# ASYMMETRIC EFFECTS ON "PERCEIVED VALUE OF DEALS": INTERACTION OF DEAL FRAMING AND PRODUCT CATEGORY


## Abstract

This research investigates the consumer perceptions of transaction utilities belonging to certain deal types (i.e., "buy one get one free" versus "50% off" deals) that are equivalent on a unit-cost basis, however framed differently. Through two experimental settings, we expect to show that transaction utility of hedonic products is greater when the deal is framed in "buy one get one free" form. For the utilitarian products, however, "50% off" framing is expected to communicate a greater deal value than does "buy one get one free" framing. Overall, the findings demonstrate different value functions for different product categories when they are offered in certain framings. Specifically, hedonic (vs. utilitarian) products have a steeper value function in the gain domain, while this relation becomes just the opposite in the loss domain of value function for "buy one get one free" deal. On the other hand, utilitarian products have a steeper value function in loss domain for "50% off" deal. We posit that this difference in value functions is the result of combining acquisition and transaction utilities in different ways depending on the product category and deal framing. Believing that our findings add to the understanding of deal framing on consumer perceptions and evaluations, we offer some useful implications for managers and policy makers to communicate a better value through sales promotions.


***Key words:*** mental accounting, value function, monetary vs. non-monetary promotions, hedonic vs. utilitarian products

# ASYMMETRIC EFFECTS ON "PERCEIVED VALUE OF DEALS": INTERACTION OF DEAL FRAMING AND PRODUCT CATEGORY

## 1. Introduction

Individuals may respond differently to different descriptions of the same decision problem and these different reactions to the same offer are the consequences of a framing effect (Frisch 1993). Framing on decision problems impacts individuals' perceptions, and thus their preferences. Relevant literature provides many examples of this phenomenon. For instance, Kahneman and Tversky (1979) demonstrate that people change their preferences between certain and uncertain options solely due to how these options are communicated. Thaler (1980) finds that it is more difficult to accept a surcharge than to forego a discount, despite both options mean the same amount of cost to subjects. Levin and Gaeth (1988) find that people evaluate ground beef labeled 75% lean more favorably than beef labeled 25% fat.

Framing effects have been shown to be an important factor influencing consumer response to marketing stimuli (Levin and Gaeth 1988; Heath, Chatterjee and France 1995). A lage amount of research in marketing has been concerned with the impact of framing of price and situation on consumers' perceived savings (e.g., Monroe 1973; Winer 1988) or sales promotions (e.g., Chandon, Wansink and Laurentwe 2000; Monroe and Petroshius 1981). These studies differ in considering some certain types of promotions, such as monetary versus non-monetary promotions. Alternatively, some characteristics of the promotional product become the focus of this stream of research. For instance, Chen, Monroe and Lou (1998) investigate the impact of price; Li, Sun and Wang (2007) examine the storability and consumable nature of the product on framing effects. Also, there are studies exploring the role of consumer characteristics on the perceptions of deal framing. For example, DelVecchio (2005) and Gazquez-Abad and Sanchez-

Perez (2009) show the role of deal proneness and price consciousness on the impact of deal framings.

In this research, we focus on impact of the deal framing, as well as the product category characteristics on consumers' perceived values and evaluations. Two types of deals are in interest of this paper: "buy one get one free" and "50% off". There is a main classification of promotion based on whether the offered benefit is explicitly related to the price information (i.e., monetary or price-off promotions) or it is not defined in terms of price (i.e., non-monetary or value-added promotions). In this regard, we are concerned with the favorability of monetary versus non-monetary promotions in the perceptions of consumers. Thus, we explore if there is a moderating role of the benefit type provided by the promotional product. In particular, we investigate whether providing a utilitarian benefit versus an emotional benefit is perceived more favorably for one of the two deal framings.

The rest of the research is organized as follows. Next section describes the prior literature, its findings and how it guides our research. Third section presents our conceptual framework and hypotheses. Following the methodological section, expected results are presented. Finally, a discussion section concludes our research.

## 2. Prior Research

Price framing can evoke a feeling of perceived loss or gain. Previous literature suggest that framing promotions in non-monetary terms will produce a perception of a "gain", while promotions framed in monetary terms are experienced as "reduced loss" (e.g., Sawyer and Dickson 1984). Klein and Oglethorpe (1987) argue that it is more difficult to integrate various attributes of purchases if these attributes are not in the same units. In the sales promotion context, the deal offered in the same units as pricing information is expected to be more easily integrated with the price. Therefore, that offer will be framed as a *reduced loss*. On the contrary, a deal

offered in a different unit from the price information should be considered as a *gain*, since the consumer may not expend the effort necessary to integrate the promotions in units other than money into the price paid (Abelson and Levi 1985). In support of this classification of promotions, there are other studies distinguishing price-off promotions from value-added promotions to explain the same phenomenon (e.g., Diamond and Sanyal 1990; Sinha and Smith 2000; Thaler 1985). Since our interest is on the particular examples of value-added and price-off deals, we conclude that "buy one get one free" and "50% off" deals induce a gain and a reduced loss, respectively.

The fundamental aim of this paper is, therefore, exploring the certain situations that one of these two deal framings is perceived more favorably relative to the other. We provide different perspectives and alternative predictions about our main research objective. We first present the rational choice theory and its prediction, and then introduce the behavioral decision perspective wherein the value function and mental accounting concepts will be discussed in detail. Following these two different perspectives, we develop our conceptual framework and derive our hypotheses.

