



## Developing a model of antecedents to consumers' perceptions and evaluations of price unfairness

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### ABSTRACT

Drawing on previous research in pricing, we propose three broad antecedents to perceptions of price unfairness. Consumers perceive price unfairness when (1) they feel that the firm is making excessive profits, (2) they are not able to understand the pricing structure applied, and (3) they sense the firm is acting in an immoral or unethical manner. Survey data were collected from 969 consumers to understand their perceptions of price unfairness. In the survey, respondents were asked to provide their perceptions of pricing practices for fifteen products or services. A content analysis of consumers' comments confirms a wide array of drivers of price unfairness discussed by researchers and uncovers a few under-researched antecedents.

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### 1. Introduction

Pricing is a major marketing decision. Small price changes can have a dramatic impact on profitability. Moreover, the price of a product/service is, often, one of the most influential factors in deciding whether or not a consumer buys a product/service. Researchers showed that perceptions of price unfairness influence consumer choice (Sinha and Batra, 1999), attitudes toward the seller (Maxwell, 2002), and satisfaction in general (Oliver and Swan, 1989). Interestingly, anecdotal stories suggest that some of the pricing practices that consumers perceive as unfair were initially set to attract those same consumers, such as major price discounts and off-season offers.

The purpose of this research is to develop a model to help better understand how consumers make their judgments of pricing (un)fairness. More specifically, we address the following research question: What are the tools (heuristics or signals) that consumers use to judge the fairness (or unfairness) of a price? To build our model, we first survey previous research on pricing unfairness. Based on this literature review, we propose a model that incorporates the broad antecedents to unfairness. Then, we draw on consumers' experiences and perceptions to provide actual vivid illustrations of those antecedents.

Our approach differs from that of most previous researchers. Instead of using experiments with hypothetical scenarios to test the influence of pre-determined factor(s) on consumers' perceptions (see, e.g., Bolton et al., 2003; Campbell, 1999; Cox, 2001), we perform content analysis on almost unstructured consumer reports of their actual opinions. This approach enables us to have a rich picture of consumers' thinking process. It also allows us to uncover important factors that have yet to be considered by researchers. Hence, the contribution of our research is primarily methodological since our approach allows for richer data and empirically grounded insights.

### 2. Literature review

Researchers have used a variety of theories/principles to study price unfairness and its possible antecedents. These theories include the equity theory and one of its offshoots, the dual entitlement concept, the principle of procedural justice, and the attribution theory. Equity theory states that parties involved in social exchanges compare with each other the ratios of their inputs into the exchange to their outcomes from the exchange. Perceptions of inequity exist when the perceived inputs and/or outcomes in an exchange relationship are seen as inconsistent with the perceived inputs and/or outcomes of a referent (Huppertz et al., 1978). Hence, according to equity theory, consumers who are considering buying a product do not only think about what they pay and get. They also take into account what the firm pays (costs) and what it gets (price).

Drawing on the equity theory, a considerable number of researchers referred to the use of comparisons to judge price fairness (Xia et al., 2004; Huppertz et al., 1978). According to previous research,

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consumers compared their prices to those paid by other comparable buyers (Martins, 1995), to previous prices, or to prices set by competitors (Bolton et al., 2003) to conclude price fairness or unfairness. Exchanges judged as “inequitable” led to perceptions of price unfairness and, hence, dissatisfaction (Oliver and Swan, 1989).

The dual entitlement concept states that, as consumers are entitled to a certain value in their exchange relationship with firms, firms also are entitled to reasonable profits (Kahneman et al., 1986). Consequently, consumers feel that it is fair for a firm to raise prices when faced with increasing costs (Kahneman et al., 1986). However, according to this principle, fairness perceptions are influenced by information about supply and demand and the sellers' profit orientation. Hence, having this information is necessary. Otherwise, the fairness of the pricing process is questioned.

Procedural justice emphasizes the influence of the underlying procedures used to determine judgments of fairness perceptions (Thibault and Walker, 1975). Unlike distributive justice which is concerned with the perceived fairness of the tangible outcome, procedural justice focuses on the policies and rules applied to set a price. Collie et al. (2002) found that, when outcomes were unknown, judgments of fairness were determined by perceptions of procedural fairness. Drawing on the procedural justice, Dickson and Kalapurakal (1994) found that consumers viewed price increases due to demand as unfair.

