# THE INFLUENCE OF SUBJECTIVE MARKETING COST EVALUATION ON PRICE UNFAIRNESS AND PURCHASE INTENTION: THE MODERATING EFFECT OF RETAILING BRANDS 

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#### Abstract

This paper focuses on the subjective cost evaluation (SCE) of three different brands: national brands (NBs), standard private labels (standard PLs) and economy private labels (economy PLs). More specifically it tests whether and under which condition subjective cost evaluation (SCE) impacts perceived price unfairness (PPU) and consequently purchase intention. Based on extant literature a conceptual model is designed that predicts that subjective cost evaluation impacts on purchase intention and that price-quality association, price unfairness and price consciousness accounts for this effect. Assuming that the pattern of relationships varies according the three type of brand researched (NB, standard PL and economy PL), three hypotheses are formulated including some specific assumptions for each brand type. The hypotheses are tested by means of an experimental setting in which the three brand types are manipulated for two product categories varying in repurchase frequency. The results show that NBs and standard PLs display quite similar patterns of relationships even though for standard PLs the relationships intensity are lower than for national brands while economy PLs display a specific pattern of relationships. Results are discussed. Theoretical and managerial implications are displayed. The limits of the present research and avenues for future research are presented.


Keywords: subjective cost evaluation, perceived price unfairness, price-quality association, price consciousness, private label, national brand

The authors declare that they have no conflict of interest.

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## 1. Introduction

In a retail setting, for almost every product category, consumer has to choose between national brands (NB) and private labels (PL). Introduced in the 1990's, private labels gained over the last twenty-five years significant market shares. Nowadays they represent in Europe $38.7 \%$ of all value sales and $48.9 \%$ in unit sales (IRI Wolrlwide 2015) ${ }^{1}$ but only $17.5 \%$ of the total dollar share in the United States (Nielsen 2014) ${ }^{2}$. Private labels pose significant challenges for national brands around the world (Steenkamp, Van Heerde and Geyskens 2007). The competition between PL and NB and the conditions under which one or the other could be the winner in terms of market share, profit, brand image, etc. has been widely studied, most of the time from the PL perspective and for pricing issues (Gielens 2012). Some authors contented that PLs growth could be explained by their attractive quality-price association (Batra and Sinha 2000). Others went further and underlined that PL reached such a penetration rate partly because of three-tiered PL programs implementation (Geyskens, Gielens and Gijsbrechts 2010). Namely retailers have developed their PL range by adding to their standard PL an economy PL and a premium PL (Ailawadi and Keller 2004; Gielens 2012). Economy private label (also referred to as value or economy PLs) are no-frills bottom-of-the-market PLs that economize on more expensive ingredients to reduce costs, standard PL (also referred to as regular PLs) imitate mainstream-quality manufacturer brands and are positioned as mid-quality alternatives (Kumar and Steenkamp 2007). Premium PLs are at the top end of the market and deliver quality equal to that of premium-quality national brands (NBs) while typically still selling to a slightly lower price’ (Geyskens, Gielens and Gijsbrechts 2010, p. 792).

Since the seminal book of Kumar and Steenkamp (2007) in which they defined the three types of PL and investigated how retailers can efficiently manage PLs to gain market shares and

[^1]make more profits, multi-tiered PL portfolio strategies have attracted quite little attention from marketing researchers with, to our knowledge the exception of Geyskens, Gielens and Gijsbrechts (2010) and Gielens (2012). Geyskens, Gielens and Gijsbrechts (2010) studied how the introduction of an economy PL and a premium PL may affect consumer's choice of existing NB and PL. They showed that economy PL and premium PL cannibalize standard PL. Gielens (2012) seeked to assess the extent to which and when new products introduced by NBs change NB's market positing with regard to premium, standard and economy PL. Pricing prior studies have demonstrated that perceived price differences can lead to perceptions of unfairness (Greenberg 1987; Xia, Monroe and, Cox 2004) and that perceived unfairness is a considerable cause for customer actions such as defections (Keaveney, 1995), refunding and complaining actions, or revenge such as word of mouth, legal actions and so forth. Bolton, Warlop, and Alba (2003) have suggested that consumer knowledge of prices, profits, and costs contribute to their perceptions of price unfairness. However they contend that consumers display a poor knowledge of firm costs; at the best, they are able to evaluate them subjectively. Consumer's perception that a price is unfair results not from his/her understanding of why the higher price was set. The seller's cost (either retailer or national) plays an important role in buyers' assessing whether a price or a price increase is acceptable or fair (Bolton, Warlop, and Alba 2003). All seller's costs are not equally legitimate and therefore the process of causal attribution for price differences is a key question for the understanding of unfairness (Ratchford, 2014).