### 2.1. Rational Choice Theory

Rational choice theory models its predictions on the assumption that economic actors are "rational" and they seek to maximize their utilities or benefits (see Turner and Roth 2003, p. 303). These economic models usually begin with an individual who has certain preferences and faces several constraints. Presented with various options, the individual economic actor decides how best to achieve the preferences, given the set of constraints and choices available. Adapting this theory to the sales promotion domain, rational choice theory suggests that consumer preferences between two choices communicated differently should not differ as long as these deals provide the same amount of overall value. In support of this prediction of rational choice

theory, Tversky, Sattath and Slovic (1988) introduce the "descriptive invariance" concept whereby consumer preferences for presentations of the same stimulus do not change when they are described differently. Therefore, taking the rational choice perspective, we conclude that consumers will be indifferent between the two deals both offering the equivalent monetary values and the same requirements to take the advantage of that deal. We continue that any additional constraint that the consumer faces will decrease the utility or benefit derived from that choice. For instance, forcing a consumer to buy a certain quantity of a product is perceived unfavorably, since this constraint restricts the quantity freedom of consumer's decision on how much to purchase.

### 2.2. Behavioral Decision Theory

#### *Value Function*

*Reference-Dependent Model* (Tversky and Kahneman 1991) posits that alternatives are evaluated comparing with a reference state. In particular, people judge discounted prices relative to referents using a *value function* (Kaicker et al. 1995; Mazumdar and Jun 1993). Kahneman and Tversky (1991) nominate three characteristics of the value function: (1) Value function defines gains and losses relative to a reference point rather than a final state of wealth (i.e., reference dependence). (2) Value function has diminishing marginal returns for gains (i.e., concavity) relative to a referent, and increasing marginal costs for losses (i.e., convexity) relative to a referent (i.e., diminishing sensitivity). (3) Value function is steeper for losses than it is for gains (i.e., loss aversion).

As noted in the first section, relevant literature suggests that non-monetary promotions are perceived as gains in contrast to the monetary promotions that are perceived as reduced losses. As to the main concern of this paper, "buy one get one free" deals induce a gain by offering an additional product for the same cost. However, "50% off" deals induce a reduced loss by

decreasing the cost by half to purchase the same product. Therefore, we argue that "buy one get one free" deal will be evaluated on the gain domain, while "50% off" deal will be evaluated in the loss domain. In other words, the utility derived from "buy one get one free" deal will be increased benefit for the same cost, whereas the utility of "50% off" deal will be result of reduced cost taken for the same benefit.

Thaler (1988, 1999) argues that it would be better to assign a price discount to the product that would have negative valuation at its current offer price. This argument simply bases on the fact that the loss portion of the value function is steeper than the gain portion. For instance, shifting the value of the product B from *v[-$4]* to *v[$0]* (i.e., *v[B])* should result in a greater increase in utility than shifting the value of product A from *v[$0]* to *v[$4]* (i.e., *v[A])* (see Figure 2). Thus, value function predicts monetary promotions are more favorable than non-monetary promotions because it is steeper in the loss domain, even when the overall utility (i.e., perceived benefit/perceived cost) is identical in both offer.

### *Mental Accounting*

*Mental Accounting Theory* (Thaler 1980; 1985) provides an alternative explanation regarding the effectiveness of different promotion framings. The mental account is stated as "a set of cognitive operations used by individuals and households to organize, evaluate and keep track of financial activities" (Thaler 1999, p.183). There are three main components of a mental account. The first one is about how outcomes are framed and experienced. The second one is the assignment of activities to mental accounts. Consumers tend to label both resources and consumption, and group them into accounts such as *regular income* versus *windfall gains*, and *necessary consumption* (e.g., paying bills) versus *hedonic consumption* (e.g., a cruise vacation). Thus, there exist different types of mental accounts. The third component is the evaluation of mental accounts and closure by balancing. Thaler (1985) states that consumers have systematic

preferences for matching certain mental accounts; such as, they prefer to pay for luxurious consumption with windfall gains, but not with regular income. Kivetz (1998) argues that reasons can serve as important building blocks in the formation and grouping of mental accounts. Consequently, reason-based choices and mental accounting may work together, as when reasons help determine the matching of different reasons.

In addition to these main three components mentioned above, why and how a mental account is opened is also of interest. Campbell and Diamond (1990) posit that in the "buy one get one free" deal, consumers open two mental accounts: one is coded with the gain in focal product's value, and the other one is coded with the extra gain of the free product. It is not likely that the free product will be used to correct the value of the focal one. In contrast, Sinha and Smith (2000) argue that "buy two get 50% off" deal have consumers open one mental account, wherein they code one gain in the focal product's value with a small loss of payment for the tie-in product. Relying on their argument which is having the monetary representation of the deal is the reason to open one mental account; we predict that consumers open one mental account also for "50% off" deal.