Attribution theory states that people are likely to search for causal explanations for an event when the event is surprising and/or negative (Folkes, 1984; Weiner, 1985). Accordingly, consumers make inferences about a firm's motive for a price increase and whether the inferred motive is positive or negative influences perceptions of price fairness (Campbell, 1999). Previous research shows that increasing price to profit from demand is unfair (Frey and Pommerehne, 1993). It also demonstrates that offering a justification for a price increase (Urbany et al., 1989), especially when not under the control of the seller, helps reduce perceptions of price unfairness.

What are the antecedents to price unfairness? In this paper, we integrate the main themes in the relevant theories to present a broad model that allows for the incorporation of previous research. We then use responses provided by a large number of consumers to provide examples about each of the broad antecedents and understand the inherent dynamics in consumers' thinking process such as the cues and heuristics used to assess (un)fairness. In most of the previous research on pricing (un)fairness, researchers have focused on examining one main influential factor or one particular pricing practice or a specific context. Examples include Cox (2001) who examined whether differential prices can be considered fair, Bolton and Alba (2006) who studied consumers' reactions to a price increase that is commensurate with increased vendor costs, and Haws and Bearden (2006) who focused on dynamic pricing. Broad comprehensive pricing models have been rare and the most known are those presented by Campbell (1999), Bolton et al. (2003), and Xia et al. (2004). Conceptual differences between our model and each of these three models are discussed later, after presenting our model. The major difference in our work is the distinctive methodology we use as explained below.

Researchers have used a variety of methodologies to study pricing and price unfairness. Several researchers have presented conceptual models, i.e., not backed by empirical evidence (see, e.g., Xia et al., 2004). For empirical studies, the use of laboratory experiments has been the most common (see, e.g., Bolton et al., 2003; Campbell, 1999). Some of the laboratory experiments were web experiments (see, e.g., Suri et al., 2003). Other researchers have used surveys to collect pricing related data (see, e.g., Hanson and Martin, 1990).

In this paper, we offer one more approach to study pricing, the qualitative approach. The use of qualitative research has been growing in the field of consumer research. Consumer researchers have used qualitative research to study a wide variety of phenomena including

advertising messages, moving possessions, and gift-giving. In the area of pricing, Zeithmal (1988) used a qualitative approach (a focus group and 30 in-depth interviews) to examine the relationship between price, quality, and value. In our research, we obtained qualitative responses from a large sample of consumers. Those responses were subjected to a thorough content analysis and were used as examples to illustrate concepts presented in our model.

### 3. Conceptual model

Fig. 1 illustrates our conceptual model. We propose three broad antecedents to perceptions of price unfairness: (1) consumers' perceptions of excessive profits by the firm, (2) consumers' perceptions of immorality on the part of the firm, and (3) consumers' inability to understand the pricing strategies or policies used by the firm.

#### 3.1. Perceptions of excessive profits

Most previous research implies a link between perceptions of price unfairness and perceptions of firm's excessive profits. The dual entitlement principle calls for what is perceived as fair profits while any excessive profits seem to be judged negatively (Kahneman et al., 1986). Moreover, perceived excessive profits render exchange transactions inequitable through increasing the output of the exchange partner, i.e., the firm. According to the equity theory, inequity results in perceptions of unfairness (Huppertz et al., 1978). In almost all research studies on price unfairness, consumers seemed to be trying to assess the profits made by the firm through, for example, comparing prices to reference prices or estimating costs and judging how reasonable those costs were (Xia et al., 2004). Studies focusing on the inferred motives found that covering costs was considered acceptable in contrast to making more profits (Campbell, 1999).

#### 3.2. Immorality

Consumers' perception that a firm acted immorally is expected to lead to perceptions of price unfairness. Xia et al. (2004) proposed that trust plays a key role in perceptions of price unfairness. Previous researchers also have referred to outrage among consumers who felt that promises made by companies were broken or that their trust in those companies was violated (Nasr Bechwati and Morrin, 2003). The mistrust consumers feel toward firms is at the essence of perceptions of price unfairness.

