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The willingness to pay for cause related products: Empirical evidence from a conjoint analysis in Mexico

La disposición a pagar más por productos vinculados a la RSE: evidencia de un análisis conjunto en México

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Abstract

Marketing campaigns aligned with Corporate Social Responsibility (CSR) are becoming more common as a strategy to attain brand differentiation and consumer preference. However, the challenge for many companies is understanding how social and environmental campaigns sponsored by a brand affect the purchase decision of the consumer and how these campaigns generate financial and social benefits. In view of the fact that consumers make purchase decisions based on different attributes, we utilized the joint analysis to determine the impact of three attributes in purchase decisions: CSR campaign, brand, and price. Information from a sample of consumers was collected through an electronic survey and it was analyzed using a regression model with panel data. Based on this sample, the direct and indirect effect of the CSR campaigns regarding consumer preference were determined, and a method to map the increase in the preferences in their monetary equivalent was developed. The results suggest that the consumer is willing to pay a premium of approximately 22% for leading products in the studied category associated to campaigns with a social cause, compared to 10% in products that are not that well positioned. This effect is not present in environmental campaigns. In this manner, it is demonstrated that social campaigns create financial benefits for the company while society benefits from the participation of the consumer in this type of campaigns.

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JEL Classification: M14, M21, M31, D40

Keywords: Brand Preference, Corporate Social Responsibility, Premium, Joint Analysis, Equivalent Discount.

Resumen

Las campañas de mercadotecnia alineadas a prácticas de Responsabilidad Social Empresarial (RSE) son cada vez más comunes como una estrategia para lograr la diferenciación de marca y la preferencia de los consumidores. Sin embargo, el reto para muchas empresas está en entender como impactan las campañas sociales y ambientales patrocinadas por una marca en la decisión de compra del consumidor y cómo estas campañas generan beneficio económico y social. Considerando el hecho de que los consumidores toman decisiones de compra basándose en varios atributos, utilizamos el análisis conjunto para determinar el impacto de tres atributos: campaña de RSE, marca, y precio en las decisiones de compra. Se recolectó información de una muestra de consumidores mediante una encuesta electrónica y se analizó utilizando un modelo de regresión con datos panel. Con base a esta muestra, se determinaron los efectos directos e indirectos de las campañas de RSE en la preferencia del consumidor y se desarrolló un método para mapear el incremento en las preferencias en su equivalente monetario. Los resultados arrojan que el consumidor está dispuesto a pagar un sobreprecio aproximado de 22% por productos líderes en la categoría estudiada asociados a campañas con causa social, en comparación a un 10% en productos menos posicionados. Este efecto no está presente en campañas ambientales. De esta forma, se demuestra que las campañas sociales crean beneficios económicos para la empresa mientras que la sociedad se beneficia de la participación del consumidor en este tipo de campañas.

Códigos JEL: M14, M21, M31, D40

Palabras clave: Preferencia de Marca, Responsabilidad Social Empresarial, Sobreprecio, Análisis Conjunto, Descuento Equivalente.

Introduction

In recent years, an increase in the generation of products and services linked to Corporate Social Responsibility (CSR) has been perceived. Companies, in their aim to be recognized as socially responsible, attempt to establish a connection with the consumers through the development of communication campaigns that highlight areas such as: 1) the preservation of non-renewable resources, 2) the preservation of the biosphere, and 3) the creation of a better society (Veenhoven, 2008). This business connection is generally achieved by aligning the CSR campaigns with what the consumers think. For example, in Mexico, market research has shown an increase in the interest for the consumption of sustainable products and services. Similarly, the TNS Research International Mexico reports that 70% of the consumers surveyed would be willing to pay a premium for ecological products, while 43% indicated that environmental care affects their purchasing decisions (TNS, 2011). Similarly, 95% of European consumers consider it good to purchase environmentally friendly products, and 54% of them intend to buy this type of products (TNS, 2013).

In the cause marketing campaigns, the most common process entails companies contributing with a predetermined monetary amount each time the consumer acquires one of their products (Berglind and Nakata, 2005; Varadarajan and Menon, 1988). This type of campaigns has become a common practice in markets in recent times. For example, data from the study carried out by the IEG in the United States report a growth of 3.7% in 2015, reaching an expense of

1,912 million American dollars in this type of campaigns (Cause Marketing Forum, 2015) with a similar trend globally. Edelman (2014) reports that according to the IEG, the expense in cause marketing has increased almost 200% in the past ten years and will become more important in brand awareness (WFA, 2013) and in the generation of value for the company (Barone, Miyazaqui and Taylor, 2000). Considering the proliferation of this type of campaigns, it is essential to analyze which elements have more impact on the consumer in a cause marketing offer with regard to their purchasing decision process.

A fact that has been proven in previous investigations is that consumers do not evaluate only one attribute of the offer when making their decision, rather they evaluate a set of them (Lusk and Shogren, 2007). Previous studies have separately evaluated the impact of some of the product attributes, such as the brand, quality certifications, price, and the social responsibility campaigns on consumer preference (Aaker and Keller, 1990; Keller, 1993; Elliot and Cameron, 1994; Barone, Miyazaki and Taylor, 2000; Mohr and Webb, 2005; Van den Brink, Oderken Schöreder and Powels, 2006). However, the results have been inconclusive, as some state that consumers buy under the traditional criterion of price, quality, and brand recognition (Boulstridge and Carrigan, 2000; Marin, Ruiz and Rubio, 2009) and for personal and non-social reasons (Beckmann, Chirstensen and Christensen, 2001).

Even more important, the existing literature has not taken into consideration the simultaneous study of these variables in purchase intent. Based on the foregoing, the objective of this research is to confirm the joint effort that the type of CSR campaign, brand, and price have on the preference level of the consumer. In this manner, we can conclude which type of campaigns are more effective to achieve consumer preference and their intention to pay more for a product linked to a CSR cause. The results of this study attest to the moderating effect of the CSR campaign on price elasticity and the recognition of "x" brand in a product with cause. In other words, consumers perceive that when they pay more for a cause-related product the society benefits from those donations and also from those of the firm. Furthermore, in the category of basic consumer goods (i.e. milk) the results of this study prove that social campaigns increase the effectiveness of the leading or most renowned brands by 22% and reduces the negative impact of an increase in price.

This work is structured in three sections. The first section presents a literature review on CSR and marketing initiatives followed by a theoretical framework where the hypotheses of this investigation are established. The second section details the methodology followed to collect data and their processing. The third section analyzes and presents the results obtained through panel data modeling. Finally, we analyze the contribution of each variable included in the model independently to discuss how the Mexican consumer is influenced in his purchase preference by the CSR efforts of the companies. Furthermore, we suggest future lines of research to learn in more detail the interaction of these variables and thus be able to overcome some of the limitations of this study.

Literature review

The CSR concept has been defined differently by various authors and organizations, creating a broad spectrum of concepts that have not been unified (Briseño, Lavín, & García, 2011; Marsden, 2006; McWilliams et al., 2006). For the purposes of this work, we will take into consideration the concept generated by the European Union through their Green Book on

Corporate Social Responsibility. In this document, CSR is defined as the voluntary integration of social and environmental concerns in corporate operations and in the interactions of the companies with the stakeholders. This means that it entails the making of decisions that go beyond the minimal legal requirements in order to address social needs (European Commission, 2001).