On the other hand, there is a considerable amount of research showing that people feel additional psychological pleasure associated with the financial merits of the deal beyond the perceived economic gain or loss associated with the purchase transaction (i.e., receiving good deal) (e.g., Yadav and Monroe 1993; Noone and Mattila 2009). To capture this psychological aspect of purchasing into the model, two types of utility were postulated: *acquisition* and *transaction* utility (Thaler 1985). Acquisition utility depends on the value of the product compared to the money consumers spend to buy that product. Transaction utility depends solely on the financial merits of the deal and is derived by comparing a consumer's internal reference price to the actual price of the product. In the sales promotion domain, the transaction utility effect (Thaler 1985) can be defined as the effort to conceptualize the psychological pleasure

associated with the merits of a deal and identifying its impact on consumers' behavioral intentions. It is empirically shown that an unexpected promotional deal contributes significantly to a consumer's brand choice (e.g., Kalwani et al. 1990; Urbany et al. 1997) and this is captured in the transaction utility of the deal.

Literature suggests that segregated gains are perceived more favorably compared to aggregated ones (e.g., Thaler 1985). Therefore, we argue that mental accounting predicts "buy one get one free" deals to be more favorable than "50% off" deals.

Overall, prior studies and relevant literature provides conflicting views regarding the favorability of these deals as well as the unclear predictions about the direction of the dominance, if there exists so. We aim to resolve this conflict by specifying some certain situations whereby a different behavioral mechanism might be working.

## 3. Conceptual Framework and Hypotheses

### *Choosing the types of deals: "Buy one get one free" versus "50% off"*

In order to have accurate comparisons between different deals, the monetary values should be exactly equal to each other. There are different ways to have different promotion framing with equivalent monetary values. A price discount can be either stated as the percentage of decrease in price (e.g. %70 off) or the percentage of price to be paid (e.g. pay only %30 of the price). As to the bundle pricing, the price of the components in the bundle can be partitioned differently, having the total price equal in each offer (e.g. A is for $20, B is for $30 versus A is for $10, B is for $40 and in both offers A+B is priced at $50). Another framing could be defined by increasing the quantity in one offer and decreasing the price in the other one, noting that the monetary value of the increased quantity in the former offer should be equal to the decreased price amount in the latter offer in terms of the monetary value (e.g. "buy 4 and pay 3" versus "buy 4 and get %25 off for each").

There exists a bunch of monetary promotions whereby the reduced price is explicitly communicated as the deal. The representation of discount may be in dollar terms, as well as in percentage terms. We prefer defining the deal in percentage terms, in which the amount of the price discount is a relative indicator of the depth of the reduction bounded by 0% and 100%. Thus, percentage amount of price reduction can perfectly be used to compare the relative attractiveness of price promotions without providing any information regarding how much actual money is indeed saved. Grewal, Monroe and Krishnan (1998) show that a $20 savings on a $100 jacket would provide more pleasure than a $20 savings on a $400 television (see also Kahneman and Tversky 1984). Therefore, consumers likely depend on the actual price when they evaluate the discount in dollar terms. Since impact of price levels on the deal perceptions is not our primary concern in this research, we do not prefer the perceived benefit to be moderated by actual price level, thus we do control for it, rather than manipulating it. Hence, we choose price discounts in percentage levels as the framing of monetary price promotions.

Non-monetary promotions, such as bonus amounts of the same product or other products as premiums, can be composed in the form of units rather than price. In the bundling literature, Yadav (1994) suggests that consumers evaluate the components differently anchoring on a focal component usually with the higher price. Since the relative judgments of components in the bundle is beyond the scope of this research, we do not prefer different perceptions of and evaluations toward the components in the bundle, and thus we choose "buy one get one free" framing wherein the components are identical.

### *Product Benefit: Functional versus Emotional Benefits*

Consumers may perceive the benefits of a product in different ways, such as social, conditional, epistemic, functional and emotional benefits (Sheth, Newman and Gross 1991; Sweeney and Soutar 2001). We focus on the functional and emotional benefits received from the product on

deal. Functional benefit stems from the instrumental usefulness of the good or its capacity for delivering functional, utilitarian or physical performance, while emotional benefit is acquired from a good's association with specific affective states or feelings (McFadden 1986). Depending on the assumption underlying economic utility theories, McFadden (1986) argues that functional benefit is the primary driver of consumer preference. However, we argue that the benefits of the product can manipulate the evaluation of perceived value of a certain type of deal and result in different preferences across product categories for that particular deal.

Following Strahilevitz and Myers (1998), we describe a utilitarian (necessary) item as one that is mainly desired to fulfill a basic need or to accomplish a functional or practical task, and a hedonic (luxury) item as one primarily desired for pleasure, fantasy and fun. Prior research in social sciences (e.g., Kivetz and Simonson 2002; Kivetz and Zheng 2006; Prelec and Loewenstein 1998) suggests that justifying the purchases of a hedonic good is more difficult than of a utilitarian good because hedonic luxuries have inherent disadvantages compared with utilitarian necessities. Several recent researches (Okada 2005; Zheng and Kivetz 2009) suggest that consumers face a stronger need for justification and are inclined to rely on external justifications, such as promotions, to offer them an excuse for making the purchase decision when buying hedonic products than buying utilitarian ones.