#### 3.3. Inability to understand

Consumers want to understand the pricing structure adopted by a firm. Previous research demonstrates that prices were perceived as unfair when consumers were unable to understand how a price was

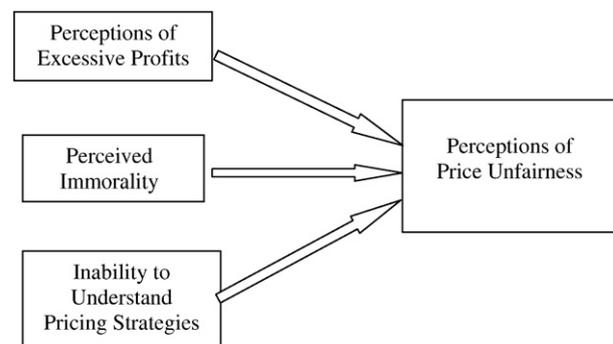


Fig. 1. Antecedents to price unfairness.

determined. When the procedure was unclear, e.g., when it was not based on cost, unfairness was concluded. In effect, consumers do not seem to favor price fluctuations caused by shifts in supply and demand (Dickson and Kalapurakal, 1994; Kahneman et al., 1986). Finally, and perhaps most importantly, consumers seem to mistrust companies (Xia et al., 2004). Whenever consumers do not see or understand the process, they are likely to assume that the firm is playing tricks in order to make profits.

The model presented in this paper differs from other broad comprehensive models previously offered in taking a stronger consumer perspective and applying a less restricted framework. In a seminal paper, Campbell (1999) drew on attribution theory to present inferred motive of the firm as the main antecedent to price fairness with consumers concluding unfairness when the motive is perceived as bad. Campbell, however, does not discuss how consumers decide on the valence of a motive, i.e., how they come to the conclusion that a particular motive is good or bad. In a series of experimental tests, Campbell (1999) uses hypothetical scenarios to imply good or bad motives. Our research takes a different approach and identifies three broad situations where perceptions of unfairness occur. If indeed, the inferred bad motive is the main antecedent to price unfairness, our model offers three broad categories of what can be considered manifestations or indicators of bad motives.

The model presented by Bolton et al. (2003) is mainly focused on the comparisons consumers make to judge price unfairness. In a series of experiments, Bolton et al. presented and demonstrated a variety of assumptions that consumers make, often in a biased manner, in computing costs and estimating other prices. Bolton's work mainly focuses on consumers' assumptions and on potentially effective preventive actions to deal with the fallacious assumptions. Bolton et al.'s model might converge with ours in many areas particularly those related to excessive profits and, possibly, the inability to understand situations. However, Bolton et al.'s model is too focused on comparisons and assumptions to capture the bigger picture where some of the general antecedents are not limited to direct comparisons. For instance, issues such as immoral behavior on the part of the firm and the related concept of social justice do not naturally fit in Bolton's model.

Xia et al. (2004) offer perhaps the most comprehensive model of price unfairness. In presenting the antecedents to price fairness, Xia et al. make the statement that price comparison is a necessary but not sufficient condition for price unfairness perceptions to occur. Their work, hence, focuses on the moderating factors that influence the impact of comparisons on perceptions of unfairness. Unlike Bolton et al. (2003), Xia et al. (2004) refers to beliefs and social norms as possible moderators which gives their model a social perspective. However, similar to Bolton et al. (2003), Xia et al.'s (2004) model is built around the framework of comparisons. In our model, we do not make any assumptions about comparisons being always present in assessing price unfairness. Instead, we adopt a less restricted framework which allows us to accommodate all possible antecedents to price unfairness. While comparisons might be the process that consumers go through in making judgments of price unfairness, no previous research has demonstrated that it is the sole process. In the absence of research supporting such essential assumption explicitly stated in Xia et al.'s model and clearly implied in Bolton's model, we offer a broader model that is not restricted by any similar assumptions. In addition, Xia et al. (2004) is a conceptual paper.

