bundled pricing would be more attractive compared to partitioned pricing.

However, when price of a product is high, difference between the product and surcharge is relatively large, so the surcharge should draw less attention (for a related discussion, see Sheng *et al.*, 2007a, 2007b and Kim, 2006).

H2b. For a product with a shipping surcharge, where the ratio of the product price to shipping surcharge is relatively high, partitioning would be a more attractive strategy compared to bundling.

It remains to be examined which predictions (*H1a* or *H1b*) from the two decision models (weighted-additive or reference-dependent) are supported when prices are presented in different frames for low- and high-priced products. Our studies were conducted on two differently priced products which are commonly purchased. The ratio of product prices to shipping surcharges were either low (study 1) or high (study 2). Both bundled and partitioned price frames were presented with discounts offered on the product, surcharge or the overall bundle.

Overview of the studies

In a pretest, we shortlisted two common consumer products (flipflops and backpacks) sold at two price levels where one was at a comparatively higher price than the other. The pretest tested that the prices are indeed perceived to be high and low for the backpack and flipflop, respectively. Note that the high or low prices are in the context of the overall expenditure basket of the consumer. Indian customers purchasing items for regular use are relatively more budget constrained as compared to Western consumers and judge prices as high or low within their budget (Bijapukar, 2009). We also tested whether a representative sample from our participation pool perceives shipping surcharges as a loss because our hypothesis assumes most people perceive such surcharges as a less positive aspect of the bundle. The product in the first study (flipflop) was a relatively lower-priced product which had a list price of 478 INR and a shipping cost of 90 INR with a total bundled price of 568 INR. It provided a comparatively low price ratio between the product and the shipping surcharge (approximately 5:1) compared to the second study where the product was a backpack that had a relatively higher list price of 2,478 INR along with a shipping cost of 90 INR resulting in a total bundled price of 2,568 INR (and a ratio of approximately 27:1 between product and shipping surcharge). This enabled a comparison between different price frames across situations where the ratio between the primary item (product purchased) and the secondary item (shipping surcharge) is relatively small (study 1) or large (study 2). The pretest also showed that an expenditure of 568 INR was perceived to be less costly than an expenditure of 2,568 INR in their overall budget basket, justifying our assumptions of using 568 as a low and 2,568 as a high price across the studies to test *H2a* and *H2b*. The pretest and the two following studies were conducted at the same business school in India.

No brand information of the retail website was presented. Both the studies employed a full factorial design comprising of six between-subject conditions with price format (2: bundled versus partitioned) and discount framing (3: discount on overall price, discount on product, discount on shipping surcharge) as factors. In all conditions, a discount of INR 90 was offered but the frames were different. All participants were told that a popular online retail store (without any brand information) is planning to start its operations in their city and were interested in evaluating customer responsiveness. To increase credibility, a realistic website image was designed that closely resembled online retail websites (see [Appendix](#)) but care was taken to ensure that the design did not exactly resemble any of the common online retail companies in India.

Pretest*Participants and method*

One hundred and seventy-one graduate students (mean age = 24.73; females = 60) volunteered to participate in a survey purported to measure “online customer preferences among Indians”. These participants were from the same participant pool but different from the respondents who participated in the two main studies. The pretest was designed on a web form and all participants were sent the link of the survey which they could fill up online.

We used three items to measure attitudes towards shipping surcharges which the participants had to rate on a 7-point scale (1 = strongly disagree; 7 = strongly agree) how much they agreed with the statements. The items were:

- “When I buy products online and have to pay shipping charges, I think of paying for shipping as a loss of money”.
- “Paying separately for shipping when buying product online is painful”.
- “I feel as if I am loosing money when I have to pay shipping fees when buying online”.

Then, they were asked to state their monthly expenditure, average money they spend per month on online shopping, along with other demographic information including how often they had used online shopping websites in the last year and what are the major websites they used. These helped us determine the suitability of the population in conducting a study on online shopping. Importantly, we asked them to what extent did they consider spending 568 INR and 2,568 INR as a high or low expenditure (In general, would you consider an expenditure of INR 568 [INR 2,568] a high-priced or low-priced expenditure keeping in mind your expenditure basket?) on a 7-point scale (1 = very low; 7 = very high).