### *Hypothesis Development*

Comparing the monetary and non-monetary deals is rather difficult in terms of setting the equivalent monetary values and having it realistic at the same time. We prefer examining the "buy one get one free" and "50% off" deals as they are the most common ones communicated in the packaged consumer goods domain. In addition, they are the same in terms of the unit cost. However, they are not equivalent in their total costs which may bias our results. To overcome this issue, we first consider the equivalent of "but one get one free" deal in terms of the total

units. Sinha and Simith (2000) propose "buy two get 50% off" deal is exactly the same with "buy one get one free" deal in terms of both total and units costs. They continue that "buy two get 50% off" inherently implies a precondition to purchase two units to receive the deal offered. Referring to our discussion in rational choice theory, we posit that this precondition reduces the consumers' perceived gain from the deal. In contrast, the "50% off" deal offers the consumer the maximum latitude, because unlike in the offers "buy one get one free" and "buy two get 50% off", consumer is not forced to receive two items to take advantage of the deal (see also Sinha and Simith 2000). Therefore, we conclude that rational choice theory and utility maximizing objectives of consumers will predict that "50% off" deal will be perceived more favorably than "buy two get 50% off" that is equivalent to "buy one get one free" deal. Thus, from the classical economics perspective "50% off" deal will be evaluated more favorably than "buy one get one free" deal.

However, behavioral decision theory provides different insights regarding the evaluation of these deals. First of all, we argue that the value function may suggest both conflicting and consistent predictions with that of rational choice theory. We speculate that the reason for such a difference in value function predictions is due to the operationalization of the perceived value (or transaction utility) of the deal.

We posit that there can be two extreme points, one being the maximum and one being the minimum perceived benefit (for "buy one get one free" deals) or perceived cost (for "50% off" deals) level. The overall benefit or cost associated with the deal corresponds to somewhere in between these extreme points which will consequently determine the favorability of the deal.

Considering "buy one get one free" deals, maximum benefit level can be found by adding extra amount of perceived benefit of one unit of item right up on the first unit's perceived benefit. In other words, perceived benefit coming from the second unit of extra product will be added on

the prior benefit *vertically* (see Figure 3b). This operationalization will yield to the maximum perceived benefit that could be received from "buy one get one free" deal. The minimum perceived on this kind of a deal is found by adding the benefit received from the extra product *horizontally* (see Figure 3a). The overall amount of perceived benefit from two units of product will be certainly greater than the perceived benefit of one unit only, whereas smaller than the maximum point due to the concavity of gains in the value function (Kahneman and Tversky 1991).

Similar operationalization will work for "50% off" deals with the only difference that these deals will be evaluated on the loss domain. The value of the deal is obtained by decreasing the cost, while holding the benefit constant. Therefore, the maximum reduction in the loss will be obtained by subtracting the amount of perceived cost corresponding to the first half of the price paid (see Figure 3b). Because of the convexity of losses in the value function (Kahneman and Tversky 1991), the upper part in perceived cost (corresponding to the first half of the price paid) will be greater than the lower part (corresponding to the second half of the price paid). The minimum decrease is found simply by reducing the price paid into the half of it and finding the corresponding perceived cost (see Figure 3a).

Finding the extreme points for both deals, we posit that the perceived value (perceived benefit or cost depending on the deal type) will occur at some point between these two extremes (see Figure 3c). We predict that adding the value offered by the deal (i.e., transaction utility) to the value of the product itself (i.e., acquisition utility) may depend on several factors such as characteristics of consumers, product type, deal or environmental conditions and so on.

In this research, we are concerned with the product specific factors, and particularly with the hedonic nature of products. As we previously discussed, hedonic products provide more emotional benefits, whereas utilitarian products provide more functional benefits. Arguing that,

the second mental account (i.e., transaction utility), opened in "buy one get one free" deal, will be perceived more as an unexpected gain, rather than a regular gain, we hypothesize that this second account will be more favorable for the hedonic products than for utilitarian products. The unexpected (windfall) gains are more likely to be spent on the hedonic products. However, we expect that "50% off" deal will be more attractive for the utilitarian products, since utilitarian products are evaluated more in the form of economic efficiency of the purchase, in other words with monetary aspects. Therefore, we postulate the following hypotheses:

***[H1]:*** Perceived benefit of "buy one get one free" deal will be higher for hedonic products than for utilitarian products.

***[H2]:*** Perceived cost of "50% off" deal will be less for utilitarian products than for hedonic products, thus perceived saving will be higher for utilitarian products than for hedonic products.

***[H3a]:*** Perceived value of the deal "buy one get one free" will be higher for hedonic products than for utilitarian products.

***[H3b]:*** Perceived value of the deal "50% off" will be higher for utilitarian products than for hedonic products.

Mental accounting supports our predictions. The perceived benefit obtained from the second product in the "buy one get one free" deal is the transaction value of the deal. Sinha and Simith (2000) argue that two mental accounts are opened for these kind of deal, first of which is for the first product, (for the acquisition utility) and the second one is for the extra product, thus for the transaction utility. This will correspond to our maximum extreme point on the gain domain of value function. In "50% off" deal, on the other hand, only one mental account is expected to be opened whereby the acquisition and transaction utilities are aggregated. This will correspond to our minimum extreme point on the loss domain of value function. While

prior findings are consistent with our predictions, our predictions are more flexible that do not impose mental accounts to entirely segregate from or aggregate with each other, but allow for a partial combination due to some other factors, such as product category or consumer traits.

We aim to investigate our hypotheses from the mental accounting standpoint to find convergent evidence supporting our main propositions. To that end, we need to show that the transaction utility of deal "buy one get one free" on hedonic products will be added completely on the acquisition utility. In this case, perceived value of the deal will increase due to the increase in perceived benefit. Likewise, the transaction utility of deal "50% off" on utilitarian products will be added completely on the acquisition utility. However, in this case perceived value of the deal will increase because of the decrease in perceived cost. In other two deal settings, "buy one get one free" deal or utilitarian products and "50% off" deal for hedonic products, transaction utility of the deal will be operationalized as an *additional benefit* and thus only a portion of it will be added on the acquisition utility, due to the diminishing marginal returns of gains and increasing marginal costs for losses (Kahneman and Tversky 1991). To test our propositions derived from mental accounting, we posit the following hypotheses:

***[H4]:*** Transaction utility of "buy one get one free" deal will be higher than the transaction utility of "50% off" deal.

