



# FRAMING INFLUENCE ON FAIRNESS PERCEPTIONS OF DIFFERENTIAL PRICES

---

---

Iacob CĂTOIU\*  
Diana Maria VRÂNCEANU\*\*  
Cristian TATU\*\*

## Abstract

*The objective of the research presented in this paper is to examine the effect of two types of framing (attribute and goal) on distributive and procedural price fairness perceptions and on some other variables of consumer behavior. For this purpose, two 2x2 marketing experiments were conducted. The first study evaluated the influence of price framing and seller's motive on price fairness, price policy fairness, and value perceptions, as well as shopping intentions. The second study assessed the influence of price framing and seller's motive framing on the same variables as in the first study. An important finding of this paper was that price framing has a direct influence on price fairness perceptions and seller's motive has a direct influence on policy fairness perceptions. The implications of these results for the firms concern the communication of their pricing messages.*

**Keywords:** distributive fairness, procedural fairness, attribute framing, goal framing, dual entitlement

**JEL Classifications:** M31, C12, C92

## The Framing Theory

Levin, Schneider and Gaeth (1998) have developed a typology to distinguish between three different kinds of valence framing effects: risky choice framing, attribute-based framing and goal framing. In the literature, the prospect theory (Kahneman and Tversky, 1979) is the theoretical foundation for the effects of framing. Initially, the most frequently studied type of framing was *risky choice framing*. In this form of framing preferences are measured for a set of options with different risk levels.

---

\* Academy of Economic Studies, Bucharest, e-mail: [iacob\\_catoi@yahoo.com](mailto:iacob_catoi@yahoo.com)

\*\* Academy of Economic Studies, Bucharest.

In *attribute framing*, some attributes or characteristics of an object or event serve as the focus of the framing manipulation, a single item being evaluated by comparing the attractiveness ratings of the attribute description of that item. Attribute framing represents perhaps the simplest case of framing, because only a single attribute within any given context is the subject of the framing manipulation. Here, the dependent measure of interest is not the choice between independent options, but is, instead, a measure of the more basic process of evaluation. An attribute framing can take certain forms for example: 40% rate of success versus 60% rate of failure for medical treatment, 80% passed the exam versus 20% did not pass it.

In *goal framing*, the goal of an action or behavior is framed, with the impact of persuasion being measured by comparing the rate of adoption of the behavior. The positive frame focuses attention on the goal of obtaining the positive consequence (or gain), whereas the negative frame focuses attention on avoiding the negative consequence (or a loss). Rothman and Salovey (1997) have analyzed the behavior of getting a mammogram when the goal is early breast cancer detection. The messages were framed positively as “if you get a mammogram, you take advantage of the best method for detecting breast cancer early” or negatively as “if you don’t get a mammogram, you fail to take advantage of the best method for detecting breast cancer early”. They have concluded that the negative frame (loss) is more effective than positive frame (gain) because people prefer to avoid a loss than to obtain a gain of the same magnitude.

### **Price Fairness**

Xia, Monroe, and Cox (2004) define price fairness as a “consumer’s assessment and associated emotions regarding of whether the difference (or lack of a difference) between a seller’s price and the price of a comparative other party in a transaction is reasonable, acceptable or justifiable”. So price fairness perception is a comparative process. It has an *individual component* because people might evaluate a price, by comparing it with: a price paid by them in another buying occasion, a price set by another store, or with the costs estimated by them for the product. It also has a *social component*, in that the price might be compared with a price paid by another person (Bolton, Warlop and Alba, 2003; Darke and Dahl, 2003; Xia, Monroe, and Cox, 2004).

In the fairness literature there are defined some major concepts: distributive fairness, procedural fairness and dual entitlement. *Distributive fairness* refers to the modality of outcomes distribution in a transaction, the measure in which there exists a fair report between the investment made in a transaction and the reward received (Cox, 2001). The outcome comparison (the price paid) might use an *expectation base reference point* (expected price based on past experience) or a *social-based reference point* (price paid by another person or a group of persons)(van den Bos *et al*, 1998).

*Procedural fairness* refers to process and the rules used to achieve the outcomes. According to *procedural justice* principles, fairness is determined by society norms and behaviors, being classified as either objective or subjective. Objective procedural justice pertains to the ability of the procedure to conform to normative standards of justice. Subjective procedural justice concerns the procedure’s effects on the fairness judgments of those involved in the procedure (Cox, 2001). Procedural fairness can be

studied relative to the accuracy and consistency with which a procedure is applied or relative to the respect shown to an individual that is subject of the procedure (Vermunt *et al*, 2001). This last aspect is also considered as interactional fairness which concerns the treatment of individuals in a transaction (respect, courtesy, apology). Other authors consider this to be a third dimension of fairness, manifested especially in services sector (Collie, Bradley and Sparks, 2002; Goodwinand and Ross, 1992).

Maxwell (2002) distinguishes between *economic fairness*, concerning the magnitude of price, its economic acceptability in relation with the customer's interest and *social fairness*, a price being fair if it is set according to the rules applied to it as an outcome, as well as to pricing as a process.