#### 4. Methodology

A cross sectional survey was administered online. Data were collected from 969 consumers. The respondents were conveniently recruited by graduate students at two universities, one in the Northeast and one in the Southeast. Each student recruited around 10 respondents and received partial course credit for participation in

the project. Prior to data collection, all participating students were thoroughly trained in the methods of sample recruitment. Students were urged to contact individuals who vary demographically.

As illustrated in Table 1, the sample represents a cross section of shoppers (albeit a predominance of 21 to 30 years old).

In the survey, respondents were asked to provide their perceptions of pricing practices for fifteen products or services (see Table 2 for a list of the products). To have a meaningful and balanced mix of products, we surveyed previous research on pricing and product categories. Similar to Mazumdar et al. (2005), we included in our basket packaged goods, services, and durables. Products used in previous price research such as food (Conover, 1986) and durables (Estelami and De Maeyer, 2004) to study price knowledge, and airlines to study dynamic pricing (Elmaghraby and Keskinocak, 2003) were included in our basket. Moreover, given the special nature of services and related pricing conditions (Schlissel, 1977), services too were included in our list of products.

The products also were chosen to represent a varied basket that includes products of high (computers) and low (razor blade cartridges) item prices, necessities (medical drugs) and luxury products (CDs), industries known for their low (grocery items) versus high (clothes) profit margins, and industries known for substantial price fluctuations (airlines) versus stable prices (office supplies). Our choices were in line with (1) products (or categories) considered representative by previous researchers, and (2) pretesting done on familiarity of our potential respondents with pricing in a particular product category.

For each of the fifteen products, respondents were asked to indicate how they view pricing in those industries on a scale going from 1 (no relation to value) to 5 (high relation to value). Respondents also were asked to comment on the rating they provided. The use of the word value in our scale does not imply that price fairness is equivalent to value and that unfairness is the same as low value. Our measure calls for a comparison between the pricing practices (not only final price) and value. To avoid bias, we wanted first to implicitly

**Table 1**  
Characteristics of the sample ( $n = 969$ ).

Characteristics	Percentage	
Gender	Female	50.4%
	Male	49.6%
Age	20 years and under	2.8%
	21–30 years	54.5%
	31–40 years	24.0%
	41–50 years	6.5%
	51–60 years	8.2%
	61 years and over	3.9%
Parental status	No children	76.7%
	Young children (below 18)	10.1%
	Grown children (above 18)	13.3%
Annual household income	Below \$50,000	36.4%
	\$50,000–<\$75,000	26.0%
	\$75,000–<\$100,000	17.4%
	Above \$100,000	20.2%
Ethnic group	White/Caucasian	67.1%
	South Asian (e.g., Indian)	10.4%
	East Asian (e.g., Chinese)	9.8%
	African–American	4.4%
	Hispanic	4.3%
	Other	4.0%
Education	High school or less	1.1%
	Some college	10.3%
	College degree	44.0%
	Graduate degree	30.7%
	Post Graduate	13.9%
Frequency of online or catalog buying	Never	12.3%
	Annually	15.6%
	Biannually	28.2%
	Monthly	40.3%
	Weekly	3.6%

**Table 2**  
Valence of responses per product.

Industry	Median <sup>a</sup>	Positive comments	Negative comments	Neutral comments	Both positive and negative comments	Total number of comments	Ratio of negative to positive comments
Airline tickets	3	28%	60%	9%	3%	271 (100%)	2.14
Books	3	55%	33%	11%	1%	225 (100%)	0.6
CDs	3	23%	64%	10%	3%	246 (100%)	2.78
Clothes	3	35%	40%	9%	16%	242 (100%)	1.14
Computers	4	70%	16%	9%	5%	235 (100%)	0.23
Consumer electronics	4	61%	21%	14%	4%	230 (100%)	0.34
Grocery items	3	60%	32%	4%	4%	225 (100%)	0.53
Home maintenance services	3	19%	46%	32%	3%	228 (100%)	2.42
Household appliances	3	61%	19%	15%	5%	215 (100%)	0.31
Legal services	2	7%	61%	28%	4%	234 (100%)	8.71
Office supplies	3	71%	14%	13%	2%	219 (100%)	0.20
Over-the-counter drugs	3	46%	41%	8%	5%	224 (100%)	0.89
Prescription drugs	2	13%	70%	14%	3%	240 (100%)	5.38
Replacement inkjet cartridges	2	14%	64%	20%	2%	233 (100%)	4.57
Replacement razor blade cartridges	2	16%	62%	21%	1%	234 (100%)	3.88

