# Fairness Perceptions of Price Increases in the Case of Currency Crisis Affecting Domestic and Foreign Brands 

Mohsen Nazari ${ }^{\text {a* }}$, Atefeh Hesaraki ${ }^{\text {b }}$<br>${ }^{a}$ Associate Professor, Business Management Department, Faculty of Management, University of Tehran, Tehran, Iran<br>${ }^{b}$ Ph.D. in Business Management, faculty of Management, University of Tehran, Tehran, Iran


#### Abstract

Given the importance of the issue of fairness perception in the case of a currency crisis, in this study, we aim to analyze the effect of the type of fairness and the impact of the price increase on the customer's perception of price fairness during the currency crisis in domestic and foreign brands. For this purpose, we have included the review of the literature in the second section of the study, the research methodology in the third section of the study, the conclusion, and analysis in the fourth section of the study, and finally, in the fifth section, the limitations and suggestions for future research have been described. Furthermore, this study doesn't touch on the effect of losing the purchasing power of people -customers- as well as inflation. Also, luxury goods are not included as their prices are unrelated to the currency crisis. The present study aims to examine and analyze the factors affecting the customer's perception of fairness in the case of a currency crisis. For this purpose, five different scenarios encompassing five different types of domestic and foreign products were used. Each questionnaire was randomly distributed among 50 people. Nonparametric t -test and ANOVA were used for data analysis. The pairwise comparison indicates that in all scenarios, the perception of fairness in the foreign market basket is significantly higher than the perception of fairness in the domestic market basket. Also, in all scenarios, there is a significant difference between the perception of fairness in the Iranian market basket and the foreign market basket. This study can be beneficial to formulating and implementing firm pricing strategies. ©2022. All right reserved


Keywords: Currency Crisis, Perception Of Fairness, Pricing ;

## 1.Introduction

A crisis is defined as a disruptive, unpredictable, and unexpected event that arises from both the internal and external environments of an organization and can threaten its sustainability, financial condition, and strategic goals (Bundy et al., 2017). When a crisis occurs, the complexity of the business environment increases (Coskun and

[^0]Ozceylan, 2011), and the successful prediction of models becomes more difficult (Kim et al, 2019). The term crisis is used in the political, social, and economic contexts, which often implies major consequences for the majority of people. Regardless of their types, crises have generally three features in common (Semerciöz et al, 2015): a) they are surprise, sudden and unexpected events, b) they distort the image of a business, person, or destination and c) they create stress due to time pressure. The economic crisis is viewed as the most difficult one as it affects the majority of the people in a society. One type of economic crisis that any country can face is the currency crisis. A currency crisis occurs with a sharp decline in a country's exchange rate or a significant reduction in foreign exchange reserves or a combination of both against world currencies (Rao and Padhi, 2020), which leads to contractionary effects in the economy for a long time and its intensity varies at different times (Rao and Padhi, 2020). Since predicting the exchange rates in countries with turbulent economic systems, in the long run, is a formidable challenge, with the whole society subject to unexpected dramatic changes, flexibility and adaptability in times of crisis are critical to the survival of a business.

When a currency crisis takes place, the pattern of customer demand and their buying behavior fundamentally change (Kantar; 2020), the level of unemployment rises and the level of consumption drops, household incomes fall and the main issue from the customer's point of view is the continuous supply of products along with cost reduction (Alegre and Sard, 2015).

On the other hand, in times of economic turmoil, organizations are faced with increased financial costs, energy, and raw materials which lead to lower profitability and higher prices (Alegre \& Sard, 2015). By transferring such costs to consumers, their dissatisfaction increases (Ferguson, 2014), because consumers are rarely aware of the full range of intangible costs incurred by the seller, and in this situation, they want to know the reason for the price increase and judge whether the prices are fair or not. The fact is that, even when the costs are quite transparent and clear, customers are still reluctant to accept them (Bolton \& Alba 2010; BERTRANDIE \& ZIELKE, 2019). Under such circumstances, companies risk losing customers because they feel that the prices are unfair (Bolton et al., 2003; Xia et al., 2004). And the main concern of the sellers is devising an appropriate technique to justify the fairness of their increased prices to retain their customers. Fairness is also often deemed as a prerequisite for trust, therefore, if a consumer considers the prices offered by the company to be unfair, they will lose their trust in that company as well (Morgan and Hunt, 1995).

Price unfairness is defined as unreasonable, unacceptable, and unjustifiable compared to the reference price (Xia et al. 2004, Vogel \& Paul, 2015; L. BERTRANDIE AND S. ZIELKE, 2019). Also, perceived unfairness in price causes a sense of tension and annoyance, and customers usually prefer not to repurchase from the company to eliminate these negative feelings (Campbell,1999; Dutta et.al, 2017; Kukar-Kinney et al., 2007; Xia et al., 2004).

Given the importance of the issue of fairness perception in the case of a currency crisis, in this study, we aim to analyze the effect of the type of fairness and the impact of the price increase on the customer's perception of price fairness during the currency crisis in domestic and foreign brands. For this purpose, we have included the review of the literature in the second section of the study, the research methodology in the third section of the study, the conclusion, and analysis in the fourth section of the study, and finally, in the fifth section, the limitations and suggestions for future research have been described. Furthermore, this study doesn't touch on the effect of losing the purchasing power of people -customers- as well as inflation. Also, luxury goods are not included as their prices are unrelated to the currency crisis.

