# Corporate Social Responsibility: Costs and Willingness to pay

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**Abstract**

Corporate Social Responsibility (CSR) is a fundamental concept for the creation of long-term value in companies. Thus, there is a growing and differentiated concern to include CSR in companies on daily basis. In fact, companies concerned with integrating it are more valued by stakeholders. This investigation intends to analyse whether the marginal costs of a company producing a socially responsible product is increasing and whether the willingness to pay by consumers decreases in the level of CSR, for all categories (Environment, Employees, Community, and Governance). The aim is to verify the existence of an equilibrium level for investment in CSR for each of the categories. Following the literary analysis, two studies were carried out: one that estimated the marginal costs associated with a socially responsible product, and another based on Experimental Economics, inquiring how much consumers are willing to pay for a particular product (health insurance or coffee pods). It is concluded that companies have room to invest more in CSR categories so that the equilibrium is reached, with the Community category being the closest to that point. Although there were respondents who were indifferent or even penalise companies for their initiatives, the promoters had a greater impact on the benefit extracted from the investment made by companies. Furthermore, it can be concluded that the Community, Employees, and Governance categories received more awards in the case of health insurance and that the Community, Employees, and Environment categories received more awards for respondents in the case of coffee pods.

**Keywords:** corporate social responsibility, CSR categories, cost-benefit analysis, marginal cost, willingness to pay, equilibrium investment.

## 1. Introduction

Corporate Social Responsibility (CSR) is a practice that has been increasingly implemented by companies, with the aim of improving communities, the environment, and the economy (Schooley, 2021). Companies differ in the way they apply CSR in their daily lives and, according to a Business News Daily article by Schooley (2021), there is no "right" way for companies to develop it. However, those that are concerned with integrating it are valued by stakeholders.

The practice of CSR in the business world generates additional costs (investment). The return on this investment (benefit) is difficult to measure, e.g., the increase in consumers' willingness to pay. In addition, it is important to understand in which CSR categories (Environment, Employees, Community, and Governance) the investment generates more benefits. In this regard, this study aims to conclude whether the marginal cost is increasing and the willingness to pay is decreasing for all CSR categories. Towards the end, the possibility of the existence of an optimal level of CSR investment for companies is also analysed.

Therefore, this paper is based on two studies that culminate in a joint cost-benefit analysis. On one hand, a study is carried out on the marginal cost (MC) generated by companies for investing in CSR initiatives. On the other hand, consumers' willingness to pay (marginal benefit - MB) is analysed considering the different categories. Thus, the present study will address topics such

as the nature of CSR activities, i.e., whether they are carried out for financial reasons (profit) or not, the types of CSR (proactive vs reactive), the investment made by companies in CSR, the relationship between market structure, organisational dimension, and CSR and finally, the types of consumers and factors that influence willingness to pay. This investigation was stimulated by the interest in contributing to literature by analysing both sides of the market, companies, and consumers, in response to CSR initiatives.

Section 2 corresponds to the literature review that exposes the main concepts, frames the theme, and exposes the main methodologies. Then, section 3 presents the methodology and section 4 describes the experimental procedure that is applied in this paper. Finally, section 5 shows, analyses, and discusses the results obtained and section 6 presents the main conclusions, as well as a brief suggestion of future developments on the subject under study.

## 2. Literature Review

### 2.1. CSR framework

Literature on CSR can be found since the 1950s and, currently, the topic continues to arouse much interest within the academic area and the business sector (Maignan and Ralston, 2002). Historically, the concern with social responsibility rose after World War II, accompanied by changes in mentality, with the beginning of movements that fought for civil rights, women, consumers, and the environment (Carroll, 2015). The modern era of Social Responsibility (SR) began with Bowen, the father of CSR, as he was the one who raised the question of what decisions or actions should be taken by business people to meet the goals and values of society (Carroll, 1999). In the 1980s, the need to measure and carry out research on CSR began. Furthermore, the idea is presented that the ideal SR would be to turn a social problem into an opportunity and economic benefit while it is transformed into productive capacity, human competence, and wealth (Drucker, 1984). In the 21st century, CSR is considered a global phenomenon, and is more evident in the European Community (Carroll, 2009) and North America (Berger et al., 2007). The growing interest in CSR is due to the pressure exerted by stakeholders on companies, especially regarding environmental and social issues (Morimoto et al.,