In countries where the economy is still developing, the concept of CSR is still in its early stages when compared with developed countries. A portion of these differences is focused on the relation between the government and the company (Vives, 2008), as well as on the lack of knowledge and/or interest of the consumers regarding the responsibilities of the company to society (Barroso, 2008; Guzmán, Becker-Olsen and Hill, 2008).

To identify the activities related to the CSR, Carroll (1991) proposes a model that incorporates the four responsibilities that a company can undertake and the interactions among these. Carroll classifies the responsibilities into four groups: a) financial, b) legal, c) ethical, and d) philanthropic. With this classification, Carroll suggests that corporate responsibilities do not lie only in the generation of profit, but that there are others that must be addressed with the same importance. One aspect to consider in this concept is that each of these responsibilities can be examined from the individual perspective of the stakeholder, which could generate communication strategies that do not satisfy the expectations of the consumers.

This expanded view of corporate responsibilities has made it possible to place greater attention on all activities done by companies to meet their financial objectives. Marketing, as one of these activities, has had an important role in the inclusion of the CSR concept. For example, Smith and Williams (2011) acknowledge the importance of marketing in the decision-making process regarding the design and commercialization of products; not only from the point of view of generating a profit, but also taking into consideration the negative effects that could arise in any of the activities of the business.

Given this acknowledgment, there are more and more opinions that consider marketing as a tool used by CSR to find an ideal platform to launch its initiatives (Piercy and Lane, 2009; Smith and Williams, 2011). For example, Piercy and Lane (2009) suggest that the involvement in CSR initiatives creates competitive advantages for companies. For the use of these advantages, marketing has a relevant role, especially in the dissemination of social and environmental initiatives given the growing social demand for corporate disclosure and transparency (Piercy y Lane, 2009).

In this relation between marketing and CSR, a recurring approach has been to identify the impact that social and environmental initiatives have on the consumer to determine their effectiveness. Different investigations have tried to identify the reactions of the consumer during the purchasing decision process (Sheikh and Beise-Zee, 2011; Tian, Wang and Yang, 2011). For example, in their investigation, Sheikh and Beise-Zee (2011) find a positive relation between the actions of CSR and consumer perception. Furthermore, these researchers suggest that social and environmental initiatives must be designed based on the particular characteristics of the consumers of the product to generate a greater impact. Additionally, Titan et al. (2011) find evidence of the consumer reactions before CSR initiatives. Particularly, significant results can be found in their research regarding the perception of the consumer towards the company (whether it is truly responsible to society or if it is only a façade) and their purchase intent. However, despite these advances in the literature, the joint impact of the attributes of CSR campaigns on the purchase intent of the consumer has not been sufficiently discussed. Given that consumers evaluate multiple attributes when purchasing products related to CSR, the literature has only partially shown the effects of purchase intent.

Theoretical Framework

Petkus and Woodruff (1992) delve into the concept of CSR described in the section above to include the idea that the company can simultaneously avoid damages derived from its operation and do good. In this sense, Bloom, Hoeffler, Keller and Basurto (2006) define the CSR programs as the corporate initiatives carried out to provide money and other resources, and/or to disseminate a social aid message, which would seek to create an association between the supported cause and the company or one of its brands in the mind of the consumer.

Bloom et al. (2006) identify the different types of CSR programs that the company can support. One of them is cause marketing, where for each unit of sold product a percentage is donated to a cause. For these authors, the benefits that allow to obtain the CSR campaigns are, among others: the possibility to establish higher prices, increase the participation of markets, differentiate themselves from competitors, obtain a greater loyalty to the brand, and improve the reputation of the company among its stakeholders.

This study analyzes the type of brands that are favored with the utilization of a CSR campaign in products with high involvement and which are of basic/utilitarian use (i.e. milk) and the effectiveness of three CSR campaigns (i.e., social, ecological and against the abuse of farm animals) on the preference of the consumers for said brands.

Some of these previous studies have evaluated the impact of CSR campaigns on brand and company image. Others have done comparative studies to determine the type of social campaigns that are more effective, while some others have evaluated how much more willing the consumer is to pay for a product that is sustainable or that is associated to a cause. However, these studies only present one incentive for the participant. This investigation evaluates consumer preference considering the three attributes (i.e., brand, price, and CSR campaign) simultaneously through a joint analysis. The rationale behind the joint analysis is that people make decisions based on a set of elements and not just on a single one (Lusk and Shogren, 2007). According to these authors, one of the advantages of this technique is that none of the attributes stand out, so that the participant choses its preferred option based on all the incentives presented.

The impact of CSR campaigns on brand

The preference for a brand by the consumer is a response to the incentives that they receive filtered by their previous conditions, this means that generally they perceive what they need, desire, or is in accordance to their interests (León, 2008). Schiffman and Kanuk (2005) note that consumers judge based on the quality of a product, considering the intrinsic attributes of the same (e.g. color, size, shape, flavor, scent) and extrinsic such as price, the brand image or reputation of the manufacturer or distributor.

The theory of information integration supports this statement, as it establishes that the previous behavior of the consumer come together with the new information acquired to issue an evaluation towards the cause, brand and the relation between them (Lafferty and Goldsmith, 2005).

Among the extrinsic attributes, four factors are of relevance when positioning a company and its brands: reputation, social responsibility, ethics, and transparency (Folse, Niedrich, and Grau, 2010; Krishna and Rajan, 2009; León, 2008). In this manner, the association of a brand with a

CSR campaign has a positive effect on the brand if the consumer perceives that the company has done a genuine social action (Habel, Schons, Alavi and Wieske, 2016). For example, a study done by the Cone company and Duke University (2008) shows that associating a product with a CSR campaign positively impacts its sales. The idea is for the company to use CSR as a differentiator among the competition and for it to connect it to the consumer. Previous studies have determined that the use of CSR positively affects profit-seeking and nonprofit companies (Baghi and Gabrielli, 2012).

However, some studies such as that by Baghi, Rubaltelli and Tedeshi (2010) report partial benefits. According to these authors, the use of CSR campaigns only improves the image of hedonistic products (i.e. those consumed for pleasure) and not that of utilitarian products. These results coincide with those of Chang (2008), who argues that cause marketing is more effective with frivolous products than with practical ones. Our rationale opposes this idea and leans towards the investigation of González Hernández, Orozco Gómez and de la Paz Barrios (2011), who propose that the evaluation of the products is influenced by the involvement conditions of the consumer. For González Hernández et al. (2011), the consumer carries out a more complex assessment when deciding on the purchase of a product with greater involvement, that is, those that have a symbolic value and a higher perceived risk. Both tangible as well as intangible elements, such as values and the image of the company and its brands, are considered for the assessment of this type of products.

In the same vein, we propose that in high involvement products such as milk, brand comprises a quality and reliability symbol. The consumer will seek to support a brand that takes care of their needs but that also represents their values (González Hernández et al., 2011). The brands that make a greater communication effort receive greater recognition by the consumer. This means that the consumer is more familiarized with the brands that advertise more. It is easier for most consumers to know the values of a company that sells at a national level than those of a company that is only known in a region. The knowledge of the values of the company allows the consumer to evaluate if the social campaign undertaken is genuine and whether it deserves their support (Habel et al., 2016). For this reason, and in opposition to the previous study by Arora and Henderson (2007), who argued that the effects of cause marketing are greater for lesser known brands, we propose that the CSR campaigns of more renowned brands will have a better acceptance by the consumer compared to the lesser known brands.