## 2.Literature Review

Since price is the only direct element in the marketing mix that leads to revenue and profit, price-related decisions are of great importance. Price is generally directly related to consumer demand. And for this reason, pricing, especially in times of currency crisis, is more manipulated compared to the other marketing elements. As a currency crisis occurs, the company's expenses increase sharply and companies are forced to raise prices, therefore, understanding the fairness of this price increase from the customer's point of view is very important. Moreover, the perceived unfairness of price increases can lead to severe customer reactions, which can result in a boycott or fewer purchases (Ruiz\& Cataluna,2008).

Issues related to price fairness have already been extensively studied (Campbell 1999; Kahneman et al,1986; Kauffman et al,2009; Kimes \& Wirtz, 2003; Kahneman et al,1986; Urbany et al, 1989). And fairness perception of price increases is important both in theory and in practice. (Bolton et al., 2003; Campbell, 1999; Martin et al., 2009;

Xia et al., 2004; Xia et al., 2010; Wirtz and Kimes 2007). Previous research has shown that customers' perceptions of price increases depend on various factors (Bolton and Elba, 2006; Campbell, 2007; Homburg et al., 2005), especially those that are influential in understanding why the prices are as much as they are (Campbell, 1999; Grewal et al., 2004; Dutta et al., 2017).

Fair and unfair price assessments can vary based on certain premises. Research shows that the main concern of the consumer when assessing the fairness of the price is the value they receive while sellers' profit is second in line. The review of the literature is divided into two sections, including the reasons for justifying price increases based on perceptions of fairness and the consequences of price unfairness.

Reasons for Price Increase Justification for Perceived Fairness
One of the strategies that managers use to deal with the crisis is to change the prices of products and services. This may be because applying price changes usually require less funding, shorter duration, and fewer changes in key activities (Chen and Miller, 1994). In times of crisis, companies may need to make decisions under extreme time pressure (Stafford et al., 2002), and because price changes require less time and effort, managers are more motivated to implement this strategy. (Pearson and Mitroff, 1993).

In times of crisis, consumers expect predictable market behavior, and price increases that result from rising costs of products and services are often accepted and approved. (Kahneman et al., 1986). Of course, in this situation, consumers expect businesses not to increase the prices of basic goods. For example, in Campbell's (1999) study, consumers considered the increase in the price of mineral water after an earthquake to be unfair. In the study by Kahneman et al. (1986), the increase in the price of snow shovels after a snowstorm was considered unfair. Therefore, despite the increase in demand, retailers are expected to keep prices stable under such conditions. With this in mind, businesses face a serious task in times of crisis. Even though their costs are rising, they still need to maintain their profitability. Every manager is obsessed with handling their clients' reactions well (Bolton and Alba, 2006).

Spreng et al. (1993) found that the availability of product information and their price while evaluating different product options has a significant effect on customer satisfaction. These effects may occur especially for purchases that, for example, contain extensive information searches and multiple interactions with the seller.

Kimes (2002), in his study, examined the perceived fairness in five pricing styles in restaurants along with the effect of price expression. The results of the research showed that the styles of lunch/dinner pricing, two-for-one coupons, weekends/weekday pricing, and time of the day pricing, were perceived as fair by the customers, however, they did not accept table location-based pricing style. On the other hand, only weekends versus weekday pricing, based on table location, time of the day, and the way the price was expressed influenced the perceived fairness of the customers.

Kimes and Wirtz (2003), conducted another study on the revenue management in the golf industry and concluded that the three pricing methods based on time of day, coupons (two for the price of one), and reduced tee time intervals as fair by the golfers. Conversely, the two pricing methods of time-of-booking and different price levels were seen as unfair.

In addition, the results of the research showed that the way of expressing price also affects people's perception and there will be higher perceived fairness if the prices are offered at a discount compared to the case where the prices are expressed as surcharges, and customers consider this style fairer.

According to Xia et al. (2004), Judgments about price fairness are largely based on comparative transactions, which include different sections; This indicates that consumers are often unaware of the sellers' cost structure or pricing information, so they cannot use input and output rates for comparison.

However, a study by Bolton et al. (2003), showed that consumers manipulate their minds about whether the price is right for a service or product. Vaidyanathan and Aggarwal (2003), criticizing the principle of Dual Entitlement, acknowledged that even an increase in price with justifying the cost increase causes an unfair perception of price change. This issue also depends on how consumers perceive the causes of price rises; For example, whenever the reason for the price increase is related to factors within the organization, increasing prices trigger a sense of unfairness for the consumers. Thus, when customers believe that the price increase is under the control of the organization, price spikes are perceived as unfair.

Consumers sometimes react negatively to price hikes when they think the new pricing does not stem from the costs incurred by the organization and merely charges the customer more.

Beldona and Namasivayam (2006) concluded that people's perception of fairness in discriminatory pricing can be affected by their gender. In addition, women remarkably consider all of the discriminatory pricing scenarios in both discount and surcharge formats as less fair.

In a study, Herrmann et al. (2007), concluded that customer satisfaction is directly affected by price perception and indirectly is affected by price fairness perception and also, the fair price itself and the ways to determine and present it, have a great impact on the level of customers' satisfaction. Taylor and Kimes (2010) in a study, examined various factors affecting the perception of fairness of price and concluded that familiarity with discriminatory pricing policies has a positive effect on the perception of fairness.

Maxwell and Comer (2010) in a study examined the social and personal components of a fair price. In this study, researchers sought to separate the effects of personal fairness (consumer savings from price) and social fairness (price acceptance according to social norms of society). This study adopted the scenarios used in fair pricing studies by Kahneman, Knetsch, and Thaler(1986). After analyzing the results they found that the individuals’ opinions of price fairness are adjusted with a social fair price perception.