<sup>a</sup> The number of respondents who answered the rating question ranged between 703 and 721. The median values are based on these responses. As noted under the "Total" column, the number of respondents who provided comments ranged between 215 and 271.

ask about unfairness without specifically using the term (un)fairness. Given the complex nature of perceived value (as discussed by, e.g., Zeithmal, 1988), the use of the word value is a good enticer for respondents to discuss pricing practices including possible perceptions of pricing (un)fairness. Then, respondents were more explicitly asked with an open-ended question to "provide an example of what they consider unfair pricing or price gouging."

## 5. Findings

Consumers' perception of pricing fairness varied substantially across the industries in our survey. Rating how they view pricing in those industries on a scale going from 1 (no relation to value) to 5 (high relation to value), respondents provided a wide range of responses. The median varied between 2 (for prescription drugs, legal services, replacement inkjet cartridges and replacement razor blade cartridges) and 4 (for computers and electronics) (see Table 2 for all median values). Respondents were asked to provide comments on their ratings in an open-ended format. Those comments were examined by two judges who classified them as positive or negative. Certain answers were classified as neutral (such as "no opinion" or "I don't know"). Other comments had both negative and positive connotations simultaneously (such as "totally insane but lawyers spend years and fortunes to get their degrees"). The judges worked independently and their level of agreement exceeded 97%. Table 2 is a summary of the distribution of responses. It also shows the ratio of negative to positive comments where a higher number implies more prevalence of negative comments. As Table 2 reveals, the products that got the worst proportions were legal services, prescription drugs, and replacement cartridges (ink and razor blade).

A content analysis of the comments provided by respondents in answer to both the industry-specific questions and to the general price gouging question was performed. The purpose of this content analysis is to unveil the cues that consumers use to develop perceptions of price unfairness. We, therefore, limit our analysis to negative reactions to pricing practices. The presentation of our findings is organized following the model developed earlier.

### 5.1. Perceptions of excessive profits

To conclude that a firm is making excessive profits, our data show that consumers compare price of the product to either (1) what they perceive as the product's cost, or to (2) reference prices.

#### 5.1.1. Costs

Respondents used the price–cost comparison to infer profits. Whenever the price significantly exceeded estimated cost, excessive profits were inferred and price unfairness was concluded. "Costs cents to make charge hundreds of percents above its original costs," and "SO UNFAIR – these things cost pennies to develop, yet still cost upwards of 30 dollars in some cases."

Our findings reveal that consumers use a variety of cues to estimate the cost of a product. For instance, respondents evaluated raw materials for this purpose. Examples include: "Too high. It seems it's just a little plastic and some ink. I don't see why that has to cost 30 bucks a pop", "Come on! \$4.25 for a toothbrush that is made in a high volume plastics factory in Asia for \$.15?", and "charge an arm and a leg for 3 crappy metal edged and a plastic holster." In cases of services, time invested by the service provider was used as indicator of true cost. For example, "Legal Services: Prices lawyers charge to fax a document or 5 min on phone, \$50 automatic," And "Pricey for their time; 5–10 min of their time could cost you between 250 and 500 dollars."

When estimating the cost of raw materials, proxies were used to infer costs. For instance, prices of generic drugs were used to estimate costs of branded ones. Similarly, prices of drugs before their patent expired were compared to those after patent expiry. Respondents wrote: "Brand name drugs are way over priced. The price comes down after their exclusive rights expire; prime example they are price gouging during that time." In cases of sales and discounts, respondents used the lowest price (e.g., over the year or for a flight route) and assumed that cost must have been below this level. As a result, they concluded that the firm is making excessive profits. Extracts include "Seeing that an item is on sale for 50–75% of its original value. You have to know the price was jacked up to begin with," "High, you see them in the sales. They are being sold at a price which is 10% of the original and I am sure that the company is still making a profit out of it," And "Always overpriced as demonstrated by the constant sales."