Research examining the effect of channel pricing strategy on price unfairness perceptions is scarce and justifies this research focus. As most of research focuses on price changes and not on the diversity of price and of brands within distribution channels, this paper focuses on the subjective cost evaluation (SCE) of three different brands: national brands, private labels and economy private labels. More specifically it tests whether and under which condition
subjective cost evaluation (SCE) impacts perceived price unfairness (PPU) and consequently purchase intention. The impact of subjective cost evaluation has seldom been investigated on perceived price unfairness and here lies the first originality of the paper. The second originality stems from the investigation of its impact on three different types of brands in the retailing industry: national brands, private labels and economic private labels. This research extends prior work on PPU and on multi-tiered PL strategies by considering consumer cost evaluation using three types of brands sold by retailers. It adds some knowledge to the understanding of consumers brand choice in a retail setting for existing brands (instead of a situation of price change or new product/brand introduction).

In section 2, we rely on extant literature to design a conceptual model that predicts that subjective cost evaluation (SCE) impacts on purchase intention and that price-quality association, price unfairness and price consciousness accounts for this effect. However, we assume that the pattern of relationships varies according the three type of brand researched (NB, standard PL and economy PL). In sum, three hypotheses are formulated including some specific assumptions for each brand type. Section 3 explains the experimental setting designed to test the hypotheses in which the three brand types (NB, standard PL and economy PL) are manipulated for two product categories varying in repurchase frequency. Section 4 displays the results. Section 5 discusses the results, underlines the limits of the present research and considers avenues for future research.

## 2. Background

In a retail setting, consumers evaluate products and brands on a variety of criteria among which quality and price. They base their quality evaluation either on extrinsic cues - brand name being the most influential (Monroe 2003) or on intrinsic cues (their own experience). They judge prices fairness by comparing them either to perceived quality or to reference
prices, i.e. to expected prices (Monroe, 1973). An expected price is one that is deemed 'fair' or 'just' for the seller to charge (Bolton and Lemon 1999; Bolton, Warlop, and Alba 2003; Campbell 1999). A large difference between the selling price and the reference price may attract the attention of consumers on the reasons that may justify such a price difference. If they attribute the price difference to quality then they will accept the price difference and be willing to pay a premium price for a higher level quality product (Bolton, Warlop, and Alba 2003; Lichtenstein, Bloch, and Black 1988). On the contrary, if they cannot attribute the difference to quality, they consider the selling price to be unfair and thus questions seller's profits intention and as a consequence, the seller's cost structure (Rachford 2014). PPU derives from consumer's 'mental accounting' of the inferred seller costs (Thaler 1985; Sinha and Batra 1999). Perceived price unfairness leads to lower purchase intention presumably because it generates higher price consciousness (Lichtenstein, Bloch and, Black 1988).

The effect of subjective cost evaluation on price unfairness and purchase intention as well as the mediation by price-quality association and perceived price consciousness (PPU) are detailed below. Specific assumptions are made for each type of brand (NB, standard PL and economy PL).