Thus, this investigation proposes that CSR campaigns have a greater direct positive effect on consumer preference for brands with high involvement products (expressed in brand recognition) compared to brands with medium or low involvement.

Similarly, different CSR campaigns have different levels of acceptance by the consumer and thus it affects their effectiveness. The study by Cone and Duke University (2008) also shows that the most attractive causes for consumers are those related to health/sickness, the environment, and the financial development of the communities. Some studies have evaluated the variables that affect this preference and the effectiveness of the campaign. For example, the greater the affinity between the social cause and the company or the product, the more the consumer will be willing to donate (Kuo and Hamilton, 2015; Arora and Henderson, 2007; Lichtenstein, Drumwright and Braig, 2004; Pracejus, Olsen and Brown, 2003). If the consumer has a favorable perception of the alliance, the perception of both the company and the cause improve (Habel et al., 2016; Lafferty, Goldsmith and Hult, 2004), and the freedom to choose the social cause increases the purchase intent (Robinson, Irmak and Jayachandran, 2012). We propose the following model in this investigation:

Figure 1 Proposed outlined model



Derived from the foregoing we present the following hypotheses:

- *H1:* In the absence of CSR campaigns, the preference of consumers is higher when the brand is better known.
- H2: A CSR campaign, be it for a Social or Ecological cause, increases the preference of the consumers for all brands.
- H3: A CSR campaign, be it for a Social or Ecological cause, increases the preference of consumers more for better known brands than for lesser known brands.

The effect of CSR campaigns on prices

CSR campaigns aim to support society, but the expectation is also for the company/brand to receive some sort of benefit. According to Edelman (2014), close to 80% of consumers in emerging countries do not have a problem accepting that a company or brand carries out a social responsibility campaign and that they obtain a certain profit from it. Said consumers are willing to trust more and recommend the brands that support a social cause, even if that entails changing brands. Similarly, the study reports that 54% of consumers are willing to pay a premium for the products of said brands.

Traditionally, the economic theory argues that people look to rationally maximize profits (Simon, 1959). Under this theory, the price paid for a product is a cost that should be limited. The consumer seeks to buy the best products at the best possible price. Thus, from the perspective of the consumer, price has a negative image.

However, based on opinion studies such as those by Edelman and on previous academic studies that report the intent to pay more for products produced in a socially responsible manner (Alphonce and Alfnes, 2012; Ha-Brookshire and Norum, 2011; Subrahmanyan, 2004), we suggest that CSR campaigns reduce this negative perception.

Other studies reinforce this idea. Henderson and Arora (2010) found that cause marketing is more effective than a reduction in price. Koschate-Fischer, Stegan and Hoyer (2012) and

Popkowski-Leszcczyc and Wong (2010) argue that as the amount of the purchase that is donated to the cause increases, then the price that the consumers are willing to pay for the product also increases. The requests for rounded amounts (prices or donations in absolute numbers) are more effective than those expressed in percentages, as they are easier to understand (Chladek, Florack and Kleber, 2013). Similarly, Winterich and Barone (2011) conclude that people with an interdependent profile (less independent) prefer to acquire products associated to a cause than having a discount on the price. More recently, Habel et al. (2016) found out that consumers are willing to pay more for a socially responsible product (i.e., they consider it fair) if they trust the company and consider that the increase in price is not just a financial strategy to increase its profit.

As shown in Figure 1, in this study we propose the following hypotheses concerning the willingness of the consumers to pay a premium:

H4: In the absence of CSR campaigns, increases in the price of the product reduce the preference of the consumer.

H5: A CSR campaign, whether it has a Social or Ecological cause, reduces the negative effect of the price on the preference of the consumers.

The five hypotheses of this work can be described in Figure 1. The direct or marginal effects of brand recognition (H1), the CSR campaign (H2), and the price (H4) are described in the paths or arrow that go from these variables to the preferences. The model also includes two indirect effects through which CSR campaigns can operate, interacting with the recognition of the brand (H3) or reducing the penalty on the preferences that causes an increase in prices (H5). These indirect effects are denominated in the literature as "moderators" (Hayes, 2013), as they imply that the effect of an independent variable (i.e., brand or price) on the dependent variable (i.e., preference) is different if another variable is present—in our case the CSR campaign— and they are represented by the arrows that go from the CSR to the paths of brand recognition and price with the preferences.

In this sense, the CSR moderates the effect between the brand and the preferences and the price and the preferences, which makes it a *moderator variable*. This variable is also called interaction, as the effect of the brand and/or the price is no longer independent from the CSR but rather it interacts with it. In the rest of this work we will use the terms interaction and moderation as synonyms.

Methodology

For the implementation of the joint analysis in this study, we selected three attributes: (1) a product of frequent use, basic and of high involvement, (2) different corporate responsibility campaigns, and (3) different price levels to be able to create different sale offers. Milk was chosen as it is a known product that is purchased by the majority of the adult population. According to the United Nations Food and Agriculture Organization, more than 6,000 million people consume milk in the world. According to this organization, the majority of Latin America, including Mexico, have a milk consumption that goes from 30 to 150 kilograms per capita per annum (FAO, 2015). In fact, the consumption of milk per capita is increasing as consequence of urbanization, the change in dietary habits, and an increase in income. Milk is

also a product that requires a greater involvement, as it is related to health and the well-being of families (FAO, 2015).

Once the product has been selected, we carried out an study through social media to identify the better known and more reliable brands in the Mexican market and the brands that are only recognized in certain regions. The responses obtained indicate that the Lala brand is the most known brand in Mexico, Nutri Leche is moderately recognized, and the Carranco brand is little known. In this manner, we obtained brands with levels of recognition that go from high to low.

For the attribute of the CSR campaign, we looked into the reports of surveys done at a global level for the causes that are most important to consumers. According to Edelman (2012), 89% of the consumers surveyed at a global level selected the campaigns that improve the health of people and those that protect the environment as the ones they would be more willing to support. For our study, we decided to add a third campaign that would take the role of a neutral campaign and that would serve as reference for the other two options. We selected the campaign to support animal rights (i.e., prevent animal abuse in productive farms), as we considered it to be a campaign that is aligned with the business of the dairy industry and which, as previous studies such as the one by Gupta and Pirsch (2006) argue, increases purchase intent.

Lastly, the Goodpurpose study (Edelman, 2014) reports that 54% of consumers are willing to pay a premium for the products of brands associated with a social cause. Therefore, we selected the market price of one liter of *tetrapack* milk (i.e., MXN\$15.50) as our third attribute and then defined two premium price levels. A moderately high price of \$19.00 pesos with a 22.5% increase and a high price of \$22.00 pesos with a 41.9% increase were established. These premium prices are based on university studies that show that consumers are willing to pay up to a 40% premium price for products that are socially responsible and associated to a cause (e.g. Amezcua, 2015; Alphonce and Alfnes, 2012; Ha-Brookshire and Norum, 2011; Subrahmanyan, 2004).

In this manner, the joint analysis of this study was carried out considering 3 attributes with three levels each, which gives us a total of 27 different attribute combinations. A card was elaborated for each of the combinations to be arranged by the participants according to their preference.