In estimating costs, many of our respondents tended to neglect research and development costs as well as overhead costs. The few respondents who acknowledged such costs were more receptive of the prices offered. In addition, certain costs were considered as unacceptable and led to perceptions of price unfairness. For instance, respondents stated that "Mach 3, for example, pays a lot for advertising everywhere.....This infuriates me," "The drug companies make all these new medications, spend millions of dollars marketing them, and then charge outrageous amounts of money for them. The person that loses: the patient," "Expensive due to too much overhead in pharmaceutical

companies,” and “Probably paying for the union wages and gas prices more than anything else .... Take that back and the high CEO salaries also.”

### 5.1.2. Reference prices

To make a judgment about price fairness, consumers compare a product price to a reference figure other than cost. Scores of our respondents compared a product's price to its price at a different point in time, e.g., during sale periods or off-season. Respondents stated “Overpriced! Prices have escalated over the past two years.” Similar conclusions were drawn when prices were compared to those in other locations (stores or countries); “Too expensive compared to other countries,” and “Prescription drugs get my vote as the biggest scam. The fact that I can go across the border to Canada and buy the very same drugs for cheaper tells me that Americans are being gouged and are forced to accept it.” Comparisons were also made to prices paid by other customers: “Crazy. I can be sitting on a plane next to a guy that paid a third the price I did for the same flight.” Unfairness was also concluded after comparing the price to one's income (e.g., drugs).

### 5.1.3. Other reference values

Our respondents compared prices of products to values that are less revealed by previous research. For instance, the price of a complementary product was compared to that of the “main” product. Prices of ink cartridges were perceived as unfair because they were considered excessively high relative to prices of printers. “Way too high. It can be almost 1/2 the price of the printer you are buying them for,” And “Makes more sense to buy a new printer!” Similarly, razor blades cartridges were seen as unfairly priced because their prices are close to those of the razors. “Too high. Most times cheaper to buy a new razor and it comes with the blade.”

Interestingly, respondents compared a product's current price to future sale price, a value known as the product's salvage value. As a result, cases of potential significant appreciation (e.g., houses) and depreciation (e.g., cars) were seen as indicators of price unfairness. “New cars depreciating as you drive them off the lot! I would never, never buy a new car and I pity the fool who does!” “It depreciates to junk every 4 years. Not a great asset to have,” “High for something that will be obsolete tomorrow,” and “Used Home: Say a house cost \$75,000 to build and is sold for \$125,000. Then 20 years later, is sold for \$275,000.”

## 5.2. Perceptions of immorality

Our respondents seem to believe that a firm is acting immorally whenever they felt that the firm (1) deceived consumers and violated their trust, or (2) took advantage of their need to buy a product without having any alternative.

### 5.2.1. Deception/trust violation

Pricing was considered unfair when it was used in a tricky or sneaky manner to attract customers. Those cases mainly focused on deceptive advertising regarding prices. “Advertising a price but when you get there you must mail in for refunds which often don't come,” “When companies raise the price of a product before putting it on sale,” “When the tax and shipping and delivery are hidden,” “The ad never seems to match what you really need and what you need is about \$100 more,” and “Car dealerships: They advertise a car at a low price, but they may only have one car for that particular price in order to get people to the dealership.”

Cases more serious than deceptive advertising were also reported. Those cases involve clear violations to consumer's trust in firms and include inside deals some of which might be illegal and are certainly unethical. Those cases were reported mainly in the area of pharmaceuticals where consumers stated: “This is a big industry where the drug companies have doctor and insurance loyalty and it all

comes out of the pocket of the patients,” and “Pharmaceuticals are scandalous. Pharmaceutical salesmen pretty much 'bribe' physicians with frequent vacations and other incentives to sell their goods.”

It is worth noting that anger accompanied those cases. A lot of the related anger was addressed to the government. For instance, in the pharmaceutical industry, the government, supposedly protecting consumers, was blamed for covering immoral practices by firms through, e.g., (1) granting patents and (2) leaving the industry “dangerously under regulated.”