### 2.1 Perceived price unfairness mediates the effects of subjective cost evaluation on purchase

 intention
### 2.1.1 Subjective cost evaluation influences positively perceived price unfairness

Unjustified cost is a source of price unfairness (Campbell 1999). However not all costs are perceived the same way. Consumers appear to have a vague appreciation of the costs faced by firms. Many costs are ignored and some costs are perceived as unfair, leading to high and sticky profit estimates that contribute to perceptions of unfairness (Bolton, Warlop, and Alba, 2003; Guo 2015). As underlined recently by Ratchford (2014), price increases that are
alignable with tangible cost increases (e.g., production and logistics costs) are perceived as fairer than those based on costs that cannot be aligned to a particular product aspect (e.g., overhead) (Bolton and Alba 2006). Thus marketing costs might be perceived as being peculiarly unfair, especially for NB since people are aware that the gap between tangible costs and the final price is not due only to a difference in terms of quality but also of marketing expenses (Steenkamp, Van Heerde and Geyskens 2010).

Some costs (e.g. marketing costs) can stimulate feelings of unfaimess (Bolton, Warlop, and Alba 2003) because consumers seek to punish upstream entities such as national brands for their role in unfair pricing practices (e.g., Anderson and Simester 2008; Keaveney 1995). Additionally, consumers make causal attributions to internal or external sources (Mizerski, Golden, and Kernan 1979). Therefore, we hypothesize that unfair prices are attributed to costs when those costs are perceived to be high because of factors external to the product (e.g. marketing costs). On the contrary when consumers perceive that costs reflect product internal factors (e.g. manufacturing or logistics), they evaluate the price based on those costs as more fair (Vaidyanathan and Aggarwal 2003).

Previous research showed that seller's cost is a cause of buyer's price unfairness, thus playing a role on the decision making process (Guo 2015). This is consistent with Campbell's (1999) experimental result that MBA students' fairness perceptions are influenced by their inferred belief about firm profits. Thus since perceived intent to make profit is higher for NB and standard PL than for economy PL, more unfairness should be felt for NB and standard PL. For economy PL, no unfairness should be felt since they are no-frill brands that offer basic, acceptable quality at the best price (Geyskens, Gielens and Gijsbrechts2010)

### 2.1.2 Perceived price unfairness influences intention to buy brands

Perceived price unfairness results from the comparison of the product price to a reference price (Bolton, Warlop, and Alba 2003; Kahneman, Knetsch, and Thaler 1986 a,b) or from the
consumer's subjective evaluation that he/she has been charged more than the costs incurred by the seller (Sinha and Batra 1999) which results in a felt inequity (Choi and Matilla 2009; Campbell 1999). Consumer knowledge of prices, profits, and costs contribute to perceptions of price unfairness in the market place (Bolton, Warlop, and Alba 2003). Furthermore, as pointed out by Xia, Monroe and, Cox (2004) price unfairness may depend on price differences between product categories but also between different brands used especially in the retailing industry. Prior research provides evidence that consumers perceived price unfairness has a negative impact on their purchase intentions (Bolton, Warlop, and Alba 2003; Campbell 1999, 2007; Munnukka 2008). Perceived price unfairness is a strong predictor of buying behavior for private labels (Sinha and Batra 1999). As the price of economy or budget PLs is the lowest, consumers will perceive no seller's intention to make profit (Huppertz, Arenson, and Evans 1978) and then will not perceive price unfairness. Therefore we do not expect that PPU impacts on the purchasing intention. On the contrary, NB providing the highest price should generate the highest PPU which in turn should negatively affect purchase intention. Standard PLs that are positioned as mid-quality alternatives display intermediary prices between economic PLs and NBs. Therefore we assume that PPU affects negatively purchase intention to a lesser extent than for NB.

### 2.1.3 Subjective cost evaluation influences intention to buy the brand

Even though consumers appear to have a poor appreciation of the costs faced by brands, as SCE influences PPU and PPU influences purchase intention, it appears that PPU mediates the effects of subjective evaluation costs on purchase intention. The SCE being the lowest for economic PL, no price unfairness should be perceived for this type of retailing brand. Thus we do not expect PPU to mediate the effect of SCE on PI. The actual literature showing an existing link between SCE and PPU, PPU and purchase intention, for NB and PLs only, we assume that:

H1: Perceived price unfairness (PPU) mediates the effects of subjective cost evaluation (SCE) on purchase intention, (a) for national brands, (b) for standard private labels but (c) not for economy private labels.