The study was designed to be electronically managed and thus achieve a national coverage, with a greater diversity of participants that have access to the internet or smartphones. The possibility of participating in the study from any mobile device with an internet connection allowed optimizing the economic and time resources. However, the reduced dimensions of mobile devices made the review and arrangement of the 27 cards rather difficult, so we decided to reduce the number of cards using orthogonal designs of Taguchi, which have proven their efficiency in previous quality and development studies for new products (e.g., Raajpoot, Javed and Koh, 2008). The results obtained with the complete factorial designs and with the fractioned arrangements of Taguchi are very similar. The cards that were selected following the methodology of Taguchi and which were used in this study are shown in Annex 1. Each participant was asked to arrange the 9 cards based on their preference and then a reagent test kit was applied to establish the demographics and the patterns of milk consumption. The electronic instrument was distributed via e-mail and social networks between the months of July and August 2015, obtaining 2043 observations.

It is evident that when using electronic media, the results cannot be representative of the national universe. This is one of the limitations of the study, and it is addressed in the conclusions

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where we propose other means to reinforce representation. Even so, social networks have been useful in social researches since participants interact and participate voluntarily in dynamics such as personality tests and, as is our case, surveys (Ellison, Steinfeld and Lampe, 2007). In addition to this, investigations have reported no significant differences in the use of collection methods in social networks when compared to its on-site counterpart (Birnbaum, 2004; Grieve, Witteveen and Tolan, 2014). For the Mexican case, the Mexican Internet Association (AMIPCI, for its acronym in Spanish) reports that in 2015, 53% of the Mexican population uses the Internet regularly. Among internet users in Mexico, 76% is between the ages of 13 and 44. Of these, 46% of them is from the C/D+ socio-economic level and 47% belongs to the higher classes (C+ and A/B) with an equal proportion between men and women. Based on these figures, the AMIPCI confirms the use of electronic surveys as acceptable for the realization of market research. In fact, the AMIPCI found that more than half of the population in Mexico uses the internet frequently, with an annual growth rate of up to 13% in the last two years. These statistics coincide with the global figures where, for example, European countries observe an annual growth of 11% and the population with internet access is around 50% of the total population (We are social, 2015).

In the case of social networks, these have acquired a dominant role in the last couple of years. In Mexico, 89% of Internet users make use of these networks (AMIPCI, 2015). Mexico follows the global trend of social network use, showing an annual growth of 12% and with Facebook as the leading network, with more than 1.366 million reported users in January 2015 (We are social, 2015).

Proposed investigation model

The CSR campaign can directly affect preferences or do so indirectly through the interaction with some other variable or both. Particularly, we propose that CSR campaigns positively increase preferences, but can also make the rating of preferences more sensible to prices, meaning that a higher price would penalize the preference less if there are CSR campaigns when compared to when there are none, or it can make the leading brand more attractive when compared to the brand that is lesser known (see Figure 1). Thus, we can use a lineal preference model of the type:

$$U_{it} = \alpha + \gamma_s S_{it} + \gamma_e E_{it} + \beta_p P_{it} + \beta_s (P_{it} * S_{it}) + \beta_e (P_{it} * E_{it}) + \delta_c C_{it} + \delta_m M_{it} + \pi_s (C_{it} * S_{it}) + \pi_e (C_{it} * E_{it}) + \mu_c (M_{it} * S_{it}) + \mu_e (M_{it} * E_{it}) + \varepsilon_{it}$$
(1)

Where U indicates preference on a 1 to 9 scale, where 1 is the less preferred and 9 the most preferred; S is a dichotomous variable that takes the value of 1 if the CSR campaign has a social cause and 0 if it does not; E takes the value of 1 if the CSR campaign is of the ecological kind and 0 if it is not; P is the price of each expressed alternative in pesos per unit; C takes the value of 1 if the brand is known and 0 if it is not; and finally M is a dichotomous variable that takes the value of 1 if the brand is moderately known and 0 if it is not. The sub-indices i and t refer to the individuals and the cards that they evaluated, the coefficients α , γ 's, β 's, δ 's, π 's and μ 's are the parameters of the model, and ε are the residuals.

Thus, the effects of creating a CSR campaign, be it for a social or ecological cause, for the most renowned brand can be obtained as:

$$\Delta U_{it} = \gamma_j + \beta_j P_{it} + \pi_j \tag{2}$$

Y es igual a (3) para la marca medianamente reconocida:

$$\Delta U_{it} = \gamma_j + \beta_j P_{it} + \mu_j \tag{3}$$

Where "j" can denote the social or ecological cause-related campaign. As can be observed in equations (2) and (3), the direct effect is given by γ_{j} , while the one that operates through the prices is given by β_{j} and the one that operates through the brand recognition by π_{j} and μ_{j} .

Additionally, we can express the increase in the preference or profit (in pesos) of a CSR campaign in the following manner. First, we estimate the increase in the preferences as a result of the CSR campaign, both through its direct and indirect effects through the moderation in the prices and brand recognition. The second step is to estimate how much of a reduction in price would be needed to obtain the same increase in preference granted by the CSR campaign "j" and which was estimated in the first step, if this will not be implemented. This reduction in price will be called *equivalent discount* and the equivalent discount can be placed in proportion to the price to obtain the relative price, which we will call the *equivalent premium* of the CSR campaign, given that in its absence the price would have to be lowered to obtain the increase in preference and the premium would disappear.

To estimate the equivalent discount for the better-known brand, we simply matched the increase in preference given by (2) to the increase in profit if we reduce the price. In symbols, it is represented with the following equation:

$$\Delta U_{it} = \gamma_j + \beta_j P_{it} + \pi_j = \beta_p \Delta P_{it} \tag{4}$$

Solving for the change in prices:

$$\Delta P_{it} = \frac{\gamma_j + \pi_j + \beta_j P_{it}}{\beta_p} \tag{5}$$

The equivalent premium can be estimated through:

$$Premium = -\frac{\Delta P_{it}}{P_{it}} = -\frac{\gamma_j + \pi_j + \beta_j P_{it}}{\beta_p P_{it}}$$
(6)

which is multiplied by the minus sign to express it as a premium. Given that the equivalent discount would necessarily imply a reduction in price, it is negative.

Similarly, for the moderately-known brand the equivalent premium is equal to:

$$Premium = -\frac{\Delta P_{it}}{P_{it}} = -\frac{\gamma_j + \mu_j + \beta_j P_{it}}{\beta_p P_{it}}$$
(7)

Thus, to estimate the direct and indirect effects and their valuation in pesos through the discount and the premium in the equivalent price, we require the estimation of the parameters of the model of equation (1). The estimation can be done with the ordinary least squares method (pooling) as it is a study where the variables: price, social campaign, and degree of recognition of the brand were orthogonally manipulated by the investigators. This makes it possible for the residuals to not be correlated to the regressors. Furthermore, as each individual evaluates

several repetitions of each attribute, it could also be estimated with panel data methods, whether the effects are fixed or random. However, given that the alternatives or cards are the same for each individual, the variance between individuals is zero so that the three models (pooling, fixed effects and random effects) present the same estimations (Wooldrige, 2009).