### 5.2.2. Being taken advantage of

Consumers concluded unfairness when they felt that they were taken advantage of because they had no choice but to buy the product. Those cases fell into two categories: contextual and necessities. An example of contextual cases is the price of food at convention centers. “Going to sporting events and making any purchases at the stadium, i.e., gifts or food,” and “Amusement Parks: They charge an extremely high price to get in and then you have to wait in long lines. Also the food prices there are very high. Since it is the only place to buy food and you can't bring in your own food, the prices are inflated.” Consumers who perceived prices of necessities to be too high to be affordable by the poor were angered by this fact. “When pricing on must have items (large appliances, food, etc.) becomes a burden,” “Grocery items: Anything that you need and not just want. They know you'll pay through the nose for it,” “Pharmaceuticals are scandalous. It's the saddest of all markets when our elderly can't afford their meds.”

Negative affect accompanied those cases of perceived price unfairness. Outrage was salient particularly in cases where consumers felt that moral rules were broken. Pharmaceutical products, whose high prices were blamed on patents granted by the government, resulted in high negative emotions. “Absolutely criminal. No one should be unable to afford the medicine they need in order to continue living, especially in the richest nation in the world.”

## 5.3. Inability to understand

Consumers perceived prices as unfair when they were unable to understand how a price was determined. Our findings show that the inability to understand pricing is the result of one of three cases involving consumers' inability to (1) understand price changes, (2) estimate underlying costs, i.e., what the firm paid, or (3) assess real value derived from the product, i.e., what they got.

### 5.3.1. Price changes

Non-understandable cases include cases when prices fluctuated quickly and without a clear and justifiable reason. Respondents stated “Plane ticket: There is no logic why the price can jump between \$900 to \$1200 every hour or so.” “I would like to know why there is such a sharp spike the closer you get to departure date.”

### 5.3.2. Underlying costs

When price differentials are not proportional to size differentials, consumers are unable to understand the pricing strategy and, consequently, consider it unfair. Our respondents also made comparisons of similar products/services of different sizes. Examples of such comparisons include: “\$450 from Boston to DC, but less than that to go from Boston to London. Where do they get their pricing from?!” “Why the round trip often cheaper than oneway trip?” “A 10 cubic fridge costs \$450 but a 15 cubic fridge costs \$350,” and “Women's clothes is so expensive compared to that of men's clothing; women's clothing is smaller yet more expensive.”

### 5.3.3. Assessment of value

Consumers were not at ease with pricing when they felt unable to assess the value of the service they were getting. Examples of such frustration include: “Never know if you're getting a good deal or getting ripped off (Home Maintenance Services)” and “Hard to know if lawyer's skill matches his fee rate.”

#### 5.4. Other findings

Different consumers reacted differently to the same pricing phenomenon. While many consumers welcomed deals and sales, others saw them as proof for pricing unfairness. Some consumers did not want to go through the process of looking for deals: *“And there is no logic why you have to hunt for the cheapest ones through different channels.”*

Alarming, consumers used unfair pricing practices to understand, and perhaps justify, illegal actions by consumers. For instance, in the case of compact discs (CDs), piracy was seen as a “fair” way to get back at companies that charge excessively high prices. Respondents wrote *“Way too high – one reason why there is so much illegal internet music swapping,”* And *“There’s a reason why people get it free off the web. Too darn expensive.”*

Consumers often reached conclusions of unfairness after using a mix of the categories identified earlier in this paper. In effect, although respondents were quoted to illustrate a particular antecedent of unfairness, many respondents described situations that could serve as examples of several antecedents.

#### 6. Discussion

Our research sheds light on the many different routes to perceptions of price unfairness. Many of our findings are in line with previous studies. This paper, however, contributes to the literature on price unfairness through (1) providing vivid examples to already researched concepts, (2) combining all antecedents to perceptions of price unfairness in one model, and (3) uncovering few under-researched decision processes (signals or heuristics) that consumers use to conclude price unfairness. As detailed in this section, these under-researched decision processes include, as examples, the use of non-traditional reference values, the reference to proxies to estimate costs, the application of broad concepts such as social justice, and clear sensitivity in evaluating pricing practices of necessities such as food and medical drugs.