### 2.2 Price-quality perception influences perceived price unfairness (PPU)

Steenkamp, Van Heerde, and Geyskens (2010) showed that consumers agree to pay a premium price for NBs over standard PLs as far the price difference corresponds to a quality difference i.e. NB quality is really higher than PL quality. Standard PLs quality improved over the last decades so that today the quality gap between NBs and PLs is lower than the price gap. Since for NBs the price-quality association is adverse, price is viewed negatively, reflecting resources yielded (Lichtenstein, Bloch and Black 1988). Thus consumers tend to attribute higher prices to seller's intention to make profit (rather than to higher quality or other costs) and to marketing strategies. As a result, they might judge NBs price as being unfair. Therefore price-quality association might affect price unfairness judgement. This pattern expected for NBs should not stand standard PLs that are positioned as offering a good pricequality association (Kumar and Steenkamp 2007). Thus for standard PLs price-quality association should not affect PPU. Also since economy PLs display the smallest prices for a basic quality, price-quality associations should not generate PPU.

H2: Lower price-quality association generates greater price unfairness for national brands. No relationship is expected for standard PL and economy PL.

### 2.3 Price consciousness mediates the effects of perceived price unfairness on purchase

## intention

### 2.3.1 Perceived price unfairness influences price consciousness

Price consciousness has received quite a lot of attention in past research. It has been defined in a variety of ways. Monroe and Petroshius (1981) characterize a shopper as price conscious to the degree he/she is unwilling to pay a higher price for a product, and if the price is greater than what is acceptable to pay, the buyer may refrain from buying. Moreover, the price conscious shopper will not be willing to pay for distinguishing features of a product if the price difference for these features is too large (Lichtenstein, Bloch and Black 1988). Those authors also contend that price consciousness refers to 'the degree the consumer [...] uses price in its negative role as a decision-making criterion" (Lichtenstein, Bloch, and Black 1988). Later they have defined PC as "the degree to which the consumer focuses exclusively on paying low prices" (Lichtenstein, Bloch, and Black 1993). PC was conceptualized either as an attitude-like enduring predisposition, or a situational evaluative tendency. Therefore it may vary in intensity across individuals. For these reasons PC does vary across product categories (Sinha and Batra 1999). In the present study, we extend this variability to three types of brands in the retailing industry. In other words, we assume that consumers' PC varies according to the type of brand they face (NB, standard PL or economy PL). Namely consumers are more price conscious for NBs that for standard PLs (Sinha and Batra 1999) and for standard PLs than for economy PLs.

Moreover, price conscious consumers tend to engage in higher levels of price comparisons than less price conscious consumers (Alford and Biswas 2002; Kukar-Kinney, Ridgway and Monroe 2011). Thus they are likely to pay more attention to the pricing differences between the three types of brand. PPU affects price consciousness (Sinha and Batra 1999). Therefore we expect to observe the same relation in retailing channels namely that PPU for each type of
brand will affect PC. Since NB prices are perceived as more unfair than standard PL or economy PL, because of a lower perceived price-quality association, and that as a consequence buyers tend to focus more on perceptions of monetary sacrifice (Monroe 2003; Xia, Monroe and, Cox 2004), we contend that for NBs, PPU will impact more strongly PC than for standard PL or economy PL.

### 2.3.2. Price consciousness influences purchase intention

Lichtenstein, Bloch and Black (1988) contended that consumers who perceived a price to be unfair were more price conscious and that as a consequence their purchase intention was lower. Therefore, we assume that perceived price unfairness influences purchase intention via price consciousness (Huppertz, Arenson, and Evans 1978). However as pointed by Guo (2015), there is a direct link between perceived price unfairness and willingness to pay. For this reason, we postulate that price mediates the effects of PPU on purchase intention. This effect holds for NBs and standard PLs (Sinha and Batra 1999) that are likely to generate PC but not for economy PLs that display a low price.