The *principle of dual entitlement* suggests that firms are entitled to a reference profit and customers are entitled to a reference price (Kahneman, Knetsch, and Thaler, 1986). Consequently, a cost increase can generate a price increase, in order to maintain profit, but a cost decrease might lead to a profit increase, by maintaining price (Dickson and Kalapurakal, 1994). In conformity with this principle, price increases must not be made arbitrarily or to enhance profits, but they must be based on costs increase. A price increase is considered unfair when it enhances profits and fair when it maintains profits. There exists an asymmetry in how consumers perceive costs increases and decreases. Customers are less sensitive to cost decreases than they are to cost increases, because the first does not change their reference price. Dickson and Kalapurakal (1994) demonstrated that cost-based rules are perceived fairer than dual entitlement rules. They concluded also there are some differences in price fairness perceptions from the buyers' and sellers' perspectives.

Xia, Monroe, and Cox (2004) distinguished between the concepts of price fairness and price unfairness perceptions, the last being considered clearer, sharper and more concrete than the first.

### **Differential Pricing and Price Discrimination**

Dynamic prices have been defined as a strategy in which prices vary over time, consumer category, product/service type or circumstances (Haws and Bearden, 2006; Kannan and Kopalle, 2001) They are formed by adjusting prices in response to supply and demand conditions at the individual transaction level, being considered a variation of the traditional practice of price discrimination (Gabarino and Lee 2003; Weis and Mehrotra 2001). The factors considered important in the development of dynamic prices are: the increased availability of demand data, new technologies that facilitate changing prices, and availability of tools for analyzing data that support decision making (Elmaghraby and Keskinocak, 2003). Price discrimination is based on adapting the principle of segmentation on the price dimension by setting different prices for the same product according to the customers, amounts purchased, or shopping situations (Gonzales-Benito and Gonzales-Benito, 2004). It should be pointed out that there is a difference between price discrimination (usually considered illegal) and differential prices (justified by differences in price sensitivity of the different market segments) (Frank, 1983; Monroe, 2003).

In differential pricing research another concept has been introduced: *targeted promotions*, defined as practices of offering different pricing policies to prospective, as

opposed to current customers. Feinberg, Krishna and Zhang (2002) demonstrated that some of these practices can generate two kinds of negative effects: *betrayal effect* occurs when consumers prefer their favored firm less if it offers a promotion to switchers (persons that bought in the last period from another firm); and *jealousy effect* occurs when consumers prefer their favorite firm less if another firm offers a price decrease to its own loyal customers.

Lo, Lynch and Staelin (2007) consider that whenever targeted customers are favored, the non-targeted customers “get the short end of the stick.” That is, they either pay more to receive the same quality or receive less utility than the favored customers even though they pay the same price. Therefore, there are cases in which a promotion attracts the excluded customers if they perceive the benefits of the promotion as they are quality discerning, but it will repel the excluded customers if the target group has no expertise in judging quality.

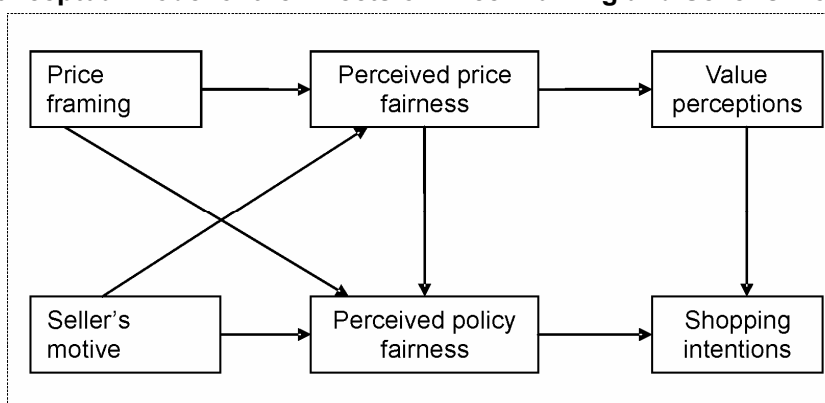
When evaluating the fairness of differential prices, consumers try to explain these differences, making internal attributions (considering themselves responsible for paying different prices) or external attributions (the firm is considered responsible). Grewal *et al.* (2004) suggest that a firm does not need to give explanations about costs when the attributions made by the customers are likely internal (e.g. purchase time). However, it would be better to offer cost information when it is external (purchase frequency).

## Part I. Influence of Price Framing and of Seller's Motive

The conceptual relationship between the studied variables is shown in Figure 1.

Figure 1

### Conceptual Model of the Effects of Price Framing and Seller's Motive



Levin and Gaeth (1988) have argued that, in attribute framing, the positive labeling of an attribute leads to an encoding of the information that tends to evoke favorable associations in memory, whereas the negative labeling of the same attribute is likely to cause an encoding that evokes unfavorable associations.