Heo and Lee (2011) conducted a study on the effect of customer characteristics on a fairness perception of pricing used in revenue management in the hotel industry. In this study, they examined the impact of characteristics such as the number of uses, knowledge of price, gender, household income, age, and education on customer perception. The results of their research showed that the customer with more frequent use, younger age, and higher education, considers the activities related to revenue management in the hotel fair. In addition, revenue also plays a significant role in the perceived fairness of customers; this means that the higher the income of individuals, the fairer they perceive these methods.

Ferguson et al. (2011), in a study entitled "Procedural and Distributive Fairness: Determinants of Overall Price Fairness", examined the fairness perception in the pricing process of retailers as well as price distribution in comparison with the price offered by others. The effect of perception of procedural fairness and distributive fairness on overall fairness was also studied. In this research, two empirical studies were investigated to assess the effect of procedural and distributive fairness on the overall perception of price fairness. In the first study, procedural fairness and distributive fairness were manipulated and were found to affect prices to create overall fairness. In the second study, suspicion about the seller was considered as a moderating variable in the relationship between procedural fairness and overall price fairness.

The results of a study by Choi, Jeong, and Mattila (2015) conducted in the South Korean film industry, showed that pricing based on time of day (noon/evening pricing) is considered fair by customers, especially when the price is expressed as a discount. Pricing based on the time of the week (weekdays versus weekends) and seat location was also considered somewhat fair by the customers, but pricing based on the popularity of the film and booking time was seen as unfair. Also, the way the price was expressed (as a discount) led to an increase in the perception of fairness.

Dutta et al. (2017) studied fairness perception of the increase in retail prices of domestic and foreign brands and reviewed the role of ethnic beliefs, profit stability, and environmental information in such perception. They contended that even though the customers did not feel good about rising prices, their perception of fair price spike depended on other factors including whether the products were domestic and foreign brands. The researchers found that ethnic beliefs did not necessarily lead to the perception of price fairness of domestic or foreign brands.

Other researchers (Bolton and Alba, 2006; Ruiz and Cataluna, 2008) claimed that perceived pricing-related unfairness may be greater for products than services; because it is easier to evaluate the quality of products (mostly by using search qualities) compared to services (mostly by using experience or credibility qualities).

## 2-1 Consequences of price unfairness

McCarville et al. (1996) argued that customers' unfairness perception of service may lead to retaliatory behaviors such as selecting competing companies. They emphasized that Attribution Theory is useful to understand people's unfair perceptions about the entrance fee for recreational services and public entertainment; therefore, if they do not find a justification for the increase in costs, they show a negative emotional reaction and undesirable behaviors. Martin Consuegra, Molina, and Esteban (2007) contended that the passengers with higher fairness perception were more likely to be more loyal to the airline company.

Martin, Pondor, and Lueg (2009) also found that providing reasons for justifying price rises, may increase customer loyalty. Loyalty is created when customers are confident that the organization can satisfy their needs in the best way possible.

Ferguson et al. (2011), in their study, examined the role of suspicion and fair price perception in times of crisis. The researchers contend that in times of crisis, demand for business increases, and business costs rise unexpectedly and significantly. It is a challenge for consumers to bear these costs. Consumers can take the signs of the reason for the price increase into account. Such signs can raise suspicions of alternative incentives that influence consumer decisions about price fairness. In this study, two factors caused by suspicion have been investigated: The importance of alternative motivations and behaviors that are far from the business personality. When there is an incentive to raise prices, the consumer can decide more easily about its fairness. In general, determining the nature of the motivation makes the perceptions of price increases fairer than the uncertainty of the motivation. The reason is that; the lack of motivation creates the ground for the formation of negative motivations. The results of two studies in the field of crisis show that suspicion arises when alternative motives are not known and when the retailer acts outside the business personality. Multiple group analyses revealed that suspicion leads to a negative effect on price fairness perceptions. When there is suspicion, there are negative feelings about the retailer and unfair price judgments. Also, customers' perceived unfairness of prices leads to potentially reactive behaviors, such as complaints, negative comments, and disengagement. To prevent such a dramatic increase in prices, one of the strategies of retailers is breaking down the additional costs on different product lines. By doing so, there will be less price increase and the effect will be felt less.

Consumers may realize that the price rise is consistent with cost increases, however, price increases on multiple product lines, even those not directly related to cost increases, makes the customer think that maybe the company violates the common principles of trade. This study aims to evaluate the effect of different expressions of the reasons for price increases caused by currency crisis on the customers' price fairness perception regarding different kinds of products including durable and FMCG. In Iran, the currency crisis broke out in early 2018 and reached its peak in the fall of the same year (The exchange rate against the dollar increased from 3400 tomans to 19000 tomans). In 2019, the government was able to control the crisis to some extent. In early 2020 dollar exchange rate witnessed an unprecedented rise and was traded more than 27,000 tomans in mid-September. It means that the US dollar exchange rate soared from 3,400 Toman to 27,000 Toman in less than two years.

As a result of this crisis, the value of the Iranian currency the rial reached its nadir in recent years against the US dollar and other world currencies. This sudden rise in forex exchange rates brought about a major crisis for companies and increased the prices of foreign brand products. In addition, it brought about drastic changes affecting domestic brands.

## 3. Research Methodology

This study covers several products, including basic products, consumer products, and durable and non-durable products which had price increases during the currency crisis. The prices were compared over the course of a year. (Dollar price in August 2019: 11.700 tomans, Dollar price in August 2020: 22.900 tomans).