H3: Price consciousness mediates the effects of perceived price unfairness (PPU) on purchase intention (a) for national brands, (b) for standard private-labels but (c) not for economy private-labels

Figure 1: The proposed model


## 3 Quantitative study

### 3.1 Procedure and sample

A between subjects experimental design using three different brands types was used to test the model: national brand, standard private label and economy private label. Previous research showed that inter product category differences are a strong predictor of PL success (Dhar and Hoch, 1996) due to consumers specific perceptions of product categories in terms of risks of making the wrong choice, perceived quality, consumption pleasure, repurchase frequency, price consciousness and so forth (Batra and Sinha 2000). Keeping this in mind, in order to ensure internal validity, two types of product categories were tested: orange juice a frequently purchased category and an electric kettle, an unfrequently purchased category.

The study used an e-mail invitation to complete a questionnaire (10 minutes), sent to a convenience sample. The convenience sample was obtained using snowball sampling, starting with the researchers' professional and personal networks. The sample featured a great variety of ages and occupations. The 464 participants were native French speakers distributed as follows: 1) for the NB, 158 participants of 30 years of age on average (range $=19-73$ years); 2) for the PL, 167 participants of 33 years of age on average (range $=19-70$ years; and 3 ) for the economy PL, 139 participants of 34 years of age on average (range $=18-92$ years). There was no statistical significant difference between the groups according to their age's mean. Subjects were randomly assigned to one of the three conditions (brand) and were asked to answer to questions related to the two products. The order of product presentation (orange juice vs kettle) was randomly changed in order to neutralize the effect of order.

### 3.2. Questionnaire and Measures

The questionnaire starts with a brief description of the brands that the respondent is supposed to find in a retail store: national brand is 'a brand belonging to a manufacturing company and
being presented in almost all retailers' shelves'; standard private label is 'a brand belonging to the retailers and sold under the retailer's brand name'; Economy private label is 'a brand belonging to the retailer but presented without the retailer's name and the least expansive in the product category'.

Measurement instruments are based on close-ended questions to assess respondents' agreement with each item, using five points Likert scales. Scales measuring price unfairness, price-quality association and price consciousness are borrowed to Sinha and Batra (1999) and presented in Table 1. Buying intention was assessed using a single item: 'Next time you will buy (the product), what brand will you choose (national brand or standard private label or economy private label'.

Subjective cost evaluation was conceptualized as the difference between the ideal fair cost and the perceived actual cost of the product: a negative percentage represents an unfair cost evaluation meanwhile a positive differences provides a fair cost. Costs were divided between marketing, manufacturing and logistics. These broad costs categories were described in the questionnaire to respondents. They were asked to distribute $100 \%$ points into the three types of costs (excluding the margin), first of all for the ideal fair costs and then for the perceived actual costs of the product. Analysis of differences of each costs showed that: 1) the ideal and perceived actual logistics costs were very similar (mean $=-3.19 \%$ ); 2) the perceived difference between ideal and actual marketing costs was evaluated as unfair (mean $=$ $12.55 \%$ ) meanwhile the perceived difference between ideal and actual manufacturing costs was evaluated as fair on a corresponding positive percentage (mean $=+15.70 \%$ ). Therefore, as logistics costs were about neutral and all costs were between manufacturing and marketing costs, which were off equivalent size but opposite sign (trade-off), we decided to focus on marketing costs only.

Additional items measured socio-demographic characteristics (age, gender and occupation).

## 4. Results

### 4.1. Measurement assessment

Multi-items measures (price fairness, price-quality association and price consciousness) were submitted to a classical scale validation procedure (Gerbing and Anderson 1988): exploratory factor analyses were performed resulting in a one-dimensional structure with the average variance extracted (AVE) for each construct exceeding 0.5 as suggested by Fornell and Larker (1981). Reliability indexes (Cronbach's $\alpha$ ) were satisfactory (see table 1). Discriminant validity was established through two methods: 1) testing the confidence intervals around the correlation estimate between the pair of multi-item scales that did not include one (Gerbing and Anderson 1988) and 2) verifying that the estimated AVE of each construct exceed the squared correlation between-measure pairs (Fornell and Larcker 1981). As we are excepting differences between the three types of brands in the intensity of the relation between some constructs, discriminant validity was also checked within each brand.