2005). Consequently, business leaders face the challenge of trying to include and balance the social, environmental, and economic components in the day-to-day of companies, trying to simultaneously create value for shareholders (Morimoto et al., 2005). The UN Global Compact was signed in 2007 by several brands that committed to following the 10 Principles of CSR (Berger et al., 2007), which include several areas, such as Human Rights, Labour Practices, Environmental Protection and Corruption. In the European Union (EU), the CSR concept is described as: "companies decide, on a voluntary basis, to contribute to a fairer society and a cleaner environment. (…) Being socially responsible is not restricted to complying with all legal obligations – it implies going further through "greater" investment in human capital, in the environment and in relationships with other stakeholders and local communities" (Europeias, 2001, p.7).

### 2.2 Main Currents in CSR Literature

**Marketing Literature**

The research flow that started with Marketing studies the response of consumers to CSR (Berger et al., 2007). According to Corcoran (2018), the involvement of companies in CSR adds a different value to the business: moral value. CSR information communicated by companies affects consumers, namely in the way consumers perceive companies and brands (Wagner et al., 2009). There are several socially responsible marketing strategies. Van de Ven (2008) groups them into three: (1) when companies want to protect and improve their reputation, (2) when companies want to build an honest corporate brand, finally, (3) when companies want to bet on ethical product differentiation. The author concluded that the last two strategies - (2) and (3) - are the most ambitious, demanding a higher ethical level.

CSR can also give rise to spillover effects, e.g., Tezer and Tofighi (2021) demonstrate that when consumers are informed about socially responsible initiatives of a brand, a negative effect is created in the evaluation of a competing brand and a positive effect is created in the evaluation of the brand itself. This way, the authors reinforce the importance of resorting to the strategic use of CSR initiatives as content in the brand's marketing communication.

## Management Literature

The perspective that came from Management Literature focuses on normative issues of whether organisations should or should not be involved in CSR and the effects that these initiatives have on the financial result (Berger et al., 2007).

The Triple Bottom Line (TBL), also known as the Three Pillars or 3Ps, argues that a company is considered sustainable only if it demonstrates responsibility in the three pillars: Profit, People and Planet, i.e., economic, social, and environmental responsibility (KsiężaK and FischBach, 2017). Another concept presented in Management Literature is the Resource-Based View (RBV) which explains competitive advantage from the company's resources and differentiating competencies, based on the idea that companies gain competitive advantage by implementing value creation strategies, not only from external resources but also through the ability to implement these resources on a day-to-day basis (Torugsa et al., 2013). In this sense, the human resources of companies are both an important contribution to the Sustainable Competitive Advantage (SCA), but also resources that have a greater weight in the total cost.

### 2.3 Proactive vs Reactive CSR

Regarding the group of companies that practise CSR, the main difference is based on the nature of the initiatives (Berger et al., 2007): proactive or reactive. Proactive CSR involves business practices that are adopted voluntarily and that go beyond the requirements of the law, with the main objective of actively supporting economic, social, and environmental development in a sustainable way (Torugsa et al., 2013). When companies develop CSR activity with their community, they can involve them and, thus, establish strong relationships with people who may become potential customers (Li and Zhang, 2010). This practise adds value to the company, contributing to its reputation and, subsequently, increasing the return on shares (Muhammad et al., 2015). Companies that have a reactive behaviour only invest in CSR due to external pressures, e.g., from investors and competition. Thus, they only do it with the aim of protecting the image of the brand or company after the disclosure of some socially irresponsible situations (Murray and Vogel, 1997).

## 2.4 Companies and CSR

### Market Structure

Market structures can be divided: monopoly, oligopoly, monopolistic competition, and perfect competition. Each of these structures has different characteristics, which makes their behaviour in relation to CSR different. Firms in monopoly markets are less motivated to create a good social reputation since consumers have no alternative in choosing the organisation (Johnson, 1966; Graafland and Smid, 2004). However, they must continue to invest in a strategic or altruistic perspective, e.g., to maintain a good reputation. Firms in perfectly competitive markets are subject to increased competition. The higher the level of competition, the greater the motivation for companies to invest in social activities as a means of differentiating themselves from other organisations (Baron, 2006). Oligopolistic markets are those with imperfect competition. It is usually a market made up of few companies and this allows them to raise their market prices, increasing the organisation's profit. According to Acabado et al. (2020), oligopolies perform worse for all CSR categories than monopolistic competition. Companies in oligopolistic markets are more subject to the impact caused by external sources (e.g., consumers and the media) and, therefore, the motivation to maintain a good social reputation is high in this market structure.