Pretest results

Online purchases: all participants had used online shopping in the last year with the majority of them having used it for more than six times in the past 12 months. A variety of shopping websites were used including FlipKart, Amazon, SnapDeal, Myntra, Jabong. The average stated amount spent on online shopping in a month was 1,276 INR, while the total average monthly expenditure for purchases was 7,065 INR.

Attitudes towards shipping surcharges: a single item (shipping_surcharge_as_loss) was created by averaging the three items used in the survey to measure attitudes towards shipping surcharges because there was high level of reliability (Cronbach’s alpha = 0.95) across the three items purported to test whether shipping charges are conceived as losses. The mean of shipping_surcharge_as_loss was 5.22 on a 1- to 7-point scale (1 = strongly disagree; 4 = neither agree nor disagree; 7 = strongly agree), significantly higher than the midpoint of 4 (mean difference = 1.22, 95 per cent confidence interval (CI) [0.96, 1.48], $t(170) = 9.24, p < 0.001$; thus, showing that most of our participants agreed with shipping surcharges being a loss.

Prices of products: participants stated to what extent expenditures of 568 INR and 2,568 INR were perceived as high on a 7-point scale (1 = very low expenditure; 7 = very high expenditure). An expenditure of 568 INR was indeed perceived to be lower (mean = 4.36, SD = 1.54) compared to an expenditure of 2,568 INR (mean = 5.39, SD = 1.10), mean difference = -1.02, 95 per cent CI [-1.24, -0.80], $t(170) = -9.14,$

$p < 0.001$. These results show that the prices of around 500 and 2,500 are judged to be fairly around an expenditure which is lower than the mean online purchase within their overall expenditure budget. An amount of 568 INR was judged to be significantly lower than 2,568 INR lending credence to the lower and higher prices of the chosen products for the studies. Compared to a computer purchase (approximately 40,000 INR currently) they are, however, much lower both on an absolute and relative scale. Hence, based on the prices, one could assume that these products are close to medium involvement purchases. These were the total prices used for the products in Studies 1 and 2.

Study 1

Participants and method

From a pool of participants, 220 graduate students (mean age = 24 years with a range from 22 to 40; 80 females) from an Indian business school voluntarily participated in response to a request to complete a web survey and were divided into six groups. All these participants had experience of shopping online before.

Each group was sent a different web link as per condition (see sample screen in [Appendix](#)). Each of the six groups saw the same product with different price frames. Prices were either bundled or partitioned. Bundled prices stated the list price as 568 INR including shipping charges and partitioned prices stated the listed prices as 478 INR for product + 90 INR as shipping charges. Discounts of 90 INR were offered on the overall price, product price or the shipping surcharge (see [Table I](#) for all cells in the experiment). Here, the ratio of the product price to shipping surcharge was relatively low.

The main dependent variable was attractiveness of the offer ('Rate the attractiveness of the offer on a scale of 1 to 7 where 1 = not at all attractive and 7 = very attractive). To account for concerns with paying shipping charges ([Schindler et al., 2005](#)), they were asked to rate how much it bothers them to pay for shipping charges on a 7-point scale (1 = not at all; 7 = very much) to see if any group differs on this dimension. Then they filled some demographic information (age, gender, family income and whether they had used such a flipflop). Data were analysed from only those who stated that they had used a flipflop before ($n = 207$; mean age = 23.25 with a range from 22 to 40; 72 females).