***[H5a]:*** For hedonic products, perceived value of the deal "buy one get one free" will be equal to the sum of acquisition and transaction utilities of the deal.

***[H5b]:*** For utilitarian products, perceived value of the deal "50% off" will be equal to the sum of acquisition and transaction utilities of the deal.

***[H6a]:*** For hedonic products, perceived value of the deal "50% off" will be significantly lower than the sum of acquisition and transaction utilities of the deal.

***[H6b]:*** For utilitarian products, perceived value of the deal "buy one get one free" will be significantly lower than the sum of acquisition and transaction utilities of the deal.

We conclude that consistency between deal and product benefit will result in more favorable evaluations towards the deal. Hence, our main interest and dependent variable is the "perceived value of the deal". In order to test our predictions, we first refer to *value function* literature and measure "perceived benefit" and "perceived cost of a product", and next, using those measures we derive the value of the deal. Second, we refer to the *mental accounting* literature and measure the "acquisition" and "transaction utilities of the purchase", and next, using those measures we derive the value of the deal. We theorize that the predictions of two perspectives will be the same, suggesting the consistency between deal and product benefits for a better deal evaluation.

## 4. Methodology

*Overview*

We undertake an experiment involving undergraduate students. Two treatment factors (deal type and product category) are manipulated across participants. The cover story provided to the participants is that the professor is interested in their perceptions of different deals that might encounter while shopping for groceries. Based on the previous studies and a pretest, 12 product categories are rated on a scale to measure the hedonic or utilitarian nature of the product category. These products were chips, toothpaste, soap, pudding, coffee, shampoo, soft drinks, pizza, snacks, bath tissue, detergent and sliced cheese. Participants respond to a set of items to measure the hedonic or utilitarian nature and the interest in these products as a manipulation check. Next, to examine the relative attractiveness of two deals, participants are provided with the empirical scenario that "while reading your local paper, you saw the following ads for the product identified below at supermarkets A and B. A friend of yours wants you to join him/her

at supermarket A." This is followed by information on either a hedonic or a utilitarian product and its regular price. Subsequently, one of the deals is advertised in that product category at supermarket A as the focal deal. Both of the products are paired with the other type of deal in the same product category at supermarket B. The procedure results in 2 (deal type pairs) X 2 (product type: hedonic versus utilitarian products) mixed design. Deal type is manipulated within subject; however product type is primed between subjects.

*Measures*

Participants are asked to answer a set of questions. All items are 7-point scales ranging from strongly agree to strongly disagree. All scale items are coded/recoded so that higher scores reflect higher levels of the construct. First, they are asked to perform the evaluations regarding the product. Specifically, they answer the perceived benefit and perceived saving measures. We could not find exact scale for perceived benefit, thus we adjust the related scale of perceived value of the deal (Inman et al. 1997; Lichtenstein and Bearden 1989; Urbany et al. 1988). We measure the perceived monetary savings with three items derived from Chandon, Wansink, and Laurent (2000). Next, we ask them to answer two sets of questions wherein we assess the acquisition and transaction utilities of the deal (Al-Sabbahy, Ekinci and Riley 2004). Finally they evaluate the overall value of the deal with seven items derived from the study of Chandon, Wansink, and Laurent (2000) and d'Astous and Jacob (2002). The ratings for the hedonic nature of product act as a check on the product type manipulation (see Appendix A for all measures).

## 5. Conclusions and Discussion

Previous research has demonstrated that retail price promotions change consumers' purchase decisions and that retailers use price promotions more frequently to increase store sales (e.g., Inman and McAlister 1993). Keeping constant the benefits received by consumers, retailers

may implement a price promotion in several ways (Della Bitta et al. 1981) communicating a price promotion in different ways is similar to framing of purchase decisions (Monroe 1990). For instance, retailers can frame a price discount in dollar terms, in percentage terms or in a form of combination of dollars and percentages (Della Bitta, Monroe and McGinnis 1981). Alternatively, they can offer sales promotions in a way that it increases the benefit received such as in bonus amounts of the same product or other products as premiums (Sawyer and Dickson 1984). Previous studies have shown that consumers' perceptions, thus judgments and purchase intentions, indeed change due to the way that promotion information is framed (e.g., Diamond and Johnson 1990; Kahneman and Tversky 1979).

The fundamental thesis guiding this research is the framing of a promotion will change consumer attributions of the promotion, generating different consumer evaluations, thus, ending up with different purchase decisions for the same offer. Moreover, we explore the moderating role of product type (hedonic vs. utilitarian) on the attractiveness of the deals framed differently.

Broadly defining, we anticipate that the consistency between the benefit of the product and deal will increase the favorable evaluations towards the deal. Building on the previous finding that "buy one get one free" deals have consumers open two mental accounts where the second one is only for the extra product (Campbell and Diamond 1990), we posit that this approach will correspond to our maximum extreme point in the gain domain which is found by the vertical addition of benefit from extra product. Sinha and Smith (2000) also suggest that consumers facing with "50% off" deals open one mental account wherein they aggregate the cost and price reduction over the price. This operationalization would give the minimum extreme point in the loss domain that we cut off the perceived cost from the point where the half of the price paid corresponds to.