A consistent number of studies show that the positive framing of attributes generates more favorable evaluations than negative framing (see review by Levin Schneider, and Gaeth1998). In a 2x2 experiment, they manipulated the general context of the scenario (positive, save money for a vacation or negative, save money to pay the accumulated parking fines) and the key attribute (notice that piggybank is half full/half empty). The results showed that the evaluation was more favorable in the positive framing condition, irrespective whether the general context of the scenario was positive or negative. In the same study, they showed also in goal framing, a negatively framed message emphasizing losses tends to have a greater impact on a given behavior than a comparable positively framed message emphasizing gains.

**H1a: A price difference framed such that a consumer segment pays less (more) than another segment will be perceived to be fairer (less fair) than if it is framed that they pay more (less).**

The seller's motive for the price change or price differential plays an important role in price fairness perceptions (Campbell, 1999). When sellers do not indicate any reason for price increases, customers will perceive the prices as being less fair in comparison with the situation when a motive is provided (Schein, 2002). Customers' inferences of the seller's motives for a price influence their perceptions of price fairness as well as their attitudes and buying intentions. It was shown that a price increase was perceived to be unfair when the seller has a negative motive regardless of whether or not the price change increases the firm's profit (Campbell, 1999). Cătoiu and Vrânceanu (2007) found out in a qualitative research that for the Romanian customers a price increase must be generated by costs, not by demand, because the firm has to cover its cost and to obtain profit, not to speculate the demand.

**H1b: If the seller's expressed motive for a price increase is cost-oriented, then the price will be perceived to be fair.**

Seller's motive refers to the procedure of price setting, so:

**H2: If the seller's motive for the price increase is known, it will influence perceptions of policy fairness (procedural fairness).**

It has been shown that people rely less on procedure information to form fairness perceptions when they are informed about the outcomes (van den Bos *et al.*, 1997). That is fairness perceptions are influenced more by the information that is available first relative to when the information becomes available later in the evaluation process (van den Bos, Vermunt and Wilkie, 1997). But distributive justice may be more determining of fairness judgments when people know about the outcome before learning about the procedure. Whether a procedure or an outcome is judged to be fairer depends more on what information comes first than on what information comes next.

**H3a: The effect of price framing is greater on perceived price fairness than the effect of seller's motive.**

Herrmann *et al.* (2007) demonstrated that perceived price offer fairness has a positive effect on perceived pricing procedure fairness. Also, procedural fairness positively affects how people react to their outcome (van den Bos *et al.*, 1997) and "a fair price is one that results from a fair pricing rule" (Dickson and Kalapurakal, 1994). Van den Bos *et al.* (1997) found that when people do not have information about the outcomes

of others they use procedural fairness to assess how to react to their outcome, but they rely less on procedure information when they are informed about the outcome of another person. Also, they consider that information about procedural fairness is easier to interpret comparing with information about distributive fairness.

**H3b: Consumers' awareness of the outcome influences their perceptions of the fairness of the pricing policy.**

Van den Bos, Vermunt, and Wilkie (1997) demonstrated that a positive outcome influences perceived fairness more strongly when the procedure is undesirable comparing with the situation when it is desirable and a desirable procedure influences more fairness when the outcome is unfavorable than when it is favorable so we can suppose:

**H4: A positive price framing and a demand-oriented motive is perceived fairer than a negative price framing and a cost oriented motive.**

When the motive for a price increase does not imply a cost increase the price will be considered unfair, comparing to a situation when it is initiated after a sudden costs increase, which would be considered fair (Schein, 2002; Bolton, Warlop, and Alba, 2003; Bolton and Alba, 2006). Also raising prices as a result of a demand increase to obtain profits is considered unfair (Freyand and Pommerehne, 1993; Kahneman, Knetsch, and Thaler 1986). Also, Cătoiu *et al.* (2010) found that differential prices are perceived fairer when are motivated by a social reason (company's intention to sustain an unprivileged customers category as undergraduates), than when are motivated by company's desire to maintain sales volume level.

## **Study 1- Differential prices in time**

### **Procedure design**

To test the previous hypotheses a 2 (price framing: pay more during the week-end / pay less during the week) x 2 (motive for differential prices: to increase sales during the week /to cover some of the fixed costs during the week) experiment was conducted. The respondents read a scenario about a fitness club that set differential prices based on the time when customers visited the fitness club, and the manager's reason for this pricing policy. The respondents evaluated four dependent variables (price fairness, policy fairness, value and shopping intentions) using seven-point agree / disagree Likert scales. At the end of the questionnaire, there were several statements for manipulation checks, using: True, False, I can't remember. For the analysis only the questionnaires that had a correct response for all the manipulation check statements were included. The sample was composed of 100 undergraduate students (average age 19.8 years, 30 percents males). For each scenario there were 25 responses.