Results

A 2 (price format: bundled, partitioned) \times 3 (discount framing: overall, product, shipping) analysis of variance (ANOVA) was performed on attractiveness of offer and "concern with shipping charges" was entered as covariate. We found a main effect of price format, $F(1, 200) = 11.07$, $p = 0.001$, $\eta^2 = 0.05$ and a main effect of discount framing, $F(2, 200) = 4.68$, $p = 0.01$, $\eta^2 = 0.04$. Planned post-hoc tests showed that attractiveness for bundled prices (mean = 3.79, standard error (SE) = 0.13) were more attractive than partitioned ones (mean = 3.13, SE = 0.14), 95 per cent CI [1.05, -0.27],

Price frames	Overall discount	Product discount	Shipping discount
Bundled (List price = 568 including shipping)	Total = 478 (90 INR off)	Total = 478 (90 INR off on product)	Total = 478 (90 INR off on shipping)
Partitioned (List price = 478; Shipping = 90; Total = 568)	Total = 478 (90 INR off)	Total = 478 (90 INR off on product)	Total = 478 (90 INR off on shipping)

Table I.
Price frames presented to the six groups in Study 1

$p = 0.001$. Among the different discount frames, a discount offered on shipping was rated more attractively than a similar discount on the product (mean difference = 0.69, 95 per cent CI [.22, 1.17]), $p = 0.004$. A shipping discount was also more attractive than a similar discount on the overall bundle (mean difference = 0.55, 95 per cent CI [0.07, 1.02], $p = 0.02$). There was no significant interaction between price format and discount framing ($p > 0.5$) and no main effect of “concern with shipping charges” (Figure 1).

The results supported the (H1b) that shipping discounts are more attractive than a similar product discount, rendering support to the reference-dependent model. Moreover, as predicted (H2a), bundled price frames were more attractive than partitioned ones for a lower-priced product, where the ratio of product to shipping surcharge is low.

Study 2

Participants and method

Similar to the previous study, 180 graduate students (mean age = 24 years with a range of 20 to 50; 78 females) from an Indian business school participated voluntarily.

Shipping surcharge was similar (90 INR), but the product (backpack) was priced significantly higher (2478 INR) compared to Study 1 to provide a higher ratio between the product price and the shipping surcharge. Bundled prices stated the list price as 2,568 INR including shipping charges, and partitioned prices stated the listed prices as 2,478 INR + 90 INR shipping charges (see Appendix). Again, participants were divided into six groups with prices being bundled or partitioned and discounts offered in three ways as in Study 1. They were asked to rate attractiveness of the offer (on a 7-point scale; 1 = not at all attractive, 7 = very attractive). Concern with paying shipping prices and demographic information (age, gender, family income) were recorded. Data were

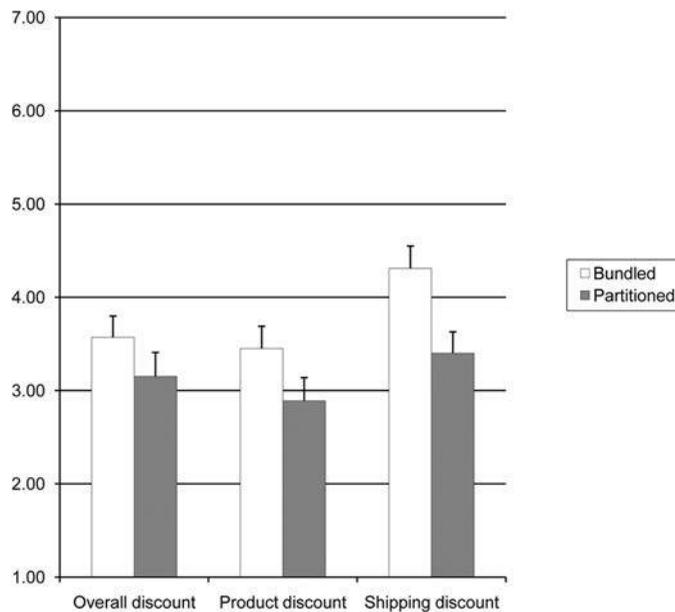


Figure 1.
Mean attractiveness
of the offers in Study
1. Error bars show
one standard error

analysed from those who stated that they had used such a backpack ($n = 169$; mean age = 23.48 years with a range of 20 to 50; 72 females).