Combining all the previous findings, arguments and predictions about the value function and mental accounting, it is concluded that the “buy one get one free” deal always in the maximum extreme in the gain domain and “50% off” deal is always in the minimum extreme in the loss domain of the value function. However, we argue that this may not always be the case. We suggest the role of product benefit as the moderator to this relationship. More specifically, depending on the type of the product, transaction value of the deal will be added either partially or totally up on the acquisition value. The rationale for this claim is that the consistency between the benefits will be perceived more favorably.

# APPENDIX A

All items are 7-point scales ranging from strongly agree to strongly disagree.

**Acquisition Value** *(Al-Sabbahy, Ekinci and Riley 2004)*

1. I bought a good quality product for a reasonable price.
2. I valued this purchase as it met my needs at a reasonable price.
3. I got good value for the Money I spent.
4. This purchase fulfilled both my high quality and low price requirements.
5. Compared to what I was willing to pay, the price I actually paid was good value.

**Transaction Value** *(Al-Sabbahy, Ekinci and Riley 2004)*

1. Reflecting on the price I paid, I felt that I got a good deal.
2. It added to my pleasure knowing that I got a good deal on the price.
3. Beyond saving money, there was a good feeling attached to making a good deal—as was the case here.

**Overall Value / Perceived Value of the Deal** *(Chandon, Wansink and Laurent 2000; D'Astous and Jacob 2002)*

1. I like this type of promotion.
2. I wish there were more promotions like this.
3. This promotion offer incites me to buy the product.
4. This promotion offer is of great value.
5. This promotion offer is original.
6. This promotion offer pleases me.
7. This promotion offer interests me.

**Perceived Benefit** *(Inman et al. 1997; Lichtenstein & Bearden 1989; Urbany et al. 1988)*

1. The product on this deal is unattractive/attractive.
2. I feel like I make a bad-buy/excellent-buy for this product.
3. Purchasing this product on this deal is extremely worthless/valuable.

**Perceived Saving** *(Chandon, Wansink, and Laurent 2000)*

1. I really save money.
2. I feel like I am getting a good deal.
3. I really spend less.

**Hedonic Nature of the Product** *(Wakefield and Inman 2003)*

Think of the situation in which each product is typically used.