The measurement model shows a satisfactory fit to the data $\left(\chi^{2} / \mathrm{df}=2.812 ; \operatorname{SRMR}=0.473\right.$; RMSEA $=0.068 ;$ IFI $=0.942 ;$ TLI $=0.942$ ). Standardized loadings for the multi-items scales are significant and ranged from 0.576 to 0.863 (Table 1). For all these reasons, we concluded that all scales measures showed good properties.

### 4.2. Test of Hypotheses

An initial check using a MANOVA was conducted with all variables included in the model as dependent variables and the type of brand, the type of product and the products presentation order as independent variables. This test showed: 1) no statistically significant interaction between factors ( $p>0.05$ ); 2) the type of brand displays a statistical significant effect on each the dependent variables ( $\mathrm{p}<0.05$ ) except on price consciousness where the statistical effect is close to the significant level $(\mathrm{p}=0.08) ; 3)$ the product category shows a statistical effect only
on price-consciousness ( $\mathrm{p}<0.05$ ) as found by Sinha and Batra (1999); 4) the product presentation order display no significant statistical effect on any dependent. Means and standard errors are shown in table 2 a and 2 b . This last result indicates that the products presentation order (consumable (juice) vs. durable goods (kettle) had no statistical significant effect on the set of variables included in the model ( $\mathrm{p}>0.05$ ) ensuring internal validity. Data fitted to the model using a Structural Equation Modeling approach with a maximum likelihood adjustment function. The adjustment indexes of the global model (for the three brands together) were satisfactory, according to Hu and Bentler's standards: $\chi^{2 / d f}=2.341$; RMSEA $=0.066 ;$ SRMR $=0.051 ; \mathrm{IFI}=0.942$ and $\mathrm{TLI}=0.926$. A multi-group approach was used to compare the relation intensity between the variables for the three brands.

The figure 2 shows three graphs with the results for the hypothesized model corresponding to each type of brand and the adjustment indexes of each model. The multi-group approach shows that all the (direct) relations are statistically significant between the different between the three types of brand ( $\mathrm{p}<0.01$ ) with the exception of the relation between price consciousness and price (un)fairness which is not statistically different for national brands and standard private label ( $\mathrm{p}>0.9$ ). Price fairness influences statistically buying intentions for NB ( $\beta=0.395, \mathrm{p}<0.001$ ) and for standard PL $(\beta=0.203, \mathrm{p}<0.001)$ this effect is significantly more important for NB than for standard PL. Price fairness negatively influences price consciousness for NB $(\beta=-0.235, p<0.001)$ and for standard PL $(\beta=-0.235, p<0.001)$ this effect is not statistically different between the two types of brand. No effect is displayed for economy PL. Price consciousness positively and statistically influences buying intentions for $\operatorname{PL}(\beta=0.476, \mathrm{p}<0.001)$ and for economy PL $(\beta=0.628, \mathrm{p}<0.001)$ this effect is statistically more important for economy PL. For NB, price consciousness negatively influences buying intention ( $\beta=-0.401, \mathrm{p}<0.001$ ). Subjective marketing cost evaluation influences significantly price unfairness for $\mathrm{NB}(\beta=0.255, \mathrm{p}<0.001)$ and for standard $\mathrm{PL}(\beta=0.200, \mathrm{p}$
< 0.001) this effect is significantly more important for NB than for standard PL. On the contrary, for economy PL no statistically significant effect is displayed. Price-quality association negatively impacts significantly price unfairness for NB ( $\beta=-0.221, \mathrm{p}<0.01$ ) and for standard PL ( $\beta=-0.155, \mathrm{p}<0.01$ ) this effect is significantly more important for NB than for standard PL. No significant effect is displayed for economy PL. H2 is validated. The mediated effects postulated in H 1 and H 3 were tested using the bias-corrected (BC) bootstrap procedure with 1000 samples, generating a $95 \%$ confidence interval (CI) of the point estimations. First, concerning the mediated effect of price (un)fairness on the relation between subjective cost evaluation and buying intention : for NB , the BC bootstrap CIs for the indirect effect of subjective cost evaluation on buying intention does not include zero, indicating that price (un)fairness mediates the relationship between this two variables $\left(\beta_{\text {indirect }}=-0.127, \mathrm{BC}\right.$ $\left.\mathrm{CI}_{95 \%}=-0.250--0.028, p<0.05\right)$. In contrast no mediating effect was found for standard PL $\left(\beta_{\text {indirect }}=-0.018 ; \mathrm{BC} \mathrm{C}_{95 \%}=-0.061-0.007 ; p>0.05\right)$ and for economy PL $\left(\beta_{\text {indirect }}=0.002\right.$; $\left.\mathrm{BC} \mathrm{CI}_{95 \%}=-0.027-0.044 ; p>0.05\right)$. H1 partially is validated. Second, the mediated effect of price consciousness on the relation between price unfairness and buying intention: for NB the BC bootstrap CIs for the indirect effect of price unfairness on buying intention did not include zero, indicating that price consciousness mediated the relationship between this two variables $\left(\beta_{\text {indirect }}=-0.159, \mathrm{BC} \mathrm{CI}_{95 \%}=-0.326--0.031, p<0.05\right)$ as well as for $\operatorname{PL}\left(\beta_{\text {indirect }}=0.126, \mathrm{BC}\right.$ $\mathrm{CI}_{95 \%}=0.046-0.226, p<0.01$ ). No mediation effect was observed for economy PL. H3 is validated.