### Organisational Dimension

Organisations are generally classified as small, medium, or large, based on three criteria: staff, annual turnover, and annual balance sheet total. Regarding the relationship between CSR and the organizational dimension, there are differing opinions. Throughout literature, there are authors who defend a positive relationship between the two variables (e.g., Adler and Milne, 1997; McWilliams and Siegel, 2001) and, on the other hand, there are authors who defend a negative relationship (e.g., Bourlakis et al., 2014). There are also authors who argue that there is no direct relationship between CSR and the size of companies (e.g., Siegel and Vitaliano, 2007).

### Investment in CSR

In CSR projects, reaping the benefits may be more difficult. However, investments made by companies in CSR should be considered as any other company investment (McWilliams and

Siegel, 2001; Husted et al., 2006). According to Sharma et al. (2018), the number of companies investing in CSR has increased considerably over the last few years. Usually, a company's operating costs increase when investing for the first time in CSR. Sometimes companies do not have the initiative to invest in CSR due to the high MC at the beginning of this investment and the reduced MB that this initiative brings, because, in the beginning, investment in CSR can be demanding, but these costs will be decreasing as an investment is made regularly (Chen and Lee, 2017). According to the authors, as the investment in CSR evolves, the company acquires greater notoriety, improves its reputation and, consequently, increases its MB. From the moment that the MB is greater than the MC, as shown in **Figure 1**, the investment in CSR contributes positively to the value of the company. Thus, when investment in CSR reaches a certain level, consumers identify with the company, significantly increasing its value. Furthermore, the study revealed that company value is positively correlated with CSR, institutional participation, and company size.
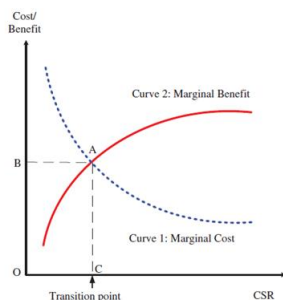


*Figure 1 - MC and MB of CSR. Source: Chen and Lee (2017).*

## 2.5 Consumers and CSR

The 21st-century consumer has constant access to information, making it easier and more obvious to make comparisons between products and brands (Pratas, 2014). In literature there are several classifications for different groups of consumers, e.g., according to Trapero et al. (2010), there are four consumer profiles: (1) the consumer who makes the decision based on the lowest price, (2) the conventional consumer, (3) the informed consumer and (4) the citizen consumer. Most consumers assume a consumer profile (1), (2) or (3). Since the consumer profile (4) is aimed at a restricted part of society and was not significantly identified. A consumer with this profile is willing to pay a higher price and receive more information about CSR practices. Notably,

the willingness to pay for CSR depends on consumer to consumer and, according to the work by Ferreira et al. (2010), consumers who have a good perception of the company in relation to CSR are willing to pay 10% more for the product price and consider this price difference to be fair. Every human faced with the same situation, can make different decisions (Pratas, 2014). For McWilliams and Siegel (2001) there are determinants of demand for products with CSR attributes (e.g., price, price of substitute products, advertising to promote consumer awareness of CSR attributes, consumer income, tastes and preferences, demographics). However, consumer income is a crucial factor to be considered, as consumers with low incomes are more sensitive to price, while those with high incomes are more willing to pay a higher price.

## 2.6 Main Methodologies: Marginal Cost and Willingness to Pay

### Costs and Benefits of CSR for Companies

Quantifying the costs and benefits of socially responsible activities remains an unclear topic in terms of how best to calculate them. McWilliams and Siegel (2001) built a CSR supply and demand model from which they concluded that there is an ideal level of CSR. They also suggested that this could be determined through Cost-Benefit Analysis (CBA). In the same vein, Asatryan (2012) used CBA as a tool to determine the break-even point of investment, modelling the microeconomic concepts that underlie CSR in the aviation sector. The model not only made it possible to analyse the relationship between MC and MB over a certain period, but also allowed to find the point of convergence for a good economic performance. **Figure 2** represents the fundamental principles of CBA, and the main objective is to maximise efficiency at point Q (equilibrium point), where MB = MC; in this case, the optimal point represents the win-win situation for the company and society.
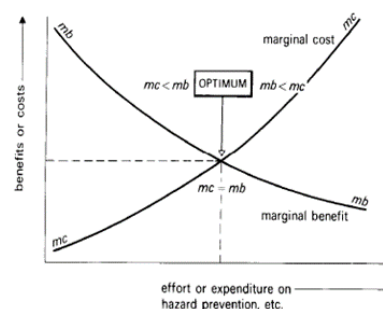