To exemplify, we present the first scenario:

*A shopper who buys a fitness class during the week-end pays 12 RON, which is 2 RON more than one who buys it during the week (Monday to Thursday). A short time after the visit he read in a newspaper an interview with fitness club manager who expressed the desire, that by using this tactic, they would be able to increase sales during the week because demand is lower during those four days.*

**Analysis**

The causal relationship between variables was evaluated using path analysis with SPSS/AMOS. The observed variables were indicated in the Table 1 and the model goodness-of-fit data indicate a reasonable fit: Chi-square (7) = 12.459,  $p=0.086$ , IFI=0.969, NFI=0.931, CFI=0.966, RMSA= 0.089.

**Table 1**  
**Testing the relationships for differential prices based on time (Study 1)**

Path from → to	Study 1 temporal differences		
	Standardized estimate	t test	p
Seller's motive → Price fairness	0.022	0.223	$p>0.1$
Price framing → Price fairness	0.037	0.371	$p>0.1$
Seller's motive → Policy fairness	0.129	1.895	$p<0.1$
Price fairness → Value	0.613	7.520	$p<0.01$
Price fairness → Policy fairness	0.631	9.232	$p<0.01$
Price framing → Policy fairness	0.336	4.927	$p<0.01$
Value → Shopping intentions	0.479	5.366	$p<0.01$
Policy fairness → Shopping intentions	0.222	2.490	$p<0.05$
<b>Goodness-of-Fit Statistics</b>			
Chi-square (d.f.)	12.459 (7 d.f.) , $p=0.086$		
IFI	0.969		
NFI	0.931		
CFI	0.966		
RMSA	0.089		

According to hypothesis H1a: A price difference framed as such as that consumers who pay less (more), perceived the situation to be fairer (less fair) than if they pay more (less). Thus, when customers pay more, the mean for price fairness is  $M=5.22$ , and when they pay less, the mean is  $M=5.32$ ,  $t=0.371$ , ( $p>0.1$ ). The standardized estimate between price framing and price fairness is 0.037, thus expressing a weak relationship. The difference between these two means is not significant and, *hypothesis H1 is not accepted.*

Concerning the seller's motive, a cost oriented motive leads to a price fairness perception mean  $M=5.3$ , and a demand oriented motive leads to a mean  $M=5.24$ ,  $t=0.223$ , ( $p>0.1$ ). *Thus H1b is not accepted*, cost oriented seller's motive increases perceived price fairness in an insignificant amount. The standardized estimate is 0.022.

Policy fairness is perceived fairer for a cost oriented motive ( $M=4.51$ ) than for a demand oriented motive ( $M=4.02$ ). The negative price framing, pay less/cost oriented motive, price policy situation is perceived the fairest ( $M=5.52$ ). The relationship between seller's motive and policy fairness is significant,  $t=1.895$  ( $p<0.1$ ), the standardized estimate being 0.129. *Thus, hypothesis H2 is accepted, if the seller's motive is known, it influences perceived policy fairness* .

Perceived policy fairness is influenced by price framing, the estimate between these variables is 0.336. Thus, for negative framing (pay more), the mean for policy is  $M=3.61$ , and for positive framing (pay less), a mean  $M=4.9$ ,  $t=4.927$ ,  $p<0.01$ . Thus, for positive price framing, the price policy is perceived fairer than for negative price framing.

The effect of price framing on price fairness perception is greater than the effect of seller's motive, the estimates for price fairness relationship with price framing being 0.037 and with seller's motive is 0.022. Also, the effect of price framing on policy fairness ( $\beta=0.336$ ,  $t=4.927$ ,  $p<0.01$ ) is higher than the effect of seller's motive ( $\beta=0.129$ ,  $t=1.895$ ,  $p<0.1$ ). Thus we accept the hypothesis H3a. Also, the price policy for a positive framing (pay less)/a negative motive (demand oriented),  $M=4.28$  is perceived fairer than for a negative framing (pay more)/positive motive (cost oriented),  $M=3.46$ ,  $t=1.749$ ,  $d.f.=47$ ,  $p<0.1$ .

Price fairness perception influences policy perception, the standardized estimate regression weight is  $\beta=0.631$ ,  $t=9.232$ ,  $p<0.01$ , demonstrating a strong relationship, thus H3b is accepted, the consumers' awareness of outcome influences their fairness perceptions of pricing policy. Price fairness perceptions generate an important influence on policy fairness perceptions.

According to H4, the scenario of positive price framing and demand oriented reason is perceived fairer than a negative price framing and a cost-oriented reason. Thus, the mean for positive price framing (pay less)/demand-oriented motive is  $M=5.12$ , higher than and for negative price framing (pay more)/cost oriented motive  $M=5.08$ . But, because  $t=0.102$ ,  $d.f.=48$ ,  $p>0.1$  the hypothesis H4 is not accepted.