Table 1. Price comparison

| Production type | Price in Aug 2019 <br> Tomans | Price in Aug 2020 <br> Tomans | Price in Aug 2019 <br> US $\$ \$$ | Price in Aug 2020 <br> US $\$ \$$ |  |  |
| :---: | :---: | :---: | :---: | ---: | :---: | :---: |
|  | $82,000,000$ | $155,000,000$ | $\$$ | 3,581 | $\$$ | 13,248 |
| Foreign cars | $480,000,000$ | $900,000,000$ | $\$$ | 20,961 | $\$$ | 76,923 |
| Domestic toothpastes | 13,300 | 19,700 | $\$$ | 1 | $\$$ | 2 |
| Foreign toothpaste | 63,500 | 170,000 | $\$$ | 3 | $\$$ | 15 |
| Domestic refrigerators | $2,470,000$ | $5,160,000$ | $\$$ | 108 | $\$$ | 441 |
| Foreign refrigerators | $15,000,000$ | $65,000,000$ | $\$$ | 655 | $\$$ | 5,556 |
| Domestic chocolates | 17,800 | 28,000 | $\$$ | 1 | $\$$ | 2 |
| Foreign chocolates | 70,000 | 155,000 | $\$$ | 3,581 | $\$$ | 13,248 |

Five different scenarios were designed to understand the fairness of price increases. In these scenarios, we sought to examine the effect of the type of price increases justification on the perception of fairness. These factors were extracted from the literature review and observation by the authors working in this field. The factors included price transparency, reducing production costs, increasing productivity, and providing facilities.

In the first scenario, the reason for the price increase is not transparent as the seller did not provide any explanation for the price rise. In the second scenario, the seller-provided the reason for the price increase in a transparent way. In the third scenario, the seller mentioned a reduction in production costs and an increase in productivity to justify the price increase. In the fourth scenario, the effect of the installment payment method on the fairness perception was examined. Finally, in the fifth scenario, changes in the characteristics of products that prevent a sudden and sharp rise in prices and their effect on the fairness perception in various domestic and foreign products were examined.

Chart 1. Five Scenarios

1-Imagine that you are going to buy the following goods. After the sharp rise in the currency exchange rate and the country's economic problems this year, when you visit the store, you will notice a significant increase in the price of the following products. When you ask the seller about the reason, they say they have no idea as the company's headquarters would inform them of the prices. What is your opinion about the price increase for each of the following goods?

2- Imagine that you are going to buy the following goods. After the sharp rise in the currency exchange rate and the country's economic problems this year, when you visit the store, you will notice a significant increase in the price of the following products. When you ask the seller about the reason for the price increase, they say it is due to the rise in the currency exchange rate (by $100 \%$ ) and the consequent increase in the cost of production and the purchase of raw materials, which forced them to increase the price of the products by $100 \%$. What is your opinion about the price increase for each of the following goods?

3- Imagine that you are going to buy the following goods. After the sharp rise in the currency exchange rate and
the country's economic problems this year, when you visit the store, you will notice a significant increase in the price of the following products. When you ask the seller about the reason for the price increase, they say it is due to the rise in the currency exchange rate ( by 100\%), and they have increased the price of the products by only $50 \%$. They also argue that they did it by reducing costs and taking measures, which have boosted efficiency. What is your opinion about the price increase for each of the following goods?

4- Imagine that you are going to buy the following goods. After the sharp rise in the currency exchange rate and the country's economic problems this year, when you visit the store, you will notice a significant increase in the price of the following products. When you ask the seller about the reason for the price increase, they say it is due to the rise in the currency exchange rate (by $100 \%$ ), and they had to raise prices by $100 \%$. Still, the seller has made it possible for the customers to pay in installments. What is your opinion about the price increase for each of the following goods?

5- Imagine that you are going to buy the following goods. After the sharp rise in the currency exchange rate and the country's economic problems this year, when you visit the store, you will notice a significant increase in the price of the following products. When you ask the seller about the reason for the price increase, they say it is due to the rise in the currency exchange rate (by 100\%) and they should have increased the prices by $100 \%$, but they modified the characteristics of the product to make it more efficient and less costly. For example, to offer a more reasonable price, they reduced the volume of the product in the packaging and eliminated some features. What is your opinion about the price increase for each of the following goods?

To prevent the halo effect; each questionnaire was randomly distributed among 50 people. To analyze the data, first, normality with Skewness and Elongation indices was examined. Given the fact that the value of these indicators was between 2 and -2 , the normality of the distribution was confirmed. Therefore, non-parametric $t$ and ANOVA tests were used for each scenario.

According to One sample t-test, the sig value is less than 0.05 , for the Iranian-made refrigerator in the first, second, fourth, and fifth scenarios; Iranian-made toothpaste in the first, third and fifth scenarios; Iranian-made shoes in the first, second, fourth and fifth scenarios and all scenarios for the Iranian market basket Iranian car, and Iranian chocolate. Therefore, the perception of fairness is significantly different from the number 3 (which is considered as the average). Given that the average amount of fairness perception is less than 3 , therefore, the perceived fairness of the mentioned products is significantly lower than the average. Moreover, in all scenarios, there is a significant difference between the fairness perception in the Iranian market basket and the foreign market basket. And the level of fairness perception in the foreign market basket is significantly higher than the level of fairness perception in the Iranian market basket

In the next step, to compare Iranian and foreign products, we used the paired t -test in each scenario.
The sig value is less than 0.05 in the first, second, and fifth scenarios in all products, in the third scenario for all products except the refrigerator, in the fourth scenario, in all products except toothpaste. Therefore, there is a significant difference between the fairness perception of all Iranian-made products and foreign products. On the other hand, the average amount of perception of fairness for all Iranian products is less than for foreign products. Therefore, it can be concluded that the perception of fairness for all foreign products is significantly higher than the perception of fairness for domestic products. In the following, we will compare the fairness perception in all
scenarios among different demographic classes related to gender and income variables. In the first and third scenarios, the sig value for Iranian shoes is less than 0.05 . Thus, perceptions of fairness are different between men and women, and the average perception of fairness in men is significantly higher than women. In the second, fourth, and fifth scenarios, the sig value for all products is higher than 0.05 . Therefore, the fairness perception is not different between men and women.