*Figure 2 - Fundamental Principles of CBA. Source: Asatryan (2012).*

## Consumers' Willingness to Pay

To understand and predict consumer behaviour, researchers can use laboratory experiments or field experiments. The main difference is that field experiments study the hypotheses in a context of purchases and consumption more identical to reality as opposed to testing hypotheses in the laboratory. This way, it is possible to extract more genuine information from consumers' reactions and the way they act in the face of commercial activity (Ryals and Wilson, 2005). Regarding the study of consumers' willingness to pay, there are several quantitative methodologies, such as: (1) methods of declaring preferences, (2) methods of revealing preferences and, more recently, a new approach, (3) Experimental Economics, which is the combination of method (1) and (2) (Maia et al., 2010). Experimental Economics studies human behaviour in a controlled laboratory environment or in the field, as opposed to using only mathematical models (Halton, 2021).

## 3. Methodology

Considering that the increase in consumers' willingness to pay is a benefit for the company, this work will follow the CBA approach (Asatryan, 2012). As the financial resources of companies are limited, choosing the category of initiative in which the company will invest is crucial. The methodology defined for this paper consists of three studies and each study will be organised in different stages, as shown in **Figure 3**.
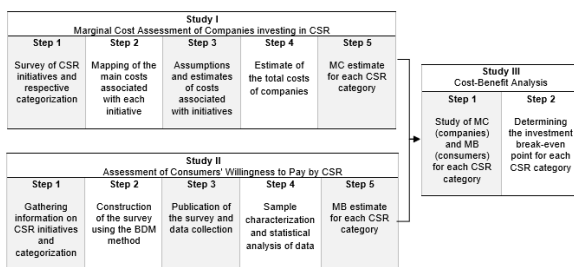


*Figure 3 – Overview of the methodology to follow in the paper.*

Consequently, two of the studies will be carried out in parallel: (I) the companies MC assessment of investing in CSR and (II) assessment of consumers' willingness to pay (MB). Both studies will be carried out for each CSR category, comparing consumer behaviour in the control situation and in situations that mirror CSR initiatives for the same product. Before the beginning of the studies, two companies will be chosen: one that produces regular consumer goods and another that performs services. In the case of product and service selection, they must

be real, priced, available in the market and they must be general consumer products. For each study, a different methodology will be applied. In the case of study (I), the method applied has five steps: 1) search the CSR initiatives of each company and their respective categorization, using documents, interviews, websites of the companies themselves; 2) map the main costs associated with each CSR initiative; 3) estimate the costs associated with the initiatives through assumptions that are not properly clear in the company documents; 4) estimate the total costs considering the scenario in which companies do not invest in CSR; 5) finally, estimate of the MC of companies investing in a certain category of CSR. Regarding study (II), the five steps are: 1) collect information on CSR initiatives; 2) construction of the survey using the BDM method; 3) publication of the survey through the Qualtrics platform and data collection; 4) characterization of the sample and statistical analysis of the data using the IBM SPSS Statistics software; 5) finally, estimate the MB for each CSR category. After studies (1) and (2) are carried out, it will be possible to verify if the MC is increasing for all categories and if the MB is decreasing for all categories. Thus, in study (3), if this hypothesis is verified, the balance point between the two sides of the market (companies and consumers) will be determined and, this way, arrive at the ideal investment that companies should make to each CSR category.

## 4. Experimental Procedure
### 4.1. Experimental Plan

Since the dissertation's scope is comprehensive and applicable to infinite situations, it was essential to use the research methodology: a case study (Gustafsson, 2017). The use of this research method makes it possible to relate theory to field research, translating the findings of a particular case study in a broader way. In this sense, two target companies were selected - *Fidelidade* and *Delta Cafés* - to apply the investigation to two different real situations. From a business perspective, the objective is to analyse and validate the hypothesis:

*H₁: The marginal cost of CSR initiatives is increasing for all CSR categories.*

In terms of consumers, and through the application of the BDM method, the objective is to validate the following hypothesis:

*H₂: Consumers' willingness to pay for CSR is decreasing for all categories.*

### 4.2 Motivation: *Fidelidade* and *Delta Cafés*

To represent a Fast Moving Consumer Good (FMCG), the company chosen to be one of the case studies was *Delta Cafés* and to represent a service, *Fidelidade* was the insurance company selected. After some research, it was concluded that they would be the most suitable for being leading companies in the sector where they operate, known by the Portuguese, with an active role in the performance of socially responsible practices and with a strong presence in the national market where all consumers have access.