1. Practical purpose/just for fun.
2. Purely functional/pure enjoyment.
3. For a routine need/for pleasure.

**FIGURE 1**

**CONCEPTUAL FRAMEWORK**

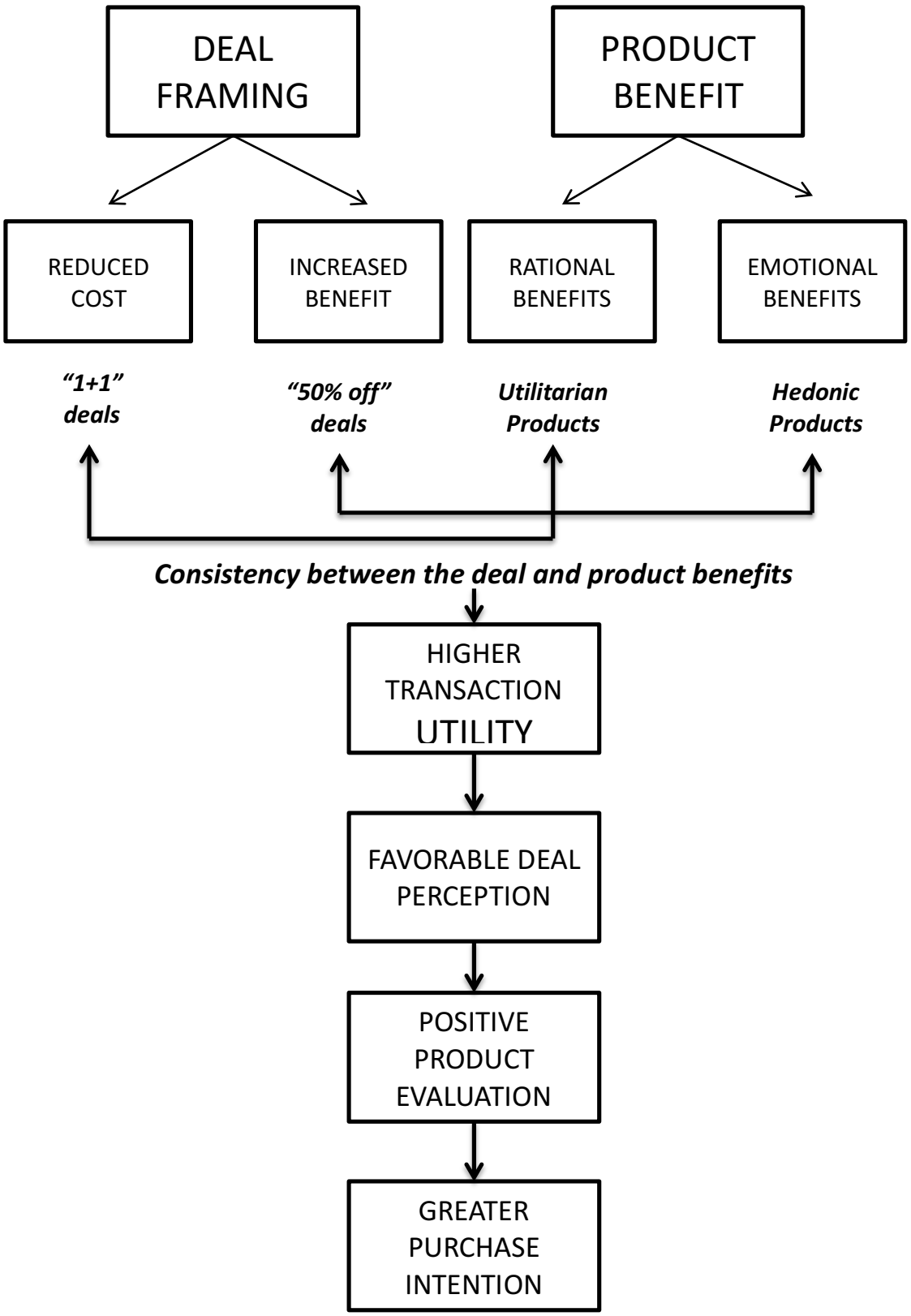


**FIGURE 2**

**VALUE FUNCTION: ILLUSTRATIVE EXAMPLE**

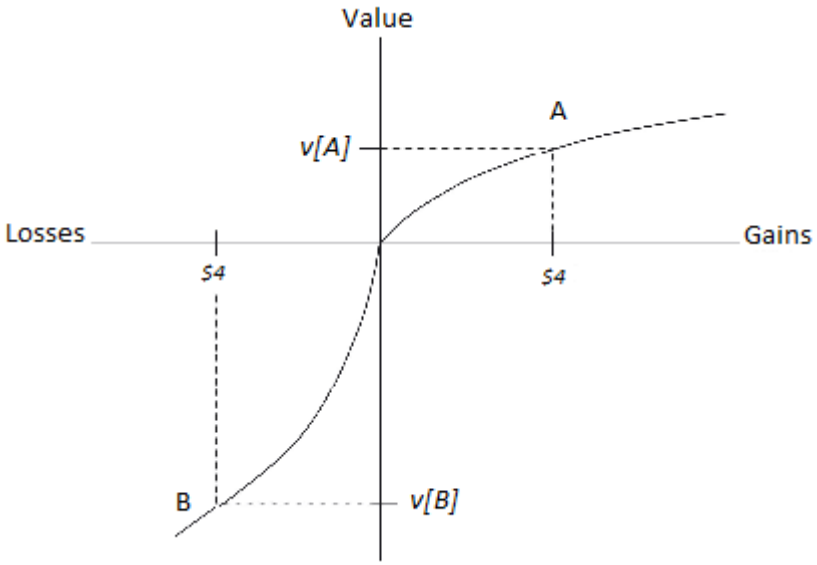