Results

A 2 (price format: bundled, partitioned) \times 3 (discount framing: overall discount, product discount, shipping discount) ANOVA with “concern with shipping charges” as covariate revealed an effect of price format, $F(1, 162) = 5.58, p = 0.01, \eta^2 = 0.03$ with partitioned prices being rated as more attractive (mean = 3.13, SE = 0.15) than bundled prices (mean = 2.67, SE = 0.14). There was a main effect of discount framing, $F(2, 162) = 3.45, p = 0.03, \eta^2 = 0.04$ (Figure 2).

Post-hoc tests showed that a discount offered on shipping was more attractively rated than a similar product discount (mean difference = 0.63, SE = 0.25), 95 per cent CI [0.12, 1.14], $p = 0.01$. Also, discount on shipping was more attractive than a similar discount on the overall bundle (mean difference = 0.54, SE = 0.26), 95 per cent CI [0.01, 1.06], $p = 0.04$. There was no significant interaction between price format and discount framing ($p > 0.12$) and no main effect of the covariate “concern with shipping charges”.

These results thus support the (*H1b*) predicted by the reference-dependent model showing discounts on shipping surcharges are more attractive than discounts on products. Further, partitioned prices were more favourable than bundled prices as predicted for a higher-priced product (*H2b*).

General discussion

While previous research (Thamizhvanan and Xavier, 2013) had identified important determinants for online purchases among Indian customers like impulsive orientation, previous experience and trust, to our knowledge, this is among the first studies to evaluate how price and discount framing can influence attractiveness of offers even when actual price paid is the same. This research studied bundles with surcharges in

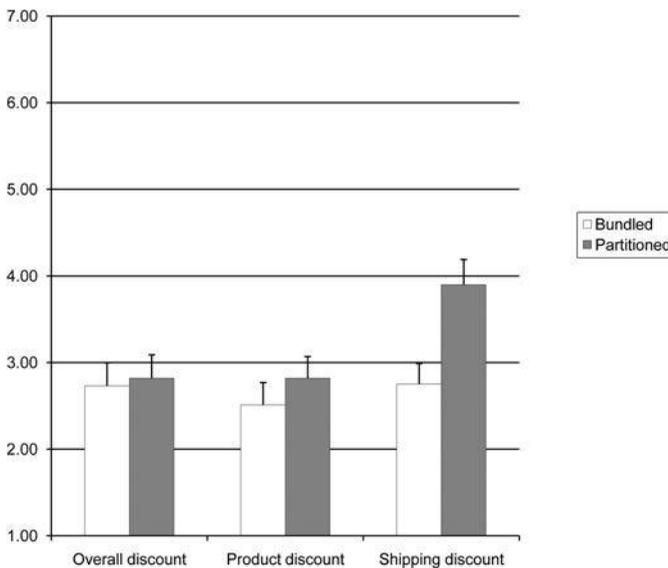


Figure 2. Attractiveness of offers in Study 2. Error bars show one standard error

light of the weighted-additive and reference-dependent models and empirically found evidence for the reference-dependent process model across both studies for common customer products in a price bracket of 500 to 2,500 INR. Discounts offered on shipping charges increased attractiveness of the product bundles for both the low- and relatively higher-priced products. We think this is so because for purchases where the product belongs to a low or medium involvement level, the negative emotional influence of the loss from paying a surcharge looms big. The products used in our studies were medium involvement products compared to previous literature (computers in [Yadav and Monroe, 1993](#) and pizzas in [Janiszewski and Cunha, 2004](#)), but how the pattern of findings differ for high versus low involvement products remains to be explored. Possibly only when the product belongs to a high involvement category or has a strong emotional aspect (like high-end electronics or jewellery), promotional offers on the focal product might be more attractive as predicted by the weighted additive model – a possible implication that needs to be tested in future research.

It was also found that when the price of the focal product is low (Study 1), it would be more effective to bundle both the product and surcharge prices in an all-in-one price, that possibly would reduce the pain of paying multiple costs. When the price of the focal product is comparatively high (Study 2), it should be more attractive to partition the product and surcharge prices because it might create a feeling of lower product prices compared to a overall bundled price. This highlights a boundary condition for processing a bundled versus partitioned price frame. While some studies (e.g. [Burman and Biswas, 2007](#)) suggest bundling to be a more effective strategy, other research positions (e.g. [Morwitz et al., 1998](#)) suggest partitioning to be more effective. This research shows that both pricing strategies could be effective depending on the price level relative to the expenditure basket and possibly the involvement levels. Depending on the price of the focal product, either a bundled or partitioned strategy could make the discount offer more attractive.