In the second, fourth, and fifth scenarios, the sig value for all products is higher than 0.05 . And the homogeneity of variances in different occupational groups is confirmed, which indicates there is no significant difference between the degree of fairness perception in all products in different occupational groups. But in the first scenario, the value of Sig in the Anova table for the Iranian-made shoes, and in the third scenario, the value of sig for the foreign-made refrigerator is less than 0.05 . And homogeneity of variances of this variable in different educational groups is broken. Therefore, the HSD Tukey post hoc test is used to examine the mean of the fairness perception of foreign toothpaste in different groups of occupational variables. The value of sig is more than 0.05 between all occupational groups, which shows that the fairness perception of Iranian-made shoes and foreign refrigerators in different occupational groups are not significantly different.

In the first, third, and fifth scenarios, the sig value for all products is higher than 0.05 and the homogeneity of variances in different age groups is confirmed, which indicates that the fairness perception in all products in different age groups is not significantly different. However, in the second scenario, the value of Sig in the Anova table for Iranian toothpaste and Iranian shoes, and in the fourth scenario, the value of sig for the Iranian refrigerator is less than 0.05 . Thus, the homogeneity of variances of this variable in different age groups is broken. Therefore, the HSD Tukey post hoc test is used to evaluate the mean of fairness perception variable of foreign toothpaste in different occupational groups variables. And the value of sig is more than 0.05 between all age groups, which shows that the fairness perceptions of the mentioned products in different occupational groups are not significantly different.

In the second and fourth scenarios, the value of sig for all products is more than 0.05 , and the homogeneity of variances in different income groups is confirmed, which indicates that the fairness perception is not significantly different in all products in different income groups. But in the first scenario, the value of Sig in the Anova table is less than 0.05 for Iranian-made toothpaste and the average of Iranian market basket, and in the third scenario, the value of sig is less than 0.05 for the Iranian-made shoes and in the fifth scenario for Iranian chocolate and the Iranian market basket. And the homogeneity of variances of this variable in different income groups is broken.

For this purpose, the HSD Tukey post hoc test is used to examine the mean of the fairness perception variable in different groups of income variables. Given that employees in Iran get a pay raise once a year and the sharp increase in the exchange rate and the ensuing economic crisis occurred in less than a year, it can be concluded that despite the sharp rise in exchange rates and the economic crisis, employees' salaries remained stable during the study. In the first scenario, for the Iranian-made toothpaste product, the sig value is less than 0.05 among people with incomes less than 5 ; between 5 to 10 and between 10 to 15 with people having incomes higher than 20 . This indicates that there is a significant difference in the fairness perception of Iranian toothpaste in these different income groups. And the positive average relationship between people with incomes above 20 and people with incomes less than 15 million shows that the level of fairness perception is higher among the people who have an income of more than 20 million compared to those who have an income of less than 15 million tomans. In the fifth scenario for Iranian chocolate, the sig value is less than 0.05 among people with incomes above 20 million tomans and less than 5 million tomans. This indicates that the perception of fairness of Iranian chocolate among these various income groups is significantly different, showing a positive relationship between people with incomes above 20 million and people with incomes below 5 million tomans. So, the fairness perception among the people with an income of more than 20 million is more than people with an income of less than 5 million tomans, which indicates that the fairness perceptions of the Iranian market basket in these various income groups are significantly different. And the positive relationship between people with incomes above 20 million and people with incomes less than 5 million tomans shows that the fairness perception among people with incomes above 20 million is higher than people with incomes less than 5 million tomans. In the fifth scenario for the Iranian market basket, the sig value among the people with incomes above 20 million and less than 5 million is less than 0.05 .

## 5. Conclusion and analysis

In the first scenario, in both durable and FMCG, the seller has no transparency in price increases and when the customer asks about the reason for the price rise, the seller fails to provide any explanation. This prompted the respondents to consider the increases in the prices of Iranian-made products as unfair. In comparison, in the second scenario, the reason for the $100 \%$ increase in prices is somewhat clarified, and the seller blames the increase on rising costs of production and raw materials. In this case, respondents consider price spikes in 4 of the 5 types of Iranian-made products, including refrigerators, cars, shoes, and Iranian chocolate, as unfair. And the fairness perception of the price increase is significantly higher than the average in 4 types of foreign-made products, including refrigerators, toothpaste, shoes, and chocolate.

So, in general, from the consumer's point of view, it is unfair if a $100 \%$ increase in the exchange rate leads to a $100 \%$ increase in the price of Iranian-made products (excluding toothpaste) (even with the transparency of the price increase). This may be because the consumer does not consider the seller's explanation sufficient or does not trust it. Under the current situation in Iran, instant increases in prices led to customers ' distrust in sellers despite the growing transparency of prices.