Price fairness has an important influence on value ( $\beta=0.613$ ,  $t=7.52$ ,  $p<0.01$ ). The influence of policy fairness on value is insignificant ( $\beta=0.059$ ,  $t=0.559$ ,  $p>0.1$ ). Shopping intentions are significantly influenced by value ( $\beta=0.479$ ,  $t=5.366$ ,  $p<0.01$ ) and policy fairness ( $\beta=0.222$ ,  $t=2.490$ ,  $p<0.01$ ). Also, a direct influence of price fairness on shopping intentions is not validated ( $\beta=0.073$ ,  $t=0.609$ ,  $p>0.1$ ), it is mediated by value.

## **Discussion**

The influence of price framing on price fairness perception is weak and this relationship was not validated by Study 1. An explanation for invalidation of H1a might be the fact that, for Romania, this type of differential pricing is very common. Price framing has a more powerful influence on policy fairness perceptions, thus, the way price is framed might influence the policy fairness perceptions.

Seller's motive does not have a direct influence on price fairness perceptions, but has an important effect on price policy perceptions. The implications are that it is useful for an unfavorable price policy to indicate the reason of using it. Also, the unfavorable effect of a negative motive might be reduced by a positive framing of price.

Price framing and seller's motive have an indirect effect on shopping intentions, as can be seen in Table 2, which displays the correlations between model variables.



Table 2

Correlations between model variables

	Frame	Motive	Price fairness	Policy fairness	Value	Shopping intentions
Frame	1.000					
Motive	0.000	1.000				
Price fairness	0.037	0.022	1.000			
Policy fairness	0.359	0.143	0.646	1.000		
Value	0.023	0.014	0.613	0.396	1.000	
Shopping intentions	0.091	0.038	0.437	0.412	0.567	1.000

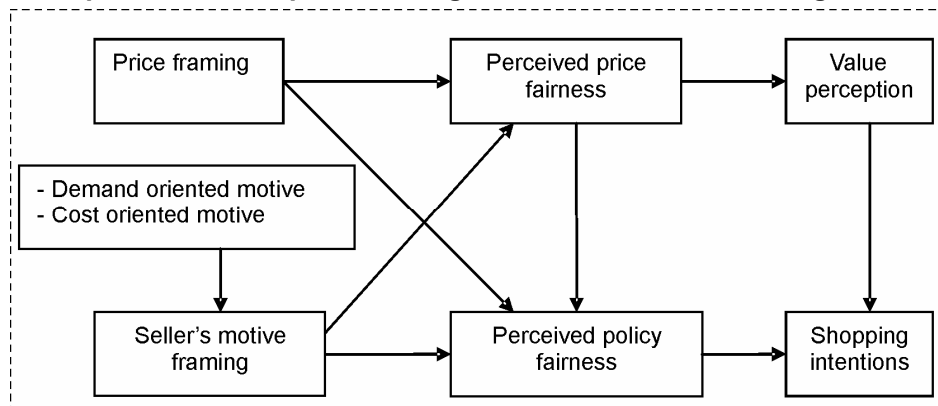
Price fairness perceptions generate an important influence on policy fairness perceptions. Value is influenced by price fairness perceptions, and shopping intentions by value and policy fairness perceptions.

## Part II. The influence of price framing and of seller's motive framing

In the second part of the study it is studied the framing effect of price, which is an attribute framing and the framing effect of seller's motive, which is a goal framing. The conceptual model of these relationships is displayed in Figure 2.

Figure 2

Conceptual model on price framing and seller's motive framing influence



**H1: A price difference framed as such that a consumers segment pay less (more) than another segment is perceived fairer (less fair) than they pay more (less)**

The effects of positive versus negative framing differ for attribute framing and for goal framing. Positive framing is superior to negative framing in an attribute framing context, and negative framing is superior to positive framing in a goal framing context.

(Krishnamurthy, Carter and Blair, 2001) In the literature, the effects of goal framing are less sustained comparing with those of attribute framing.

**H2: Positive price framing / negative motive framing is the fairest situation;**

The price framing information is presented first comparing with the seller's motive framing and has a stronger effect on fairness perception (Van den Bos, Vermund and Wilkie, 1997):

**H3: The main effect of seller's motive framing is weaker than the main effect of price framing.**

**H4: Framing of the seller's motive effect mediates the influence of motive type (demand oriented or cost oriented) on perceived policy fairness. The negative effect of a demand oriented motive can be diminished when it is expressed in a negative framing.**

## **Study 2 - Differential prices based on geographic area, demand-oriented motive**

In the second study, it was designed a 2x2 marketing experiment, in the scenarios it was presented the same fitness club that set differential prices on geographic areas. The manipulated variables were price framing (*a shopper from a central-situated club's location pays more/a shopper from a non-central area club's location pays less*) and motive (demand oriented) framing (*in the central area the customers have a higher income/in the non-central areas the customers have a lower income*). The same scales were used to measure price fairness, policy fairness, value and shopping intentions. The same sample was used as in the previous study, 100 undergraduate students from Academy of Economic Studies Bucharest, Romania, (average age 19.8 years old, 30 percent males). Also, at the end of the questionnaire there were several statements for manipulation check, using the same scale with three levels: *True, False, I can't realize*. In the sample were included only the subjects that gave a correct answer to the manipulation check questions.