### 4.3. Product Selection

The selection of products took into account three criteria - service and FMCG produced by the selected companies, known to the Portuguese due to the increase in demand during the pandemic and consequently a greater awareness of market prices. Thus, to represent a service, a health insurance from *Multicare* (*Fidelidade*) was selected and to represent the FMCG coffee pods from *DeltaQ* (*Delta Cafés*) were selected.

### 4.4. Research Instruments

#### Cost of CSR Initiatives
To calculate the cost of each CSR initiative (see **Figure 4**), firstly, a survey of initiatives was carried out, and the respective information and cost data were available on them. As a complement to the information collected, it was only possible to conduct an interview with the company *Fidelidade*. Subsequently, the need arose to organise these initiatives and their respective data by CSR categories. Since certain initiatives did not have associated monetary cost data (the investment cost), it was necessary to deconstruct the total cost of these initiatives in the different plots and estimate them using information from other sources and assumptions made. This way, it was possible to gather the costs of the initiatives to proceed with the calculation of the total

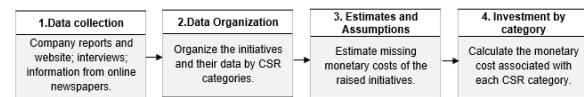investment cost of each company in each category of CSR.

*Figure 4 – Summary scheme of the stages of the study of costs in CSR.*

#### Willingness to Pay by CSR
The BDM method is applied by carrying out a survey divided into three parts – initial, central, and final part (see **Figure 5**) – and each participant must imagine that they are in a real purchase situation and dictate the price they are willing to pay for the product presented (Ribeiro, 2021).
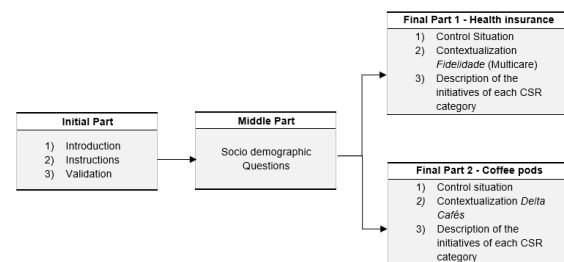
*Figure 5 - Summary scheme of the constituent parts of the survey.*

The initial part includes an introductory text that contextualizes the theme and scope of the study; instructions that explain what the participant must do and, finally, an option that validates that the participant is willing to participate in the study. The middle part includes nine essential socio demographic questions to characterise the study sample. And, finally, the final parts include the control situation – without any context of the company and socially responsible initiatives – where the participant dictates the amount that is willing to pay. After that, the company was contextualised, and the CSR initiatives were presented in different scenarios. The *Qualtrics* program was used to carry out this survey, as it meets the needs of this method - generating random numbers within a given range; distribute the participants evenly and randomly across the two scenarios of the final part and extract the data. In addition, it is a free and easy-to-use tool (Ribeiro, 2021).

#### Participants and Sampling
In this study, the sampling method was used to study the population. However, as the survey was disseminated through a link on the main social networks, through personal contacts, the sampling technique used was Non-Probabilistic for Convenience - a sample of the population that is convenient, i.e., accessible, geographical

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proximity and availability to participate in the study. This technique does not involve costs; however, it may not be accurate in representing the population to be studied.

## 5. Results and Discussion
### 5.1. Data Analysis

**Study I - Quantitative Data**
Not all data collected on CSR initiatives were in monetary form (€), they were e.g., in hours spent by employees volunteering or in training hours given. In this way, it was essential to treat this data to measure the cost that the company incurred when practising CSR. Regarding the company *Fidelidade*, most of the data was in monetary cost in the company's sustainability report, facilitating the process and reducing the assumptions and estimated values. In addition, the investment values in each category were readjusted (when necessary) considering information obtained through the interview carried out. On the other hand, data from the company *Delta Cafés* were mostly translated into different units of measurement, requiring the use of a greater number of assumptions. Adding on, it was not possible to compare the calculated values associated with each CSR category, as it was not possible to carry out the interview.