Analysis of the Results

In terms of the people that participated in this study, Table 1 shows that 97% of respondents are between the ages of 18 and 49. With people between 21 and 29 years of age being the majority at around 40%. The sample was balanced between men and women. These results coincide with the previous results by AMIPCI (2015), so the sample in this study is considered to represent the sector of the Mexican population with access to the internet and social networks. In addition to this, from the total of respondents, 73% are single and 51% are employed. Similarly, the study had a participation of 41.5% of working people and 41% of students. The education level of the participants was varied but the highest percentages were: preparatory school (27.75%), university (48%), and postgraduate degree (22%). Although the socio-economic status was not determined through the questions (e.g., AMAI socio-economic levels), the majority of surveys were done through the contacts of students in public universities, as such we consider that it covers classes D+(Low/high), C (Medium) and C+ (Medium/high), thus the data obtained are considered valid for said socio-economic levels and not for the D (Low income) and E (Extreme poverty) levels.

Category	Range/Value	Frequency	%
Age	17 or less	2	0.88
	18-20	46	20.26
	21-29	93	40.97
	30-39	57	25.11
	40-49	25	11.01
	50-59	3	1.32
	More than 60	1	0.44
		227	100
Gender	Male	98	43.17
	Female	129	56.83
		227	100

Table 1 Respondent Demographics

Civil Status	Single	166	73.13
	Married	55	24.23
	Separated	2	0.88
	Divorced	3	1.32
	Widowed	1	0.44
		227	100
Employment	Unemployed	14	6.17
	Part-time	25	11.01
	Full-time	92	40.53
	Student	94	41.41
	Retired	2	0.88
		227	100
Education Level	University	110	48.46
	Secondary	3	1.32
	Postgraduate	51	22.47
	Preparatory	63	27.75
		227	100

To prove the previously established hypotheses, four models were created, which can be observed in Table 2. Predictors for the brand, price, social campaign and ecological campaign were included in these four models. The first model considers only the four predictors without interactions, meaning that it assumes that the effect of social campaigns on preference is only direct. Models (2) and (4) include interactions or allow introducing the effect of the social campaign on the price.

Table 2 Pooling regression models

	(1)	(2)	(3)	(4)
Constant	7.904165***	7.832414***	7.739689***	7.739689***
	(0.3795224)	(0.5705921)	(0.4809433)	(0.4809433)
Brand known (c)	2.223201***	2.394889***	2.214315***	2.214315***
	(0.1250437)	(0.1602393)	0.1767066	(0.1767066)
Brand mediumly known (m)	0.3582966***	0.354825**	0.5109785***	0.5109785***
	(0.1250437)	(0.176659)	0.158401	(0.158401)
Ecological campaign (e)	-0.135			
	(0.1250437)			
Social cause campaign (s)	0.6020558***	0.6020558***		0.903624
	(0.1250437)	(0.1249475)		(1.091518)

with brand Brand known * ecological (c * e) -0.5225418 (0.3436865) Brand mediumly known * -0.0034744 (0.4583593) (0.4583593) Brand known * social cause (c * s) (0.4583593) (0.3224939)) Brand mediumly known * social cause (m * s) (0.3224939) (0.3224939) Brand mediumly known * social cause (m * s) (0.2689073) (0.2298314) Interactions of csr campaigns with price * ecological price (p * e) (0.0021368 (0.2689073) Interactions of csr campaigns with price * ecological price (p * e) (0.0154662) (0.0154662) Price * social cause (p * s) (0.0154662) (0.0103449) (0.0576552) F (p value) of proof of wald (f) of bh ecological campaign has no impact social	Price (p)	-0.2081585***	-0.207326***	-0.2055569***	-0.2055569***
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Brand mediumly known * -0.0034744 ecological (m * e) (0.4583593) Brand known * social cause (c * s) 0.2669798 Brand mediumly known * social cause (m * s) -0.3471276 Brand mediumly known * social cause (m * s) -0.3471276 Brand mediumly known * social cause (m * s) 0.2689073) Brand mediumly known * social cause (m * s) 0.0021368 Interactions of csr campaigns with price * ecological price (p * e) 0.0021368 Interactions of csr campaigns not price (p * e) 0.0021368 Price * social cause (p * s) 0.0021368 F (p value) of proof of vald (f) of blo ecological campaign has no impact 0.00369727### -0.0041011 F (p value) of proof of vald (f) of blo ecological campaign has no impact Sum of errors to the square r2 2.1 (0.098) F (p value) of proof of vald (f) of blo ecological campaign has no impact sum of errors to the square r2 10845.0535 Sum of errors to the square r2 0.2018 10817.7465 10828.8948 Sum of errors to the square r2 0.2018 0.2026 0.2026 Sum of errors to the square r2 0.2018 0.203 0.2026 0.2026	Brand known * ecological (c * e)		-0.5225418		
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adjusted F 104.24 75.31 87.46 87.46	Sum of errors to the square r2 adjusted	10845.0535	10817.7465	10828.8948	10828.8948
	Sum of errors to the square r2 adjusted	0.2018	0.203	0.2026	0.2026
***•••	F	104.24	75.31	87.46	87.46
	****p<0.01, **p<0.05				

Source: Own elaboration.

The coefficients of the variables considered in model 1 are significant (p<.01) and are the expected with the exception of the coefficient of the ecological campaign in regression 1. Thus, for example, the best-known brand increases the preference by 2.2 units (β 1) or 44% (2.2/5) over the average (5) in the preference scale from 1 to 9, whereas the moderately-known brand only increases the preference by 0.36 units (β 2) or 7% (0.36/5). The price coefficient (β 3) indicates that for each peso increased in the price, the preference falls 0.21 units. This means a price preference elasticity of -0.8 calculated in the median price and preference (0.21 x \$18.33/5). On the other hand, including a social cause campaign directly increases the preference by 0.602 units (β 4) or 12% (0.602/5), compared to when there is no campaign. In contrast, including an ecological campaign does not have any effect for this model. The goodness of fit shows that the brand, the price and the type of campaign explain a fifth of the variations in preference.

Equation 2 shows in more detail whether or not the ecological campaign has any moderating effect both in the brand recognition effect on the preferences and in that of the prices on the preferences. It is important to highlight that in this estimation it is not possible, once more, to reject the fact that the ecological campaign has some effect, be it direct or indirect, on the preferences. In fact, the Wald test shows that all coefficients where the CSR campaign with ecological cause intervenes are zero and the 5% cannot be rejected. This result means that in this case there is no difference in including an ecological CSR campaign or not. Clearly, this result is only applicable in this case and this conclusion cannot be extrapolated to the different campaigns with an Ecological cause or to all the categories of available products.

For this reason, and given that the ecological campaign was of no significance, we ran model (3) without this variable and its interaction, leaving only the social CSR campaign. In equation (3) we included all possible interactions but not the marginal or direct effect of the social cause CSR campaign. Apparently, the coefficients of the interactions of the campaign with brand recognition are not significant at 5%. In equation (4) we tried including only the most promising interaction, which is with the moderately-known brand, and it was significant at 5%.

Equation (4) is the equation that better captures the effects of the social cause CSR campaign on preference. The coefficients—being positive, significant, and greater for the better-known brand than for the moderately known brand—support H1, meaning that the greater the brand recognition the greater the preference. The negative and significant coefficient of the price is consistent with H4, meaning that when the price increases the preference decreases. The negative coefficient of the interaction of the CSR campaign with the dichotomous variable of a moderately-known brand of the -0.47 order indicates that the effect of the CSR campaign will be greater for the better-known brand than for the moderately-known brand, which supports H3.