There are practical implications that can be strategically used for advertising offers. Overall, shipping discounts are more positively viewed and, hence, it would be profitable for online retail companies to offer larger discounts on surcharges in the growing online market. It is important to weigh pricing strategies differently depending on which product is being offered and what is its price. For a low-priced product, one could use bundling, while for a high-priced product, partitioning could be more attractive. Hence, the apparent discrepancy between bundling and partitioning strategies could be due to different prices of focal products used in previous research (also see [Sheng et al., 2007a, 2007b](#)).

Multiple aspects warrant further research. Often there are a number of different surcharges that customers need to pay (see [Volckner et al., 2012](#)). It is not clear how customers would be processing a combination of surcharges and whether increasing the number of surcharges or amount of surcharges would affect the main findings. It is possible that emotional attachment with the product to be purchased including its brand information might be the context in which the weighted additive model works. Further, here partitioning referred to products with surcharges (shipping) that were mandatory. Future research could explore whether the results translate to product bundles with non-mandatory components. Different customer segments categorised on demographics like age might have different responses to these offers. This study used young adults as the participant pool. One needs to also explore how these results

translate for other ages of customers, kinds of marketing promotions (like premiums; Palazon and Delgado-Ballester, 2009) and types of discounts (volume discounts; Sinha and Smith, 2000). Additionally, shipping discounts used here reduced shipping prices to zero. One would later need to explore the effects of discounting surcharges partially. Finally, individual motivational characteristics like regulatory focus can influence perception of price partitioned frames with promotion-oriented buyers perceiving partitioned prices more favourably than prevention focussed buyers (Lee *et al.*, 2014). More research in this direction can possibly find interesting patterns between situational or trait motivational variables and information processing mechanisms associated with processing of price frames.

The practice of charging mandatory surcharges have proliferated in banking, entertainment, travel, security, auctioning and even household payments like electricity and water bills, adding millions of extra dollars as revenue (Morwitz *et al.*, 2013). The decision about how to frame prices for the primary offering and the surcharge, including promotional offers is critical for positioning strategically. This research makes a contribution to theoretical and practical aspects of bundling and partitioned pricing research. There was very little work on how different discounts on the overall bundle or product or surcharge at two different formats (partitioned versus bundled) are perceived by customers, especially from the perspective of contemporary psychological models. In common parlance, shipping surcharges need to be discounted to make it more appealing to customers as predicted by the reference-dependent model for bundle evaluation, at least for products which are low or medium involvement items. However, an all pervasive marketing strategy might not give optimal results. Both bundling and partitioning pricing strategies are useful. The product being offered should decide a marketing strategy. Price framing is an effective means for tailoring customer preferences and more research in this direction would add important marketing insights at both theoretical and practical levels.

References

- Bertini, M. and Wathieu, L. (2008), "Attention arousal through price partitioning", *Marketing Science*, Vol. 27 No. 2, pp. 236-246.
- Bijapurkar, R. (2009), *We are Like that Only: Understanding the Logic of Consumer India*, Penguin Books India, New Delhi.
- Bose, N. (2013), "Amazon tries free, on-time delivery to lure India online", *Reuters*, 1 November, available at: www.reuters.com/article/2013/11/01/net-us-amazon-india-idUSBRE9A009W20131101 (accessed on 20 April 2014).
- Burman, B. and Biswas, A. (2007), "Partitioned pricing: can we always divide and prosper?", *Journal of Retailing*, Vol. 83 No. 4, pp. 423-436.
- Chakravarti, D., Krish, R., Paul, P. and Srivastava, J. (2002), "Partitioned presentation of multicomponent bundle prices: evaluation, choice, and underlying processing effects", *Journal of Consumer Psychology*, Vol. 12 No. 3, pp. 215-229.
- Clark, J.M. and Ward, S.G. (2008), "Consumer behavior in online auctions: an examination of partitioned prices on eBay", *The Journal of Marketing Theory and Practice*, Vol. 16 No. 1, pp. 57-66.
- Darke, P.R. and Chung, C.M. (2005), "Effects of pricing and promotion on consumer perceptions: it depends on how you frame it", *Journal of Retailing*, Vol. 81 No. 1, pp. 35-47.