One variant of the scenario is: A shopper who buys a fitness class from a central-situated club's location, pays for a class 12.5 RON, that is 2.5 RON more than a shopper who buys fitness classes from a non-central area, taking into consideration that the offer is the same. In an interview to a local newspaper, the club's manager explained this price difference by the fact that in the central area, customers have a higher income, consequently they can pay more than the customers from non-central areas.

### **Analysis**

For estimating the relationships between the variables included in the model, we used path analysis by AMOS/SPSS, the results being presented in the Table 3.

Price framing influences price fairness perceptions, thus paying less ( $M=4.74$ ) is perceived fairer than paying more ( $M=4.08$ ),  $t=-1.895$ ,  $d.f.=98$ ,  $p<0.1$ . Also, the standardized estimate for regression weights is 0.188, hypothesis H1 being accepted, a price difference framed such that a consumers segment pay less (more) than another segment is perceived fairer (less fair) than they pay more (less)

**Table 3**  
**Testing the relationships in differential prices on geographic area**  
**(Study 2)**

Path from → to	Standardized estimate	t test	p
Seller's motive framing → Price fairness	0.040	0.404	p>0.1
Price framing → Price fairness	0.188	1.906	p<0.1
Seller's motive framing → Policy fairness	0.021	0.276	p>0.1
Price fairness → Value	0.351	3.732	p<0.01
Price fairness → Policy fairness	0.587	7.554	p<0.01
Price framing → Policy fairness	0.188	2.426	p<0.05
Value → Shopping intentions	0.259	2.687	p<0.01
Policy fairness → Shopping intentions	0.311	3.235	p<0.01
<b>Goodness-of-Fit Statistics</b>			
Chi-square (d.f.)	11.926, d.f.=7, p=0.1		
IFI	0.951		
NFI	0.889		
CFI	0.947		
RMSA	0.084		

According to H2, positive price framing / negative motive framing is the fairest situation. The positive price framing (pay less)/negative motive framing (in the central area the customers have a higher income) has a mean M= 4.8, greater than the other three means. Applying ANOVA analysis, F (3,96)=1.417, p>0.1, the difference between means is not significant.

**Table 4**  
**Price fairness perceptions means for Study 2**

Scenario	Mean price fairness
Pay more/higher income	3.8800
Pay less/higher income	4.8000
Pay more/lower income	4.2800
Pay less/lower income	4.6800
<b>Total</b>	<b>4.4100</b>

Hypothesis H3 states that the main effect of seller's motive framing is weaker than main effect of price framing. The standardized estimate for relationship between price framing and price fairness is  $\beta=0.188$ ,  $t= 1.906$ , ( $p<0.1$ ) is higher than between seller's motive framing and price fairness  $\beta=0.04$ ,  $t=0.404$ , ( $p>0.1$ ). Also, the regression weights for relationship between price framing and policy fairness is  $\beta=0.188$ ,  $t=2.426$ , ( $p<0.05$ ) is higher than between seller's motive framing and policy fairness  $\beta=0.021$ ,  $t=0.276$ , ( $p>0.1$ ). Thus, the hypothesis H3 is accepted, the effect of seller's motive framing on price fairness and policy fairness is weaker than the effect of price framing.

Positive price framing (pay less)/negative motive framing (in the central area, the customers have a higher income) obtained, for policy fairness perception, a mean  $M=4.08$  that is higher than negative price framing (pay more)/positive motive framing (in the non-central areas customers have a lower income), with a mean  $M=3.28$ ,  $t=1.713$ ,  $d.f.=48$ ,  $p<0.1$ . Thus, the negative effect of a demand oriented motive might be diminished when it is expressed in a positive price framing.

Negative price framing (pay more)/negative motive framing (in the central area the customers have a higher income) obtained for policy fairness perception a mean  $M=3.04$  that is lower than negative price framing/positive motive framing, with a mean  $M=3.28$ ,  $t=-0.566$ ,  $d.f.=48$ ,  $p>0.1$ . Thus, the negative effect of a demand oriented motive might be diminished when it is expressed in a negative framing. Also, because  $p>0.1$  the hypothesis  $H4$  is not accepted. Framing a motive in a negative way generates a less fair policy perception. The mean for the negative motive (in the central area the customers have a higher income) is 3.56, being lower than for its framing expression (in the non-central areas the customers have a lower income) that is 3.7,  $t=-0.441$ ,  $d.f.=98$ ,  $p>0.1$ . Thus, seller's motive framing does not have a significant influence on price policy perception,  $\beta=0.021$ ,  $t=0.276$ , ( $p<0.1$ ).

Price fairness has a direct influence on policy fairness  $\beta=0.587$ ,  $t=7.554$ , ( $p<0.01$ ), on value  $\beta=0.351$ ,  $t=3.732$ , ( $p<0.01$ ) and an indirect influence on shopping intentions (mediated by value). On shopping intentions a direct influence have policy fairness  $\beta=0.311$ ,  $t=3.235$ , ( $p<0.01$ ) and value  $\beta=0.259$ ,  $t=2.687$ , ( $p<0.01$ ).