That said, the coefficients of the social cause CSR campaign and the interaction of the campaign with the price appear as non-significant different from zero. However, it is important to clarify something here: when the campaign variable goes from 0 to 1, different effects appear—the direct effect and those that operate through the moderately-known brand, and the price effect. Conversely, statistic "t" is designed to show the effect of a variable on the dependent one while maintaining the rest fixed, which is clearly not the case. For this reason, the significant statistic is that of Wald, specifically the null hypothesis test that indicates that all coefficients where the variable of the social cause CSR campaign appears are zero. The statistic is presented in column (4) and shows F=14.16, which is significantly different to zero at 1%.

In fact, the statistic of Wald for the null hypothesis where the coefficients of the social cause campaign and the interaction of the price are zero is also rejected at 1% (F=19.44).

As indicated above, the "t" statistics are not particularly useful when a variable, such as the social cause CSR campaign, appears in different variables at the same time. Additionally, since interactions are built from the multiplication of this variable with the rest of the independents, co-linearity is introduced between the variables, which tends to inflate the variances and reduce the "t" statistics. This is in fact the case, the variance inflation factor (VIF)—which measures how much greater the variance of the coefficients is in comparison to the zero co-linearity case—is of 103 for the interaction of the CSR campaign with the price, and of 101 for the CSR variable. It is for this reason also that the "t" statistic should not be taken as the significance test, but the Wald tests, which involve all of the coefficients where the variable of the CSR campaign appears⁵.

Once the coefficients have been obtained in the regression, the equivalent discounts and premiums can be estimated using equations (5), (6) and (7) for the final specification of the model, which is equation (4). In the case of the estimations of model (4), the total increase in the preference of the social cause CSR campaign evaluated according to the prices (18.33) for the better-known brand is equal to 0.826= 0.904-0.004*18.33, whereas the increase in the preference of the moderately-known brand is equal to 0.358=0.904-0.470-0.004*18.33. In this manner, to obtain these increases in the preferences, the equivalent discount in the prices should be equal to 4.020 pesos for the better-known brand and 1.742 for the moderately-known brand, which equals to a premium of the social cause CSR campaign of almost 22% for the better-known brand and 10% for the moderately known brand.

Discussion and Conclusion

The results of our study allow us to conclude that the preferences of consumers increase if the product is linked to a campaign with a social cause, but not if the nature of the campaign is ecological. Thus, at least for the social cause, the evidence of the Joint Analysis exercise is consistent with the H1 to H5 hypotheses. This means that the preferences have a direct relation with recognition, the social cause campaign directly impacts the preferences and it moderates the effect of brand recognition and prices on the preferences.

Not only that, our estimations indicate that the mere inclusion of the social cause increases the preference between 0.4 and 0.8 units in a scale from 1 to 9 or depending on the recognition of the brand, between 8% and 16% in relation to the median preference when compared to the social cause is not included. This means that the campaign with the social cause allows the Company to have a 22% Premium if the Brand is well-known and of only 10% if it is moderately-known. This supports H3, which establishes that the CSR campaign has more profitability on the better-known brands.

The discount method or equivalent premium proposed in this article can be applied to estimate the total value of the campaign. We would simply need to multiply the premium over the typical sale volume of the company, or in this case 1.7 and 4 pesos per liter sold for each

⁵ One alternative to deal with multicollinearity is to use the Ridge Regression method, which contracts the statistics to be estimated in order to reduce the inflation in the variances at the cost of introducing bias. By using this method, the results do not substantially differ from the reported estimations. The cause-related campaigns increase the preference by 0.8 and 0.4 for the well-known and moderately-known brands, respectively, in the original estimations; whereas with the Ridge method the preferences increase by 0.77 and 0.39, respectively. It was for this reason that we left the original estimations.

brand. This estimation must consider an inferior limit since the CSR campaign could increase the number of sold units, which is a possibility that was not examined in this study.

The study has some limitations that represent potential future lines of research. One limitation is that we only considered one product category, milk, and the results could greatly vary depending on whether the product associated to the CSR campaign is a luxury or hedonistic one versus a necessary one (Koschate-Fischer, Stefan, and Hoyer, 2012) or from a healthy category compared to those that could affect health. Therefore, future research could consider not only a new product category but also the comparison between them to estimate the variations in price elasticity.

In any case, our results indicate that only some CSR campaigns influence the consumer. In this particular case, directing the campaign to ecological matters does not seem to have any effect on preference, which could indicate that consumers prioritize helping the most disadvantaged over caring for the environment. A possible reason as to why the ecological campaign had no effect in this study may be due to the type of product that was used to collect data. Milk is a high involvement product associated to other values, for example: nutrition or childhood. Future research can prove whether ecological campaigns have an effect on other types of products.

Another limitation of our study is the composition of the sample, as the instrument was distributed through electronic media. Due to the sampling procedure that was followed, our sample represents only 53% of the Mexican population (AMIPCI, 2015). Our findings are comparable only to the population that has access to electronic means, to the D+ and higher socio-economic levels with a minimum education level of secondary. In a second phase of this investigation the population with low resources (D) and with lower education levels should be considered, in addition to considering the distribution of the instrument through a means that makes it possible to represent the entire population, even on-site. The analysis of other types of products could also be considered, for example, functional products, temptation products and others.

Lastly, this study use milk brands trusted by consumers. It would be interesting to analyze, in a subsequent phase, the impact on the preference or purchase intent of a CSR campaign when people do not trust the brand and the sale price is increased.

Despite these limitations, our results imply that organizations should acknowledge the importance of CSR campaigns at the time of designing marketing strategies. The design of these strategies requires the identification of the type of campaign that most impacts consumer preference. This makes it possible to achieve an effective differentiation through a socially responsible positioning, while reinforcing brand and company awareness in highly competitive markets. This is not only a qualitative implication, the study also suggests that the adherence to CSR campaigns that consumers find relevant can increase profitability, in double digits, before contributing to the cause. This is proof that CSR "pays" or that it is profitable from a financial point of view, meaning that social campaigning mitigates the impact of a price increase and generates a social impact derived from the implementation of campaigns.

References

Aaker, J. & Keller, K. L. (1990). Consumer evaluations of brand extensions. Journal of Marketing, 54(1), 27-41. https:/ doi.org/10.2307/1252171