**Study I – Qualitative Data**
Qualitative data was obtained through a semi-structured interview carried out with *Fidelidade*'s CSR Director, Ana Maria Fontoura, on April 1, 2022, on the *Microsoft Teams* platform. CSR is an integrated practice in the daily life of the *Fidelidade Group* and as of 2007 there is a well-designed plan divided into two aspects: internal and external. As the *Fidelidade Group* is an insurance company, the focus is on people. The Community category is the one in which *Fidelidade* invests the most: according to the interviewee, in the last year this investment represented around 65% of the general budget (2M€); followed by the Employees and Governance categories and, finally, the Environment category. In the insurance industry, price comparison is difficult due to the different coverages that an insurance can include.

**Study II - Sample Characterization**
The sample of this study consists of 292 valid responses. After characterising the sample, it was concluded that both experimental groups have similar socio demographic data, representing the total sample and, therefore, it is possible to compare the results obtained in both groups. Regarding the socio demographic representation of the Portuguese population, the study sample does not fully reflect its reality, but mostly the reality of the Portuguese middle class in terms of gross monthly income. On the other hand, it reflects the newly working young population, young students, and adults.

**Study II – Sociodemographic Factors and WTP**
After the sample characterisation, the independence between categorical or nominal variables was tested using the *Chi-square* de *Pearson* Test and Fisher-Freeman-Halton Test. I conclusion, for health insurance, the gender variable has more impact on consumer behaviour and, in the case of coffee pods, the level of education of respondents is more related to willingness to pay.

## 5.2. Analysis of Results

**Study I**
After the initiatives had an associated monetary cost, the total investment costs in each CSR category per company was calculated and, subsequently, the total investment in CSR in the period associated with each company was calculated as well (see **Table 1** and **2**).

*Table 1 – Investment costs by CSR category and Fidelidade's total annual investment.*

| Fidelidade | Environment | Employees | Community | Governance |
|---|---|---|---|---|
| Investment Cost (€) | 100 000,00€ | 300 000,00€ | 1 300 000,00€ | 300 000,00€ |
| Total Annual Investment (€) in CSR | 2 000 000,00€ | | | |

*Table 2 - Investment costs by CSR category and Total CSR investment between 2015-2018 of Delta Cafés.*

| Delta Cafés | Environment | Employees | Community | Governance |
|---|---|---|---|---|
| Investment Cost (€) | 1 113 284,40€ | 2 111 945,00€ | 2 074 268,75€ | 698 460,00€ |
| Total Investment (€) in CSR between 2015-2018 | 5 997 958,15€ | | | |

In conclusion, the two CSR categories that have a superior investment are the Community and Employees categories. In the case of *Fidelidade*, the Governance category follows, and afterwards the Environment category. In the case of *Delta Cafés*, the order is opposite, the Environment category is associated with a higher investment than the Governance category.

<u>MC of each CSR Category</u>
The MC of each CSR category is equal to the investment cost in the category itself. The

difference between the cost associated with the control situation (scenario without CSR) and the cost associated with any situation where the company develops CSR initiatives is always positive, i.e., the cost increases. So, in this case, as the MC is equal to the real cost of running the initiatives, we can conclude that the MC of producing health insurance and coffee pods with CSR is increasing for all categories.

∴ **H₁**: The MC of CSR initiatives is increasing for all CSR categories. → **True**

**Study II**

**Descriptive Analysis and Statistical Tests**
After the analysis of the survey data was carried out, a statistical description of the results was used to draw conclusions that, in general, provide information on the relationship between $WTP_0$ - willingness to pay in the control situation - and $WTP_{RSC}$ - willingness to pay for each CSR category. To this end, for each situation presented in the survey, the following measures were analysed: minimum value, maximum value, number of responses, mean, standard deviation (Morais, 2005). From the observation of the standard deviation values, it is possible to verify that the variability of the results of the group of health insurance is greater than the variability of the data of the group of coffee pods. Within the Health Insurance group, the highest standard deviation is associated with the Employees category and within the Coffee pods group it is associated with the Environment category. In general, the results show that respondents are willing to pay a higher amount for CSR initiatives, except for the Governance category. To draw concrete conclusions and verify whether these are statistically significant (p-value < 0.05) it is necessary to resort to hypothesis tests. Consequently, the null hypothesis ($H_0$) and the alternative hypothesis ($H_a$) were defined as follows:

**H₀:** There is no significant difference between $WTP_0$ and $WTP_{CSR}$, CSR = {Environment, Employees, Community, Governance).