## 5. Discussion

NBs and standard PLs display quite similar patterns of relationships even though for standard PLs the relationships intensity are lower than for national brands. Unsurprisingly, the less the price is perceived to reflect product quality the more the price is perceived as unfair. Also, the
greater price unfairness the lower buying intention, either directly or through price consciousness. It should be noted that the relationship between price consciousness and purchase intention is inverted between national brands and standard PLs. For national brands, the higher the price consciousness the lower the purchase intention while for standard PLs the higher the price consciousness the higher the buying intention. For both brands, the higher marketing costs are perceived, the more unfair the price is perceived. Economy PLs display a specific pattern of relationships. Surprisingly none of the relationships are statistically significant except for price consciousness on buying intention: the higher the price consciousness, the higher the buying intention, as for standard PLs. Notice that this relationship is the strongest among the three brands.

Further research including additional variables such as brand commitment, brand trust would be of interest to investigate the complex effect leading to purchase intention of the three brand types. The present research may be helpful for retailers as well as manufacturer firms. It shows that price conscious consumers are the target of economy PLs and for this reason need to be considered by retailers. Furthermore, our research shows that manufacturer firms selling under a NB need to be proactive in providing information on their price increase to consumers. They should attribute it to manufacturing or logistics costs only because marketing costs are perceived to be unfair.

Internal and external validity of our findings was specifically taken into account. To avoid misunderstanding, we used cost concepts that could be understood by all respondents. Therefore, this usage increases the internal validity of our research findings. Two products have been investigated orange juice and electric kettle. Those two products have different repurchase frequency as they belong to two different product categories. As our model fit to the two product categories it is possible to generalize our findings and therefore extend the external validity of our results. Nevertheless this research needs to be replicated to other
product categories. To investigate cost unfairness and increase the internal validity of our findings we used an experiment. However a field investigation would be of interest to increase the external validity of our results. This added research would be more simple and easier to conduct as we know that marketing cost need only to be investigated Of course, marketing cost unfairness has been investigated in France, a country where economy PL is widespread. In the USA, economy PLs are not so well widespread, therefore our study needs to be replicated in such a country.