- DelVecchio, D., Lakshmanan, A. and Krishnan, H.S. (2009), "The effects of discount location and frame on consumers' price estimates", *Journal of Retailing*, Vol. 85 No. 3, pp. 336-346.
- Drumwright, M.E. (1992), "A demonstration of anomalies in evaluations of bundling", *Marketing Letters*, Vol. 3 No. 4, pp. 311-321.
- Economic Times (2014), "India has nearly 1 million online retailers: IAMAI", 13 April, available at: http://articles.economictimes.indiatimes.com/2014-04-03/news/48834955_1_jamai-online-apparel (accessed on 20 April 2014).
- Erickson, G.M. and Johansson, J.K. (1985), "The role of price in multi-attribute product evaluations", *Journal of Consumer Research*, Vol. 12 No. 2, pp. 195-199.
- Gaeth, G.J., Levin, I.P., Chakraborty, G. and Levin, A.M. (1990), "Consumer evaluation of multi-product bundles: an information integration analysis", *Marketing Letter*, Vol. 2 No. 1, pp. 47-57.
- Hamilton, R.W. and Srivastava, J. (2008), "When 2 + 2 is not the same as 1 + 3: Variations in price sensitivity across components of partitioned prices", *Journal of Marketing Research*, Vol. 45 No. 4, pp. 450-461.
- Janiszewski, C. and Cunha, M. Jr (2004), "The influence of price discount framing on the evaluation of a product bundle", *Journal of Consumer Research*, Vol. 30 No. 4, pp. 534-546.
- Johnson, M.D., Herrmann, A. and Bauer, H.H. (1999), "The effects of price bundling on consumer evaluations of product offerings", *International Journal of Research in Marketing*, Vol. 16 No. 2, pp. 129-142.
- Khan, U. and Dhar, R. (2010), "Price-framing effects on the purchase of hedonic and utilitarian bundles", *Journal of Marketing Research*, Vol. 47 No. 6, pp. 1090-1099.
- Kim, H.M. (2006), "The effect of salience on mental accounting: how integration versus segregation of payment influences purchase decisions", *Journal of Behavioral Decision Making*, Vol. 19 No. 4, pp. 381-391.
- Koukova, N.T., Srivastava, J. and Steul-Fischer, M. (2012), "The effect of shipping fee structure on consumers' online evaluations and choice", *Journal of the Academy of Marketing Science*, Vol. 40 No. 6, pp. 759-770.
- Lee, K., Choi, J. and Li, Y.J. (2014), "Regulatory focus as a predictor of attitudes toward partitioned and combined pricing", *Journal of Consumer Psychology*, Vol. 24 No. 3, pp. 355-362.
- Lee, Y.H. and Han, C.Y. (2002), "Partitioned pricing in advertising: effects on brand and retailer attitudes", *Marketing Letters*, Vol. 13 No. 1, pp. 27-40.
- Lewis, M., Singh, V. and Fay, S. (2006), "An empirical study of the impact of nonlinear shipping and handling fees on purchase incidence and expenditure decisions", *Marketing Science*, Vol. 25 No. 1, pp. 51-64.
- Morwitz, V., Greenleaf, E. and Johnson, E.J. (1998), "Divide and prosper: consumers' reaction to partitioned prices", *Journal of Marketing Research*, Vol. 35 No. 4, pp. 453-463.
- Morwitz, V., Greenleaf, E., Shalev, E. and Johnson, E. (2013), "The price does not include additional taxes, fees, and surcharges: a review of research on partitioned pricing", available at: SSRN: <http://ssrn.com/abstract=1350004>.
- Palazon, M. and Delgado-Ballester, E. (2009), "Effectiveness of price discounts and premium promotions", *Psychology & Marketing*, Vol. 26 No. 12, pp. 1108-1129.
- Rao, A.R. and Monroe, K.B. (1988), "The moderating effect of prior knowledge on cue utilization in product evaluations", *Journal of Consumer Research*, Vol. 15 No. 2, pp. 253-264.