## **Discussion**

This study confirms the fact that price framing has a significant influence on price fairness perceptions; therefore, to increase the fairness of price, it is important to know how to frame it. Price framing effect is higher than motive effect, thus, even though a firm has a negative motive to increase price, the way of price framing might diminish its unfavorable effect. Also, a positive motive might lower the price fairness perceptions if the price is framed in a negative way.

Framing the seller's motive has not a significant effect on price fairness and policy fairness perceptions. Also, there might be explored in other studies the possibility to influence price fairness perceptions manipulating the way to frame the seller's motive. This study confirms the findings of Study 1, referring to the relationships between price fairness, policy fairness, value and shopping intentions.

## **Conclusions and limitations**

Price framing has a direct influence on price fairness perceptions, as demonstrated in Study 2 and on price policy perceptions as validated in Study 1. The implications of these results for the firms concern the communication of their pricing messages, because people are more sensitive to comparative prices than to one price level. Thus, framing a price in a positive manner generates fairer perceptions, than in a negative one.

Seller's motive has a direct influence on policy fairness, for cost oriented motive, the pricing policy is perceived fairer than for demand oriented motives, as resulted from Study 1. Thus, for a firm it is important to state its motive for a price change, a price

increase might be perceived fairer for a positive motive than for a negative one. The negative effect of seller's motive on price policy might be diminished by a positive price framing. Thus, from both studies resulted that price framing has a direct effect on policy fairness. Consequently, the price policy for the situation of positive framing (pay less) and negative motive is perceived fairer than the one of negative framing (pay more) and positive motive.

Seller's motive framing does not influence significantly either price fairness, or policy fairness, as resulted from Study 2. We can conclude that attribute framing (designated by price framing) has a stronger effect than goal framing (represented by seller's motive framing). Further researches can be done to analyze the influence of motive framing, taking into consideration that in our study, the way of framing the motive does not generate a very clear distinction between positive and negative situation.

In both studies, it was found that price fairness has a direct influence on value, and an indirect influence on shopping intentions (mediated by value). Policy fairness and value influence shopping intentions. This finding outlines the importance of price policy perceptions in consumer behavior. Taking into consideration that price framing and sellers' motive influence policy fairness, they have an indirect effect on shopping intentions. Thus, the firms have to know how to manage the information that influences policy perceptions. These findings may help firms to choose pricing tactics according to customers' perceptions and reactions.

## References

- Bolton, L., Alba, J., (2006), "Price Fairness: Good and Service Differences and the Role of Vendor Costs", *Journal of Consumer Research*, 33(2): 258-264.
- Bolton, L., Warlop, L., Alba, J. (2003), "Consumer Perceptions of Price (Un)Fairness," *Journal of Consumer Research*, 29 (4): 474–91.
- Campbell, M. (1999), "Perception of Price Unfairness: Antecedents and Consequences of Satisfaction," *Journal of Marketing Research*, 36 (2): 187–199.
- Cătoi, I., Vrânceanu, D. M., (2007), "Price fairness perceptions in Romania", *Marketing-Management, Studii - Cercetări - Consulting, AROMAR*, 4 (100): 243-247.
- Cătoi, I., Vrânceanu, D. M., Filip, A., (2010), "Setting fair prices – fundamental principle of sustainable marketing", *Amfiteatru Economic*, 12 (27): 115-128.
- Collie, T, Bradley, G., Sparks, B. A. (2002), "Fair process revisited: Differential effects of interactional and procedural justice in the presence of social comparison information", *Journal of Experimental Social Psychology* 38(6): 545–555.
- Cox, J. (2001), "Can Differential Prices Be Fair?", *Journal of Product and Brand Management*, 50 (5): 264–75.
- Darke, P., Dahl, D. (2003), "Fairness and discounts: the subjective value of a bargain", *Journal of Consumer Psychology*, 13(3): 328-330.