- Alphonce, R. & Alfnes, F. (2012). Consumer willingness to pay for food safety in Tanzania an incentive-aligned conjoint analysis. *International Journal of Consumer Studies*, 36(4), 394-400. https://doi.org/10.1016/j.foodpol.2014.06.009
- Amezcua, B. (2015). The Impact of Temporal distance in Willingness to Pay for Cause-Related Products (Tesis doctoral). EGADE Business School, Monterrey, México.
- AMIPCI (2015). 110 estudio sobre los hábitos de los usuarios de internet en México 2015. Accesado el 11 de abril del 2016. Disponible en https://amipci.org.mx/images/AMIPCI_HABITOS_DEL_INTERNAUTA_MEXICA-NO_2015.pdf
- Arora, N. & Henderson, T. (2007). Embedded Premium Promotion: Why It Works and How to Make It More Effective. *Marketing Science*, 26(4), 514-531. https://doi.org/10.1287/mksc.1060.0247
- Baghi, I. & Gabrielli, V. (2012). For-profit or non-profit brands: which are more effective in a cause-related marketing programme? *Journal of Brand Management*, 20, 218–231. https://doi.org/10.1057/bm.2012.35
- Baghi, I., Rubaltelli, E. & Tedeschi, M. (2010) Mental accounting and cause related marketing strategies. *International Review of Public and Nonprofit Marketing*, 7(2), 145-156. https://doi.org/10.1007/s12208-010-0055-4
- Barone, M.J., Miyazaki, A.D. & Taylor K.A. (2000). The influence of cause related marketing on consumer choice: Does one good turn deserves another? *Journal of the Academy of Marketing Science*, 28(2), 248-262. https://doi. org/10.1177/0092070300282006
- Barroso, F.G. (2008). La responsabilidad social empresarial. Un estudio de cuarenta empresas de la ciudad de Mérida, Yucatán. Contaduría y Administración. 226(2), 73-91. http://ref.scielo.org/5ph6dh
- Beckmann, S. C., Christensen, A.S. & Christensen, A.G. (2001). *Myths of nature and environmentally responsible behaviours: An exploratory study.* Proceedings of the 30th European Marketing Academy Conference, Bergen.
- Berglind, M. & Nakata, C. (2005). Cause- related marketing. More buck tan bang? Business Horizons, 48(5), 443-453. https://doi.org/10.1016/j.bushor.2005.04.008
- Birnbaum, M.H. (2004). Human research and data collection via the Internet. Annual Review of Psychology, 55, 803-832. https://doi.org/10.1146/annurev.psych.55.090902.141601
- Bloom, P., Hoeffler, S., Keller, K. & Basurto, E. (2006). How social-cause marketing affects consumer perceptions. *MIT Sloan Management Review*, 47(2). 49-55.
- Boulstridge, E. & Carrigan, M. (2000). Do consumers really care about corporate responsibility? High- lighting the attitude-behavior gap. *Journal of Communication Management* 4(4), 355–368. https://doi.org/10.1108/eb023532
- Briseño, A., Lavín, J. & García, F. (2011). Análisis exploratorio de la responsabilidad social empresarial y su dicotomía en las actividades sociales y ambientales de la empresa. *Contaduría y Administración*. 233(1), 73-90.
- Carroll, A. (1991). The pyramid of social responsibility: toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39-48. https://doi.org/10.1016/0007-6813(91)90005-g
- Cause Marketing Forum (2015). Cause Marketing Research and Reports: IEG Sponsorship Report. Accesado el 16 de diciembre de 2015. Disponible en: http://www.causemarketingforum.com/site/c.bkLUKcOT-LkK4E/b.6449067/k.71C8/ IEG_Sponsorship_Report.htm
- Chang, Ch. (2008). To Donate or Not to Donate? Product Characteristics and Framing Effects of Cause-Related Marketing on Consumer Purchase Behavior. *Psychology and Marketing* 25(12), 1089-1110. https://doi.org/10.1002/ mar.20255
- Chladek, A., Florack, A. & Kleber, J. (2013). The Moderating Role of Numeracy in the Effectiveness of Cause-Related Marketing. En Advances in Consumer Research (41), eds. Botti, S. y Labroo, A. Duluth, Minesota: Association for Consumer Research.
- Comisión de las Comunidades Europeas (2001). *Libro Verde. Fomentar un marco europeo para la responsabilidad social de las empresas.* Accesado el 18 de enero del 2016. Disponible en http://ec.europa.eu/transparency/regdoc/rep/1/2001/ES/1-2001-366-ES-F1-1.Pdf
- Cone / Duke University. (2008). *The 2008 Cone /Duke University Behavioral Case Study*. Accessdo el 16 de diciembre de 2015. Disponible en: http://www.causemarketing.biz/2008/10/the-2008-coneduke-university-behavioral-cause-study/
- Edelman (2012). Edelman Good purpose Global Consumer Survey. Accesado el 16 de diciembre del 2015. Disponible en http:// www.fairtrade.travel/uploads/files/Edelman_Goodpurpose_-_ Global_Consumer_Survey.pdf

- Edelman, (2014). Brand purpose look ahead: Power of participation platforms. Accessado el 16 de diciembre de 2015. Disponible en http://purpose.edelman.com/2014-brand-purpose-look-ahead-power-of-participation-platforms/
- Elliot, G.R. & Cameron, R.C. (1994). Consumer perception of product quality and the country of origin effect. *Journal of International Marketing*, 2(2), 49-62. http://www.jstor.org/stable/25048542
- Ellison, N.B., Steinfeld, C. & Lampe, C. (2007). The benefits of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168. https://doi.org/10.1111/j.1083-6101.2007.00367.x
- FAO (16 de Diciembre del 2015). Producción y productos lácteos. Accesado el 16 de diciembre del 2015. Disponible en http:// www.fao.org/agriculture/dairy-gateway/leche-y-productos-lacteos/es/#.VnIFEPnxyko
- Folse, J.A.G., Niedrich, R.W. & Grau, S.L. (2010). Cause-Related Marketing: The Effect of Purchase Quantity and Firm Donation Amount on Consumer Inferences and Participation Intentions. *Journal of Retailing*, 86(4), 295-309. https://doi.org/10.1016/j.jretai.2010.02.005
- González Hernández, E.M., Orozco Gómez, M.M. & De la Paz Barrios. A. (2011). El Valor de la marca desde la perspectiva del consumidor. Estudio empírico sobre preferencia, lealtad y experiencia de marca en procesos de alto y bajo involucramiento de compra. *Contaduría y Administración*, 23 (Septiembre-Diciembre), 217-239.
- Grieve, R., Witteveen, K. & Tolan, G.A. (2014). Social media as a tool for data collection: Examining equivalence of socially value-laden constructs. *Current Psychology*, 33(4), 532-544. https://doi.org/10.1007/s12144-014-9227-4
- Ha-Brookshire, J. E. & Norum, P. S. (2011). Willingness to pay for socially responsible products: case of cotton apparel. *Journal of Consumer Marketing*, 28(5), 344-353. https://doi.org/10.1108/07363761111149992
- Hall. Sheikh, S. & Beise-Zee, R. (2011). Corporate social responsibility or cause-related marketing? The role of cause specificity of CSR. Journal of Consumer Marketing 28(1), 27-39. https://doi.org/10.1108/07363761111101921
- Hayes, Andrew (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach (Methodology in the Social Sciences). Guilford Press, New York. https://doi.org/10.1111/jedm.12050
- Habel, J., Schons, L. M., Alavi, S. & Wieseke, J. (2016), Warm Glow or Extra Charge? The Ambivalent Effect of Corporate Social Responsibility Activities on Customers' Perceived Price Fairness. *Journal of Marketing*, 80 (1), 84-105. https://doi.org/10.1509/jm.14.0389
- Henderson, T. & Arora, N. (2010). Promoting Brands Across Categories with a Social Cause: Implementing Effective Embedded Premium Programs. *Journal of Marketing*, 74 (November), 41-60. https://doi.org/10.1509/ jmkg.74.6.41
- Keller, K. (1993). Conceptualizing, measuring and managing customer- based brand equity. Journal of Marketing 57(1), 1-22. https://doi.org/10.2307/1252054
- Koschate-Fisher, N., Stefan, I. V. & Hoyer W.D. (2012). Willingness to pay for cause-related marketing: the impact of donation amount and moderating effects. *Journal of Marketing Research*, 49(6), 910-927. https://doi.org/10.1509/ jmr.10.0511
- Krishna, A. & Rajan, U. (2009). Cause Marketing: Spillover Effects of Cause-Related Products in a Product Portfolio. *Management Science*, 55(9), 1469-1485. https://doi.org/10.1287/mnsc.1090.1043
- Kuo, A. & Hamilton Rice, D. (2015). The impact of perceptual congruence on the effectiveness of cause-related marketing campaigns. *Journal of Consumer Psychology*, 25(1), 78-88. https://doi.org/10.1016/j.jcps.2014.06.002
- Lafferty, B. A. & Goldsmith, R. E. (2005). Cause-brand alliance: does the cause help the brand or does the brand help the cause? *Journal of Business Research*, 58(4). 423-429. https://doi.org/10.1016/j.jbusres.2003.07.001
- Lafferty, B. A., Goldsmith, R. E. & Hult, G. T. M. (2004). The impact of the alliance on the partners: A look at cause-brand alliances. *Psychology & Marketing*, 21(7), 509-531. https://doi.org/10.1002/mar.20017
- León, F. (2008). La percepción de la responsabilidad social empresarial por parte del consumidor. *Visión Gerencial*. 1. 83-95.
- Lichtenstein, D.R., Drumwright, M.E. & Braig, B.M. (2004). The Effect of Corporate Social Responsibility on Customer Donations to Corporate-Supported Nonprofits. *Journal of Marketing*, 68 (September), 16-32. https://doi. org/10.1509/jmkg.68.4.16.42726
- Lusk, J. L. & Shogren, J. F. (2007). Experimental auctions. Methods and applications in economic and marketing research. Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo9780511611261