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Figure 2: Results for the proposed model and for the three studied types of brand

$\chi^{2} / d f=2.274, R M S E A=0.090, S R M R=0.051, I F I=0.906$ and $T L I=0.911$

Private label PL


$$
\chi^{2} / d f=1.835, R M S E A=0.060, S R M R=0.059, I F I=0.958 \text { and } T L I=0.946
$$



$$
\chi^{2} / d f=1.846, R M S E A=0.078, S R M R=0.075, I F I=0.918 \text { and } T L I=0.907
$$

Table 1 Results of the CFA for the measurement model

| Construct | Item | Factor loading | AVE | CR |
| :---: | :---: | :---: | :---: | :---: |
| Category price consciousness | I tend to buy the lowest-priced brand of (category) that will fit my needs | 0673* | 061 | 080 |
| ( $\alpha=0854$ ) | When buying a brand of (category), I look for the cheapest brand available | 0808* |  |  |
|  | When it comes to buying (category), I rely heavily on price | 0819* |  |  |
|  | Price is the most important factor when I am choosing a brand of (category) | 0789* |  |  |
| Perceived price unfairness of brands | The prices of (type) brands of (category) are unacceptably high | 0802* | 090 | 088 |
| ( $\alpha=0876$ ) | The prices of (type) brands of (category) are "rip-offs" | 0863* |  |  |
|  | The prices of (type) brands of (category) are really unfair | 0852* |  |  |
| Category price-quality association ( $\alpha=0756$ ) | The price of a (type) brand of (category) is a good indicator of its quality | 0834* | 061 | 077 |
|  | I can usually judge the quality of a (type) brand of (category) from its price | 0644* |  |  |
|  | In my opinion, higher prices of (type) brands of (category) usually mean higher quality | 0576* |  |  |
|  | In my opinion, inexpensive (type) brands of (category) are usually of poor quality | 0600* |  |  |

Notes: Scales come from Sinha and Batra (1999)

* All loadings are significant ( $\mathrm{p}<0001$ )

AVE : average variance extracted, CR: construct reliability, $a=$ Cronbach index

Table 2a Mean and Standard Errors for variables

| Dependent <br> variables | Brand | StandardD <br> eviation |  |
| :--- | :--- | ---: | ---: |
| Subjective cost <br> evaluation | National Brand | $-14,56$ | , 994 |
|  | Standard Private Label | $-11,59$ | , 820 |
|  | Economy Private | $-10,75$ | , 999 |
| Label | 2,99 | , 066 |  |
| Perceived price | National Brand | , 054 |  |
| unfairness | Standard Private Label | 3,37 | , 070 |
|  | Economy Private | 3,76 | , 07 |
| Label | 2,68 | , 082 |  |
| Price consciousness | National Brand | , 067 |  |
|  | Standard Private Label | 2,83 | , 087 |
|  | Economy Private | 2,59 | , 060 |
|  | Label | 2,88 | , 050 |
| Price-quality | National Brand | 2,75 | , 064 |
| association | Standard Private Label | 2,45 |  |
|  | Economy Private |  |  |

Table 2b Mean and Standard Error for Price Consciousness for each product
Standard

| Brand | Product | Mean | deviation |
| :--- | :--- | ---: | ---: |
| National brand | Orange juice | 2,96 | , 96764 |
|  | Electric kettle | 2,41 | 1,10447 |
| Standard PL | Orange juice | 3,18 | , 96726 |
|  | Electric kettle | 2,53 | , 99834 |
| Economy PL | Orange juice | 2,88 | , 97006 |
|  | Electric kettle | 2,31 | , 91083 |


[^0]:    Fornerino M, Helme Guizon A et Jolibert A (2015) Toward an understanding of the effects of subjective marketing cost evaluation on price unfairness and purchase intention. 5ième Journée de Recherche AFM Prix, Gratuité, Don et Valeur, Tours.

[^1]:    ${ }^{1}$ http://www.iriworldwide.eu/portals/0/articlePdfs/PrivateLabel-PressRelease-Europe_Final_05Jan15.pdf
    ${ }^{2}$ http://www.nielsen.com/content/dam/nielsenglobal/kr/docs/global-
    report/2014/Nielsen\%20Global\%20Private\%20Label\%20Report\%20November\%202014.pdf