**FIGURE 3A**

**VALUE FUNCTION: MINIMIM EXTREMES**

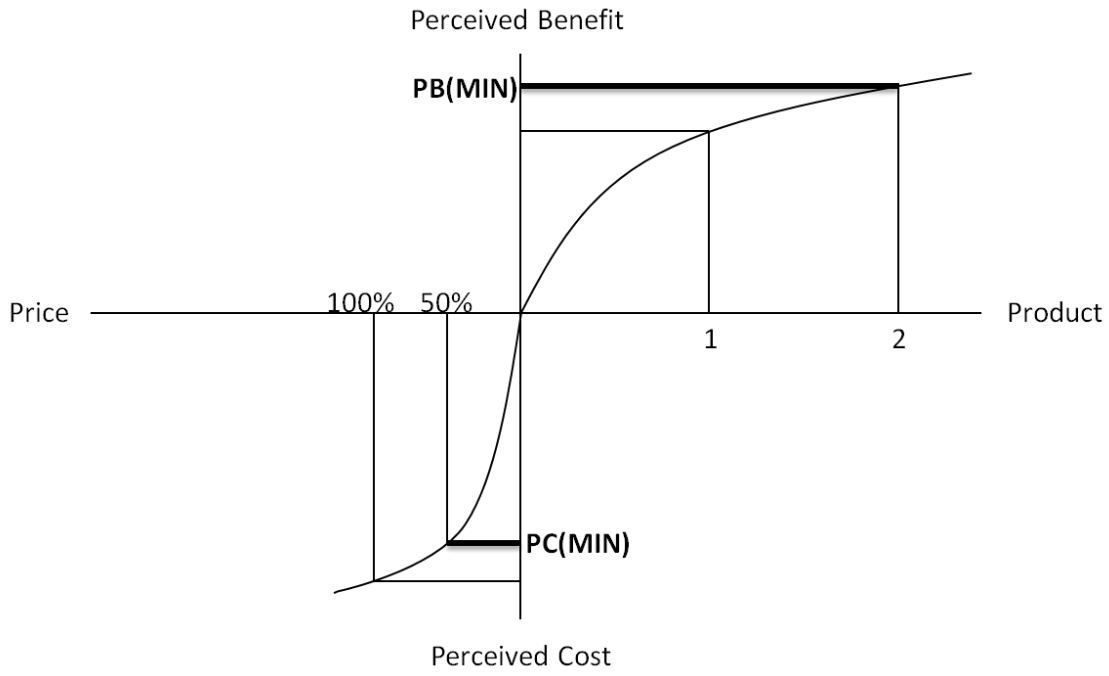


**FIGURE 3B**

**VALUE FUNCTION: MAXIMUM EXTREMES**

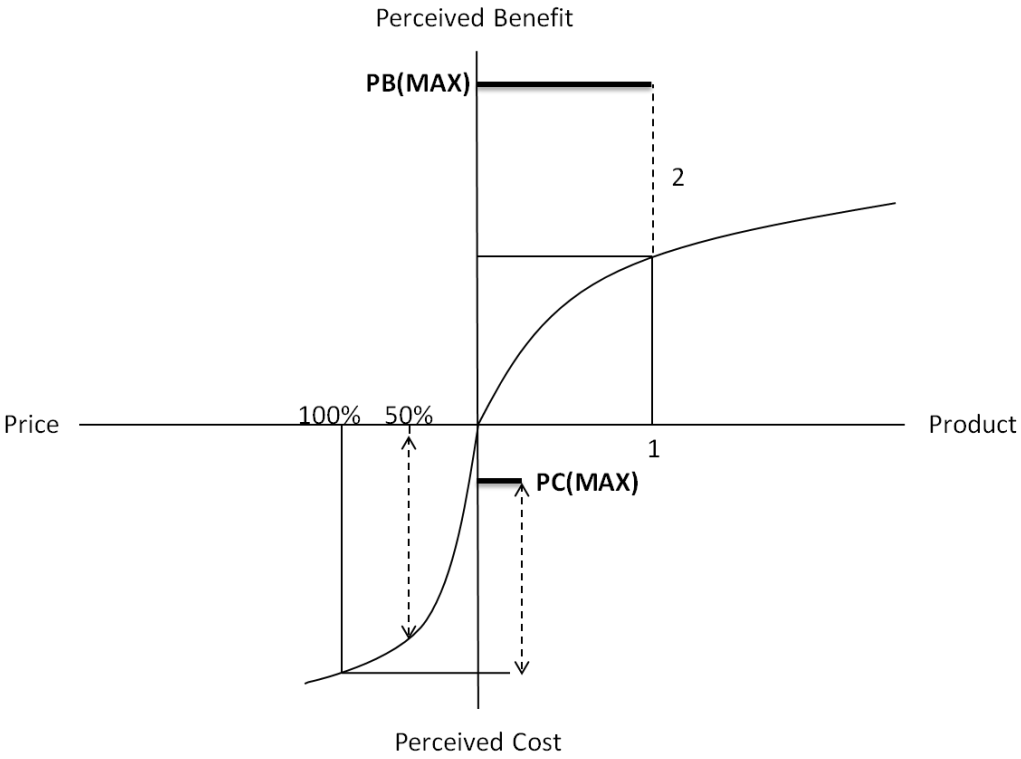
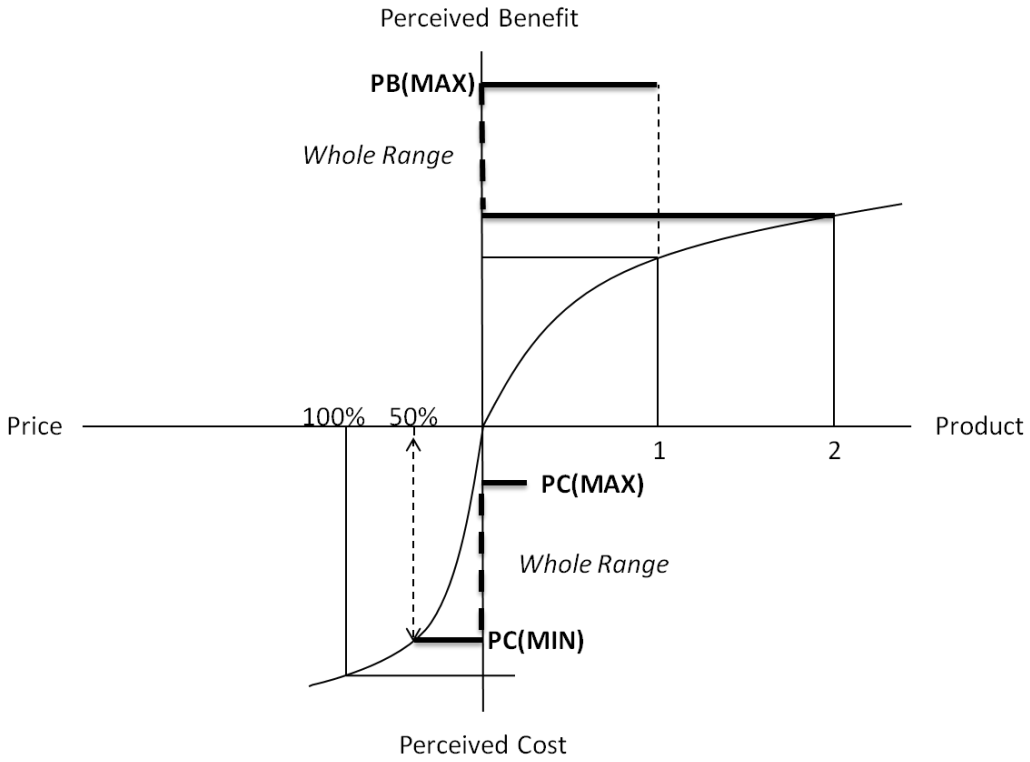


**FIGURE 3C**

**VALUE FUNCTION: WHOLE RANGE**



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