- Schindler, R.M., Morrin, M. and Bechwati, N.N. (2005), "Shipping charges and shipping-charge skepticism: implications for direct marketers' pricing formats", *Journal of Interactive Marketing*, Vol. 19 No. 1, pp. 41-53.
- Sheng, S., Bao, Y. and Pan, Y. (2007a), "Partitioning or bundling? Perceived fairness of the surcharge makes a difference", *Psychology & Marketing*, Vol. 24 No. 12, pp. 1025-1041.
- Sheng, S., Parker, A.M. and Nakamoto, K. (2007b), "The effects of price discount and product complementarity on consumer evaluations of bundle components", *The Journal of Marketing Theory and Practice*, Vol. 15 No. 1, pp. 53-64.
- Sinha, I. and Smith, M.F. (2000), "Consumers' perceptions of promotional framing of price", *Psychology & Marketing*, Vol. 17 No. 3, pp. 257-275.
- Smith, M.D. and Brynjolfsson, E. (2001), "Consumer decision making at an internet shopbot: brand still matters", *Journal of Industrial Economics*, Vol. 49 No. 4, pp. 541-558.
- Thaler, R. (1985), "Mental accounting and consumer choice", *Marketing Science*, Vol. 4 No. 3, pp. 199-214.
- Thamizhvanan, A. and Xavier, M.J. (2013), "Determinants of customers' online purchase intention: an empirical study in India", *Journal of Indian Business Research*, Vol. 5 No. 1, pp. 17-32.
- The Economic Times (2013), "India's e-commerce market rose 88% in 2013: survey", 30 December, available at: http://articles.economictimes.indiatimes.com/2013-12-30/news/45711192_1_e-commerce-market-online-shoppers-survey (accessed 12 April 2014).
- Tversky, A. and Kahneman, D. (1991), "Loss aversion in riskless choice: a reference-dependent model", *The Quarterly Journal of Economics*, Vol. 106 No. 4, pp. 1039-1061.
- Völckner, F., Rühle, A. and Spann, M. (2012), "To divide or not to divide? The impact of partitioned pricing on the informational and sacrifice effects of price", *Marketing Letters*, Vol. 23 No. 3, pp. 719-730.
- Xia, L. and Monroe, K.B. (2004), "Price partitioning on the internet", *Journal of Interactive Marketing*, Vol. 18 No. 4, pp. 63-73.
- Yadav, M.S. (1994), "How buyers evaluate product bundles: a model of anchoring and adjustment", *Journal of Consumer Research*, Vol. 21 No. 2, pp. 342-353.
- Yadav, M.S. and Monroe, K.B. (1993), "How buyers perceive savings in a bundle price: an examination of a bundle's transaction value", *Journal of Marketing Research*, Vol. 30 No. 3, pp. 350-358.

Appendix. Sample stimuli used

18

The screenshot shows a product page for flip-flops. At the top, there is a navigation bar with options like 'Great Selection', 'Low Prices', 'Fast Delivery', 'What's New', 'Gift Certificate', 'Wishlist', and social media icons. Below the navigation bar, the breadcrumb trail reads 'Home > Shoes > Slippers > Flip-Flop'. The 'DESCRIPTION' section contains text: 'Chill out in these slippers The bluepair features a simplistic V-shaped upper. The footwear sports a bright and colourful footbed to keep you active and energetic.' To the right of the description is a large image of a blue flip-flop with a colorful pattern. Below the main image are two smaller images showing different views of the flip-flop. On the right side of the page, the pricing information is as follows: 'List price: ~~Rs. 568~~', 'Including shipping charges' (with a sub-note 'Includes all taxes'), and 'Total Rs. 478' (with a sub-note 'Rs. 90 off on shipping'). Below the pricing, it says 'In Stock', 'Delivered in 5-7 Business Days. (?)', and 'Quantity: 1'. There is a 'Buy Now' button and a note 'Hassle Free return in 10 days'. On the left side, there are three promotional boxes: 'EMI Payment Options' (HDFC, Citi, Axis, ICICI...), 'No Anxiety Shipping' (9,000+ Locations, Know More), and 'Buyer Protection' (Know More). At the bottom left, there are social media icons for email, Facebook, and Twitter.