Many of our findings have at their roots theories and concepts used to understand fairness in general. As per the equity theory, our respondents compared the ratios of their inputs into the exchange to their outcomes from the exchange to others' (Huppertz et al., 1978). As per the dual entitlement theory, our data show that consumers feel that companies are entitled to reasonable profits (Kahneman et al., 1986). Excessive profits were, however, strongly rejected. Consumers' perception of procedural justice also played a key role in their judgments of price fairness (Campbell, 1999). Procedures perceived as unfair, or even unclear, led to conclusions of price unfairness.

Our findings are in line with previous research showing that perceptions of price fairness are based on a comparison process (Xia et al., 2004). Bolton et al. (2003) argue that consumers compare prices to several reference points including past prices, competitor prices, and cost of goods sold. Our research shows that the conclusion of (un)fairness is contingent upon the choice of a referent which could extend to consumers in other countries. Our data also reveal that the reference figure to which price is compared is not necessarily the price of a similar product but could be, e.g., one's income or product's cost.

As expected, cost is a key figure considered by consumers in judging price fairness. To estimate costs, our respondents used few interesting signals such as the nature of raw materials and the price of generic products. Understanding the signals used by consumers will help managers better understand how to communicate with those consumers. In estimating costs, our respondents failed to account for some costs, such as overhead expenses. Other costs, such as advertising and high CEO salaries, were rejected and considered as a main reason for price unfairness. Bolton et al. (2003) and (Kahneman

et al., 1986) reported a tendency among consumers to neglect certain costs.

In addition to procedural justice, one main route to price unfairness is one that is rooted in the broader concept of social justice. Our respondents felt that people, in general, are entitled to necessities such as food, a fair trial, and medical drugs. As a result, consumers are very sensitive about providing everybody with those necessities. Price setters in those industries need to be aware of this sensitivity and its consequences.

Cases of extreme negative affect, e.g., outrage, are reported when consumers feel that moral/ethical standards are violated. Previous researchers have referred to outrage among consumers who felt that promises made by companies were broken or that their trust in those companies was violated (Nasr Bechwati and Morrin, 2003). In a comprehensive model of price unfairness, Xia et al. (2004) had violation of social norms as an antecedent of price unfairness and pointed to the possibility of affective consequences to price unfairness.

In conclusion, consumers seem to resent many practices that managers had initially introduced to attract those same consumers. For instance, managers use frequent sales, significant discounts, off-season deals, and early discounting to please consumers. Apparently, consumers use all those practices as signals of price unfairness and gouging. Similarly, managers spend a lot of money on advertising and overhead to attract and satisfy consumers. Consumers are put off by those expenses and see them as unnecessarily increasing the price they need to pay. Hence, marketers need to examine the effectiveness of managerial practices.

#### 7. Limitations

The methodology used in this research has several limitations. An important limitation to the study is the use of convenient sampling. Although respondents seem to be well distributed among the population, the predominance of young and highly educated shoppers might have affected our findings. Another limitation is restricting the instrument to few industries. Using other industries may uncover additional routes to pricing unfairness. Finally, and perhaps most importantly, using qualitative research has its limitations such as the difficulty or subjectivity of data analysis and the possible strong influence of contextual variables. For instance, in this research, news about negative practices by firms such as Enron and WorldCom prior to our data collection might have increased consumers' sensitivity toward certain costs and sharpened their suspicions of unethical behavior.

#### 8. Future research

The present findings suggest several future avenues of research regarding how consumers assess price unfairness. It would be of interest to study whether firms can influence/reduce perceptions of price unfairness through educating consumers by either emphasizing costs incurred by the firm or values derived from the product. For instance, since it is difficult to assess the cost of an intangible service, it is worth studying whether showing consumers the value of what they are getting, e.g., by having a problem solved by their lawyer, might make them feel better about pricing. Future research is also needed to test the model proposed in this paper. Our data serve to illustrate consumers' understanding of the different components of the model. However, testing hypotheses derived from the model would further support its applicability. Finally, a natural extension of our work is to focus on the consequences of perceptions of price unfairness and whether different antecedents lead to similar (or different) consequences.

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