- Dickson, P., Kalapurakal, R., (1994), "The use and perceived fairness of price-setting rules in the bulk electricity market", *Journal of Economic Psychology*, 15(3): 430-440.
- Elmaghraby, W., Keskinocak, P., (2003), "Dynamic Pricing in the Presence of Inventory Considerations: Research Overview, Current Practices and Future Directions", *Management Science*, 49(10):1287-1309.
- Feinberg, F., Krishna, A., Zhang, J. (2002), "Do We Care What Others Get? A Behaviorist Approach to Targeted Promotions," *Journal of Marketing Research*, 39 (3): 277–91.
- Frank, R., (1983), "When Are Price Differentials Discriminatory?", *Journal of Policy Analysis and Management*, 2(2): 238 – 255.
- Frey, B., Pommerehne, W. (1993), "On the fairness of pricing – An empirical survey among general population", *Journal of Economic Behavior and Organization*, 20(3): 295 – 306.
- Garbarino, E., Lee, O. (2003), "Dynamic pricing in internet retail: effects on consumer trust", *Psychology and Marketing*, 20(6): 495-513.
- Gonzales-Benito, O., Gonzales-Benito, J.,(2004),"Geographic price discrimination as a retail strategy. Role of the geodemographic market profile", *International Journal of Market Research*, 46(4): 443-461.
- Goodwin, C., Ross, I., (1992), "Consumer responses to service failure: influence of procedural and interactional fairness perceptions", *Journal of Business Research*, 25(2): 149-163.
- Grewal, D., Hardesty, D. M., Iyer, G. R., (2004),"The effects of buyer identification and purchase timing on consumers' perceptions of trust, price fairness and repurchase intentions", *Journal of Interactive Marketing*; 18(4): 87-99.
- Haws, K. L., Bearden, W. O., (2006), "Dynamic Pricing and Consumer Fairness Perceptions", *Journal of Consumer Research*, 33(3): 304-311.
- Herrmann, A., Xia, L., Monroe, K., Huber, F. (2007), "The influence of price fairness on customer satisfaction: an empirical test in the context of automobile purchases", *Journal of Product and Brand Management*, 16(1): 49-57.
- Kahneman, D., & Tversky, A. (1979). "Prospect theory: An analysis of choice under risk", *Econometrica*, 47(2): 263–291.
- Kahneman, D., Knetsch, J. and Thaler, R. (1986b), "Fairness and the assumptions of economics", *Journal of Business*, 59(4): S285-S300.
- Kahneman, D., Knetsch, K. and Thaler, R. (1986a), "Fairness as a constraint on profit seeking: entitlements in the market", *American Economic Review*, 76(4): 728-741.
- Kannan, P. K., Kopalle, P. K. (2001). "Dynamic pricing on the Internet: Importance and implications for consumer behavior", *International Journal of Electronic Commerce*, 5(3): 63–83.
- Krishnamurthy, P., Carter, P., Blair, E., (2001), "Attribute framing and goal framing effects in health decisions", *Organizational behavior and human decision processes*, 85(2): 382-399.

- Kukar-Kinney M., Xia, L., Monroe, K., (2007) "Consumers' Perceptions of the Fairness of Price-Matching Refund Policies", *Journal of Retailing*, 83(3): 325-337.
- Levin, I. P., Gaeth, G. J. (1988), "How consumers are affected by framing of attribute information before and after consuming the product", *Journal of Consumer Research*, 15(3): 374-378.
- Levin, I., Schneider, S., Gaeth, G., (1998), "All frames are not created equal: a typology and critical analysis of framing effects", *Organizational behavior and human decision processes*, 76(2):150-168.
- Lo, A., Lynch J., Staelin, R., (2007), "How to attract customers by giving them the short end of the stick", *Journal of Marketing Research*, 44(1): 128-141.
- Maxwell, S. (2002), "Rule-based price fairness and its effect on willingness to purchase", *Journal of Economic Psychology*, 23(2):191-212.
- Monroe, K. (2003), "*Pricing: Making Profitable Decisions*", McGraw-Hill, New York.
- Rothman, A.J., Salovey, P., (1997), "Shaping perceptions to motivate healthy behavior: the role of message framing", *Psychological Bulletin*, 121(1):3-19.
- Schein, A. (2002), "Concern for fair prices in the Israeli housing marketing", *Journal of Economic Psychology*, 23(2): 213-230.
- Vaidyanathan, R., Aggarwal, P. (2003), "Who is the fairest of them all? An attributional approach to price fairness judgments", *Journal of Business Research*, 56(6): 453-63.
- van den Bos, K., Lind, A., Vermunt, R., & Wilke, H. A. M. (1997), "How do I judge my outcome when I do not know the outcome of others? The psychology of the fair process effect", *Journal of Personality and Social Psychology*, 72(5): 1034-1046.
- van den Bos, K., Vermunt, R., & Wilke, H. (1997), "Procedural and distributive justice: What is fair depends more on what comes first than on what comes next", *Journal of Personality and Social Psychology*, 72(1): 95-104.
- van den Bos, K., Wilke, H. A. M., Lind, E. A., Vermunt, R. (1998), "Evaluating outcomes by means of the fair process effect: Evidence for different processes in fairness and satisfaction judgments", *Journal of Personality and Social Psychology*, 74(6): 1493-1503.
- Vermunt, R., van Knippenberg, D., van Knippenberg, B, Blaauw, E., (2001) "Self-esteem and outcome fairness differential importance of procedural and outcome considerations", *Journal of Applied Psychology*, 86(4): 621-628;
- Weis, R. M., Mehrotra, A.K. ( 2001), "Online Dynamic Pricing: Efficiency, Equity and the Future of E-commerce", *Virginia Journal of Law and Technology*, 6(2);
- Xia, L., Monroe, K., Cox, J., (2004), "The Price Is Unfair! A Conceptual Framework of Price Fairness Perceptions," *Journal of Marketing*, 68(4):1-15.