Figure A1.
Bundled pricing with shipping discount used in Study 1

The screenshot shows the same product page for flip-flops as in Figure A1. The layout and content are identical, but the pricing information on the right side is different: 'List price: Rs. 478', 'Selling price: Rs. 478' (with a sub-note 'Includes all taxes'), and 'Shipping charges: ~~Rs. 90~~'. Below this, the total price is shown as 'Total Rs. 568 - Rs. 478' (with a sub-note 'Rs. 90 off on shipping'). The rest of the page, including the description, images, promotional boxes, and navigation, remains the same as in Figure A1.

Figure A2.
Partitioned pricing with shipping discount used in Study 1

Great Selection Low Prices Fast Delivery What's New Gift Certificate Wishlist Like 1.2m

Home > Computers > Laptop Bags, Cases & Covers > Backpack >

DESCRIPTION

A multi utility backpack designed for the urban outdoor requirements, Club is an ideal companion with copious space, integrated haul loop, study shoulder straps, ergonomic mesh padded back system & an evolved organization.

EMI Payment Options
HDFC, Citi, Axis, ICICI...

No Anxiety Shipping
9,000+ Locations [Know More](#)

Buyer Protection
[Know More](#)

Like Facebook Twitter

List price: ~~Rs. 2568~~
Including shipping charges
Includes all taxes

Total Rs. 2478
Rs. 90 off on shipping

In Stock
Delivered in 5-7 Business Days. (?)
Quantity:

Buy Now

Hassle Free return in 10 days

Figure A3. Bundled pricing with shipping discount used in Study 2

Great Selection Low Prices Fast Delivery What's New Gift Certificate Wishlist Like 1.2m

Home > Computers > Laptop Bags, Cases & Covers > Backpack >

DESCRIPTION

A multi utility backpack designed for the urban outdoor requirements, Club is an ideal companion with copious space, integrated haul loop, study shoulder straps, ergonomic mesh padded back system & an evolved organization.

EMI Payment Options
HDFC, Citi, Axis, ICICI...

No Anxiety Shipping
9,000+ Locations [Know More](#)

Buyer Protection
[Know More](#)

Like Facebook Twitter

List price Rs. 2478
Selling price Rs. 2478
Includes all taxes

~~Shipping charges Rs. 90~~

Total ~~Rs. 2568~~ Rs. 2478
Rs. 90 off on shipping

In Stock
Delivered in 5-7 Business Days. (?)
Quantity:

Buy Now

Hassle Free return in 10 days

Figure A4. Partitioned pricing with shipping discount used in Study 2

About the authors

Arvind Sahay is Professor of Marketing and International Business at the Indian Institute of Management, Ahmedabad. He has a PhD from the University of Texas, Austin. His research interests lie in the area of pricing, branding and neuroscience and consumer behaviour. He teaches courses on basic marketing, pricing and neuroscience and consumer behaviour. Arvind Sahay is the corresponding author and can be contacted at: asahay@iimahd.ernet.in

Sumitava Mukherjee is a Postdoctoral Researcher at the Indian Institute of Management, Ahmedabad. He has a PhD from Indian Institute of Technology, Gandhinagar. His broad interests are in judgment, preference and decision making.

Prem Prakash Dewani is Assistant Professor of Marketing at the Indian Institute of Management, Lucknow. He completed his Fellow Program in Management from the Indian Institute of Management, Ahmedabad. He teaches the basic marketing and pricing course at Indian Institute of Management, Lucknow.

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com