In the third scenario, while the price of the currency has risen $100 \%$, the price of products increased only $50 \%$, and the price increase of 3 out of 5 types of Iranian-made products, including toothpaste, car, and Iranian chocolate, is considered unfair. Since most of the raw materials in the production of chocolate and toothpaste are domestic and not dependent on the exchange rate, increasing the price of this type of product is considered unfair. Also because manufacturers use the foreign currency at the government-subsidized rate to import major automotive components which is much cheaper than the open market rate, from the consumer's point of view, the increase in the price of this type of products, in line with the increase in the open market currency price, is considered as unfair.

In the fourth scenario, while the payment terms are more optimal and the consumer can pay for the purchase in installments, a $100 \%$ increase in the price of Iranian-made refrigerators, cars, shoes, and chocolate is considered unfair. This means that even payment in installments cannot justify the increase in prices for the consumer (except for toothpaste). In the fifth scenario, changes in product characteristics are not a good reason to increase prices, and the respondents consider the price increase in all 5 types of products to be unfair. This may be due to the fact that they see the changes in features as a reason for reducing the quality and efficiency of the product.

The increase in the price of Iranian-made refrigerators is considered unfair in all scenarios except the third one. This means that price transparency, changes in product features, and installment payment are not viewed as fair reasons to increase prices. The increase in the price of Iranian-made cars is considered unfair in all scenarios. Since the consumer generally considers the Iranian cars as a low-quality product(Based on the reports on the high number of annual casualties in road accidents in Iran which are mostly blamed on low-quality cars), and also the manufacturers use the government exchange rate currency, which is much lower than the open exchange rate, the consumer sees any price increase of Iranian-made cars as unfair.

The increase in the price of Iranian-made shoes is considered unfair in all scenarios except the third one. This means that price transparency, changes in product characteristics, and payment in installments are not fair reasons to increase prices.

The increase in the price of Iranian chocolate is considered unfair in all scenarios. Since the Iranian consumers generally consider the cost of raw materials for the production of Iranian-made chocolate not dependent on the exchange rate, they view any price rise due to the increase in the exchange rate as unfair.

In all scenarios, increasing the price of the Iranian market basket is unfair. And in the second scenario, where the price increase is made transparent, the increase in the price of the foreign market basket is more than the average. In general, consumers consider the increase in the price of the Iranian market basket to be unfair, despite the price transparency and change in payment terms, characteristics, and optimization of the products. Since daily prices change on an almost daily basis in Iran, the increase in the exchange rate is deemed as only one of the factors affecting the prices, (Other factors such as rise in gasoline prices, gold prices, etc. are the excuses to increase the price of domestic goods), making the buyers distrustful of the seller. This distrust has negatively affected any explanations by the sellers to justify the increase in price or change in the characteristics and payment terms of the products.

Table 2. Final Result

| Scenario | Iranian \& Foreign <br> market basket | Iranian \& Foreign <br> Chocolate |  <br> Foreign <br> Shoes |  <br> Foreign Cars | Iranian \& Foreign <br> Toothpaste | Iranian \& Foreign <br> Refrigerator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ |
| 2 | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ |
| 3 | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}>0.05$ |
| 4 | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}>0.05$ | $\mathrm{Sig}<0.05$ |
| 5 | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ | $\mathrm{Sig}<0.05$ |

A pairwise comparison of the domestic and foreign market basket in all scenarios shows that the level of fairness perception in the foreign market basket is significantly higher than the level of fairness perception in the domestic market basket. Since the price of imported products depends on the exchange rate, it is reasonable and justifiable to conclude that an increase in the price of foreign products is considered fairer than domestic ones. Also, the pairwise comparison of all products in all scenarios shows that the perception of fairness in all products in all scenarios (except for the refrigerator in the third scenario and the toothpaste in the fourth scenario, where there was no significant difference between the average Iranian and foreign goods), the fairness perception of foreign products is significantly higher than the of fairness perception of domestic products in all scenarios.

The fairness perceptions of foreign refrigerators and foreign toothpastes are different among married and single people in the third scenario, where the seller announces a $50 \%$ increase in prices while the exchange rate has increased by $100 \%$. The reason for this difference may be due to the fact that married people are more involved in buying basic products such as refrigerators and consumer products such as toothpaste. As a result, they consider a $50 \%$ increase in prices despite a $100 \%$ rise in the exchange rate fairer than single people who are sometimes not primarily responsible for household purchases.

The fairness perception of consumer products such as toothpaste, among people with different incomes in the first scenario where the seller has no information about the price increase, is different among people with incomes above 20 million tomans and incomes below 15 million tomans.

This conclusion is reasonable for the consumer products that stand for the largest volume of household products. Usually, for people with high incomes, the seller's explanation about the price increase is not an important factor in fairness perception. But for the people with lower incomes, the seller's explanation of the price increase is much more important, and if the seller does not provide any explanation, the price increase is considered unfair. Finally, in the Iranian market basket, in the fifth scenario, where the seller offers reasonable explanations about the change in the characteristics of the product to balance the price, the price increase is considered fairer for people with an income of more than 20 million tomans compared to people with an income of less than 5 million tomans. Given that people with lower incomes use Iranian-made products more than people with higher incomes, and according to the reports of the Research Center of Islamic Legislative Assembly in October 2020, regarding the poverty line in Iran, which affects people with a monthly income of 7 million and 300 thousand tomans, people with incomes of less than 5 million tomans who fall below the poverty line do not accept any justification or argument for the price increase.