- Marin, L., Ruiz S. & Rubio, A. (2009). The role of identity salience in effects of corporate social responsibility on consumer behavior. *Journal of Business Ethics*, 84(65-78). https://doi.org/10.1007/s10551-008-9673-8
- McWilliams, A., Siegel, D. S. & Wright, P.M. (2006). Corporate Social Responsibility: Strategic Implications. *Journal of Management Studies*, 43(1), 1-18. https://doi.org/10.1111/j.1467-6486.2006.00580.x
- Mohr, L.A. & Webb, D.J. (2005). The effects of corporate social responsibility and Price on Consumer Responses. *Journal of Consumer Affairs*, 39(1), 121-146. https://doi.org/10.1111/j.1745-6606.2005.00006.x
- Petkus, E. & Woodruff, R. (1992). A model of the socially responsible decision-making process in marketing: linking decision makers and stakeholders. En Chris Allen et al. (Eds.), *Proceedings of the winter 1992 American Marketing Association* (154-161). Chicago: American Marketing Association.
- Piercy, N.F. & Lane, N. (2009). Corporate social responsibility: Impacts on strategic marketing and customer value. *The Marketing Review*, 9(4), 335-360. https://doi.org/10.1362/146934709x479917
- Popkowski-Leszczyc, P.T.L. & Wong, L.T. (2010). The Effectiveness of Donation Promises in Charity Auctions as a Cause-Related Marketing Strategy (June 30, 2010). Disponible en SSRN:http://ssrn.com/abstract=1734505 o http:// dx.doi.org/10.2139/ssrn.1734505
- Pracejus, J.W. Olsen, G.D. & Brown, N.R. (2003). On the Prevalence and Impact of Vague Quantifiers in the Advertising of Cause-Related Marketing (CRM). *Journal of Advertising*, 32(4), 19-28. https://doi.org/10.1080/009133 67.2003.10639146
- Raajpoot, N., Javed, J. & Koh, K. (2008). Application of Taguchi design to retail service. *International Journal of Commerce and Management*, 18(2), 184 199. https://doi.org/10.1108/10569210810895258
- Robinson, S. R., Irmak, C. & Jayachandran, S. (2012). Choice of Cause in Cause-Related Marketing. *Journal of Marketing*, 76 (July), 126-139. https://doi.org/10.1509/jm.09.0589
- Schiffman, L. & Kanuk, L. (2005). Comportamiento del consumidor. 8a Ed. México: Pearson Prentice
- Simon, H. A. (1959). Theories of decision-making in economics and behavioral science. The American Economic Review, 49(3), 253-283. http://www.jstor.org/stable/1809901
- Smith, N. Hall. Sheikh, S. & Beise-Zee, R. (2011). Corporate social responsibility or cause-related marketing? The role of cause specificity of CSR. Journal of Consumer Marketing 28(1), 27-39. https://doi. org/10.1108/07363761111101921
- Subrahmanyan, S. (2004). Effects of Price Premium and Product Type on the Choice of Cause- Related Brands: A Singapore Perspective. *Journal of Product & Brand Management*, 13(2), 116-124. https://doi. org/10.1108/10610420410529744
- Tian, Z., Wang, R. & Yang, W. (2011). Consumer Responses to Corporate Social Responsibility (CSR) in China. Journal of Business Ethics 101(2), 197-212. https://doi.org/10.1007/s10551-010-0716-6
- TNS research international, (2011). Green study 2011. Accesado el 16 de diciembre de 2015. Disponible en http:// www.tns-ri.com. mx/pdf/Green_reporte_2011.pf
- TNS research international, (2013). *The green disconnect. Consumer attitudes and behaviours in the EU*. Accesado el 16 de diciembre de 2015. Disponible en: http://www.tnsglobal.com/sites/default/files/whitepaper/TNSUK_Green2013Oct28.pdf.
- Van den Brink, D., Oderken Schöreder, G. & Powels, P. (2006). The effect of strategic and tactical cause-related marketing on consumers' brand loyalty. *Journal of Consumer Marketing*, 23(1), 15-25. https://doi. org/10.1108/07363760610641127
- Varadarajan, P.R. & Menon, A. (1988). Cause- related marketing: A coalignment of marketing strategy and corporate philanthropy. *The Journal of Marketing*, 52(3), 58-74. https://doi.org/10.2307/1251450
- Veenhoven, R. (2008). *Green consumerism: approaches in country experiences*. The Icfai University Press, Hyderabad, India, p.39-68.
- Vives, A. (2008). ¿Es nuestra responsabilidad? Harvard Business Review.86(4), 50-54.
- We are social (2015). *Digital, social & mobile in 2015*. We are social's compendium of global digital statistics. Recuperado el 28 de abril del 2016. Disponible en http://wearesocial.sg/blog/2015/01/digital-social-mobile-2015/
- WFA, (2013). How important is it for brands to have a "purpose"? World Federation of Advertisers. Recuperado el 16 de abril del 2016. Disponible en http://www.wfanet.org/en/global-news/how-important-is-it-for-brands-to-have-a-u201cpurposeu201d

- Williams, E. (2011). Responsible consumers and stakeholder marketing: building a virtuous circle of social responsibility. Universia Business Review, 30, 68-78.
- Winterich, K.P. & Barone, M.J. (2011). Warm Glow or Cold, Hard Cash? Social Identity Effects on Consumer Choice for Donation Versus Discount Promotions. *Journal of Marketing Research*, 48(5), 855-868. https://doi. org/10.1509/jmkr.48.5.855

Wooldridge, J. M. (2009). Introductory econometrics: A modern approach, México: Thomson/South-Western.

Annex 1