## 5-1. Limitations and Suggestions

In this study, the increase in the prices of products was $50 \%$ or $100 \%$. While in reality the price increase can be much less or much more than $100 \%$ and this rate can affect the perception of price fairness. It is suggested that future research measure fairness perceptions at different incremental rates. In this research, luxury products are not included, it is suggested to add luxury products along with other types of products so that the fairness perception can be measured with the increasing price of this type of product.

Also, customers' fairness perception of price increases has been measured. It is suggested that future research study customers' behaviors and the consequences of unfairness perception (Such as not buying again, insulting or complaining about the company and negative publicity against the company, etc.). Since the statistical population of this study was in Iran, it is suggested that similar studies be conducted in other countries that have experienced a
currency crisis. Also, the data of this research was collected through a questionnaire. It is suggested that in future research, customers' reactions and their perception of the fairness of price increases amid a currency crisis be measured in a laboratory and real stores. Also, it is recommended to use qualitative methods such as focus groups and in-depth interviews, and field observations, to achieve more in-depth analyses.

Also, this study was limited to physical products. It is suggested that future research also examine and analyze price increases in services that come amid a currency crisis.

This study has not investigated the impact of price fairness on brand image. Given that it is one of the important factors in trusting sellers which affects the fairness perception of price increase, it is suggested that future research focus on brands of each product to analyze its popularity as a variable.

Since the level of income plays an important role in the choice of Iranian or foreign goods and also affects the perception of fairness of customers, it is suggested that the statistical community of the research include people the with same income level to compare and analyze the results more logically.

Also, according to the results of the research, it is suggested that sellers be as transparent as possible about the price increase and avoid implementing the first scenario in times of crisis to increase the fairness perception.

Since this research only addressed the shopping cart of goods that contain both FMCG and durable goods, it is suggested that in future studies, different types of FMCG and durable goods be examined, to gain more generalizable results.
Also, given the fact that price increases are inevitable during an economic crisis, the sellers are recommended both to get more transparent about the reason for the price increase and consider creating values for their customers.

## References

Alegre, J., \& Sard, M. (2015). When demand drops and prices rise. Tourist packages in the Balearic Islands during the economic crisis. Tourism Management, 46, 375385.
Balaga Mohana Rao \& Puja Padhi (2020): Macroeconomic costs of currency crises in BRICS: an empirical analysis, Macroe, economics, and Finance in Emerging Market Economies
Beldona, S., \& Namasivayam, K. (2006). Gender and demand-based pricing differences in perceived (un)fairness and repatronage intentions. Journal of Hospitality \& Leisure Marketing, 14(4), 89-106
Bertrandie, L., and S. Zielke. 2019. "The Influence of Multi-Channel Pricing Strategy on Price Fairness and Customer Confusion." The International Review of Retail, Distribution and Consumer Research 29 (5): 504-517
Bolton, L. E., Warlop, L. \& Alba, J. W. (2003). Consumer perceptions of price (un)fairness. Journal of Consumer Research, 29(4), 474-491.
Bolton, L. E. \& Alba, J. W. (2006). Price fairness: Good and service differences and the role of vendor costs. Journal of Consumer Research, 33(2), 258-266
Bolton, L. E., H. T., Keh, and J. W. Alba. 2010. "How do price fairness perceptions differ across culture?." Journal of Marketing Research 47 (3): 564-576
Bundy, J., Pfarrer, M.D, Short, C.E. \& Coombs, W.T. (2017). Crises and Crisis Management: Integration, Interpretation, and Research Development. Journal of management 43, 6: 1661-92.
Campbell, M.C.,(1999).Perceptions of price unfairness: antecedents and consequences.J.Mark.Res.36(2),187-199.
Campbell, Margaret C. (2007), Says Who?! How the Source of Price Information and Affect Influence Perceived Price (Un)fairness, Journal of Marketing Research 44 (May), 261-71
Choi, C., Jeong, M. \& Mattila, A. S. (2015). Revenue management in the context of movie theaters: Is it fair? Journal of Reve nue and Pricing Management,14(2), 72-83.
Coskun, E., Ozceylan, D., (2011). Complexity in emergency management and disaster response information systems (EMDRIS). Paper Presented at the 8th International ISCRAM Conference.
David Martín-Ruiz Francisco Javier Rondán-Cataluña, (2008), "The nature and consequences of price unfairness in services: a comparison to tangible goods", International Journal of Service Industry Management, Vol. 19 Iss 3 pp. 325 - 352
Dutta, S., Yaprak, A., \& Grewal, D. (2017). Fairness perceptions of retail price increases by foreign and domestic brands: The roles of ethnocentric beliefs, profit stickiness, and contextual information. Journal of Business Research, 75, 37-45
Ferguson, M., \& Barry, B. (2011). I know what you did: The effects of interpersonal deviance on bystanders. Journal of Occupational Health Psychology, 16(1), 80-94

Ferguson, J. L. (2014). Implementing price increases in turbulent economies: pricing approaches for reducing perceptions of price unfairness. Journal of Business Research
Grewal, Dhruv, David Hardesty, and Gopal Krishnan Iyer (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),87-100
Heo, C. Y., \& Lee, S. (2011). Inlfuences of consumer characteristics on fairness perceptions of re「enue management pricing in the hotel industry. International Journal of Hospitality Management, 30, 243-251
Herrmann, A. (2007). Pricing strategy \& practice: The influence of price fairness on customer satisfaction. Journal of Product \& Brand Management, 16 (1): 49-52.
Homburg, Christian, Wayne D. Hoyer, and Nicole Koschate (2005), Customers' Reactions to Price Increases: Do Customer $\square$ Satisfaction and Perceived Motive Fairness Matter?, Journal of the Academy of Marketing Sciences 33 (Winter), $36 \square 49$
Hunt, S. D., \& Morgan, R. M. (1995). The comparative advantage theory of competition. Journal of Marketing, $1 \square 15$.
Kahneman, D., Knetsch, J.L. and Thaler, R. (1986), "Fairness and the assumptions of economics", Journal of Business, Vol. $59 \square$ No. 4, pp. 284-300.
Kantar (2020). Coronavirus outbreak's impact on China's consumption $\square$
Kauffman, R.J., Lee, D., Lee, J.L., Yoo,B.,2009.Ahybrid firm's pricing strategy in electronic commerce under channel migration. Int.J.Elect.Com.14(1),11 54.
Kimes, S.E. (2002), "Perceived fairness of yield management", Cornell Hotel \& Restaurant Administration Quarterly, Vol. $43 \square$ No. 1, pp. 21-30.
Kimes, S. E. \& Wirtz, J. (2003). Perceived Fairness of revenue management in the US golf industry, Journal of Revenue \& Pricing Management, 1(4): 332-344.
Kim, Minsun; Roehl, Wesley; Lee Seul Ki (2019), Effect of hotels' price discounts on performance recovery after a crisis, $\square$ International Journal of Hospitality Management
Kukar Kinney,M.,Xia,L.,Monroe,K.B.,2007.Consumers' perceptions of the fairness of price-matching refund polici.J.Retail.83(3),325 1337.
Martin-Consuegra, D., Molina, A., \& Esteban, A. (2007). An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. Journal of Product \& Brand Management 16/7, 459 468
Martin, William C. \& Ponder, Nicole \& Lueg, Jason E., (2009). "Price fairness perceptions and customer loyalty in a retail context," Journal of Business Research, Elsevier, vol. 62(6) 10.1016/j.jbusres.2008.05.017
Maxwell, S. \& Comer, L. (2010). "The two components of a fair price: social and personal", Journal of Product \& Brand $\square$ Management 19/5, PP. 375-380
McCarville, R. E., Reiling, S. D. \& White, C. M. (1996). The role of fairness in user's assessments of firs $\square$ time fees for a public recreation service, Leisure Sciences, 1 (18): 61-76.
Semerciöz, Fatih, Pehlivan, Çağlar, Sözüer, Aytuğ,Mert, Aslı (2015), Crisis management practices and strategic responses $\square$ through customer loyalty and price strategy in hard times: Evidence from fine-dining restaurants, 11th International Strategic Management Conference 2015
Spreng, R. A., Dixon, A.L., \& Olshavsky, R.W. (1993). The impact of perceived value on consumer satisfaction. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 6(1) $50 \boxed{55}$
Taylor, W. J., \& Kimes, S. E. (2010). How hotel guests perceive the fairness of differential room pricing. Cornell Hospitality Reports, $10(2), 6-13$
Urbany, J.E., Madden,T.J., Dickson,P.R., 1989. All's not fair in pricing: an initial look at the dual entitlement principle. Mark. Lett.1(1),17 25.
Vaidyanathan, R. \& Aggarwal, P. (2003). Who is the fairest of them all? An attributional approach to price fairness perceptions, Journal of Business Research, 56: 453-463.
Vogel, J., \& Paul, M. (2015). One firm, one product, two prices: Channel based price differentiation and customer retention. Journal of Retailing and Consumer Services, 27, 126-139.
Wirtz, J.; Kimes, S.E. The moderating role of familiarity in fairness perceptions of revenue management pricing. J. Serv. Res. 2007, 9, $229-240$.
Xia, L., K. B. Monroe, and J. L. Cox. 2004. "The price is unfair! A conceptual framework of price fairness perceptions." Jou nal of Marketing 68 (4): 1-15.
Xia, L., Kukar-Kinney, M., Monroe, K.B.,2010. Effects of consumers' efforts on price and promotion fairness perceptions. J. Retail.86(1),1 $\square 0$.


Mohsen Nazari, PhD. He is an associate professor in the Department of Business Administration, Faculty of Management, University of Tehran. He has many books and translations, including microeconomics, macroeconomics, pricing journey, pricing strategies and methods, etc. His favorite field of research is pricing, and a collection of price management books is published under his supervision.


Atefeh Hesaraki, PhD. She has a doctorate in business administration, majoring in marketing, from Tehran University's Faculty of Management. The field of research interest mentioned is multi-channel companies; Security is channels and pricing. Under the supervision of Dr. Mohsen Nazari, he has translated 2 books from the collection of pricing books called "Pricing and Sales Force" and "Innovation in Pricing" and edited one book. She has also published numerous articles in scientific-research journals and prestigious conferences.


[^0]:    Journal of Advertising and Sales Management, 2022, Vol. 3, No.4, pp. 4-16
    *Corresponding Author.
    E-mail Address: Mohsen.nazari @ut.ac.ir
    Article Type: Research Paper
    Received: 02/11/2022
    https://doi.org/10.52547/JABM.3.2.8
    2717-0837/@ Authors All rights reserved.
    Published by Persian Gulf University, Faculty of Management
    Please cite this article as: Mohsen Nazari \& Atefeh Hesaraki. (2022). Fairness Perceptions of Price Increases in the Case of Currency Crisis Affecting Domestic and Foreign Brands. Journal of Advertising and Sales Management, 3(4), 4-16.
    http://dx.doi.org/10.1016/j.cviu.2017.00.000