**Hₐ:** There is significant difference between $WTP_0$ and $WTP_{CSR}$, CSR = {Environment, Employees, Community, Governance).

In addition, it is also intended to assess the respondents' willingness to pay in two situations at a time ($WTP_0$ vs $WTP_{CSR}$, CSR = {Environment, Employees, Community, Governance), i.e., to assess the association between two quantitative variables. In this sense, the most appropriate tests are the Paired Samples t-Test and the Wilcoxon Signed Rank Test (Ribeiro, 2021). After carrying out the tests, it is concluded that the only pair that does not reject $H_0$ is $WTP_0$ vs $WTP_{Governance}$ (health insurance) in the case of the Paired Sample t-Test, i.e., it is not possible to conclude that the results are statistically different, since |t| < 1.96 ∧ p > 0.05. All other pairs meet the requirements to reject $H_0$ and, therefore, it is possible to conclude that the results support that the $WTP_0$ values are statistically different from the $WTP_{CSR}$.

MB of each CSR Category
For each type of product and for each category, it is notable that there are MB values that are more prevalent than others, i.e., values that most consumers said they were willing to pay when the survey was carried out. Regarding health insurance, the category with the MB value class with the most respondents was the Community category in the class ]0.5; 13.67]€, followed by the Employees category with the class ]0.5; 11.50]€, the Governance category with class ]0.5; 12]€ and, finally, the Environment category with class ]0.5; 5.25]€. Thus, we can conclude that for the health insurance product, considering the initiatives presented in the survey, the category that brings more MB is the Community category, since it is where most respondents are willing to reward CSR in a largest range of values, followed by the Employee's category. Regarding coffee pods, the category with the range of values with the most responses was the Employee category with the range ]0.01; 1.50] €, followed by the Environment category with the range ]0.10; 1.14] €, the Community category with the range ]0.01; 1.00] € and, finally, the Environment category with the range ]0.01; 1.00] €. In this sense, in terms of coffee pods, the category that brings the most MB is the Employee category, followed by the Environment category.

**5.3. Discussion of Results**

MC (%) of each CSR Category
In general, the Community category is considered in both cases as the one that most contributed to the increase in companies' costs, considering an increase of approximately 0.40% in both cases. The remaining categories have a different impact

on costs depending on the company, with a maximum cost increase of 0.40% and a minimum increase of 0.03% being observed (see **Table 3**).

*Table 3 - MC (%) by CSR category – health insurance and coffee pods.*

| | | Environment | Employees | Community | Governance |
|---|---|---|---|---|---|
| MC (%) | Health Insurance | 0,028% | 0,085% | 0,370% | 0,085% |
| | Coffee Pods | 0,204% | 0,387% | 0,380% | 0,128% |

MB (%) of each CSR Category

By calculating the weighted average of the percentage increment value - MB (%) - per CSR category, it is possible to perceive the average value that consumers are willing to pay, considering the different weights of each value. The weighted averages were calculated based on three scenarios: initial sample, sample without outliers and sample with only premiums. It is concluded that as the increase in the value that consumers are willing to pay for the product increases, the lower the frequency of respondents who said they were willing to pay this increase, i.e., there are fewer consumers available to pay a high price differential, this way it is possible to state that $H_2$ is true.

∴**H$_2$:** Consumers' willingness to pay for CSR is decreasing for all categories. → **True**

**Win-win situation**

The equilibrium situation occurs when the MC is equivalent to the MB, i.e., when what is invested by the company translates into a benefit for it, in this case, which translates into a greater willingness of the consumer to pay a higher value for the product (or service). There are two options for achieving balance:

1. If $MC(\%)_{RSC} < MB(\%)_{RSC}$, the company can invest more in a certain category until this investment translates into the value of willingness to pay.

2. If $MC(\%)_{RSC} > MB(\%)_{RSC}$, the company does not need to make such a high investment, as this investment surplus does not translate into a benefit.

In short, for the win-win situation to be achieved, companies have room to invest in all categories, with the Community category being the one that is closer to the investment value that consumers are willing to pay more. In services, the investment made in the Employees' category can be reconsidered since respondents are willing to value this type of initiative (see **Table 4**). However, companies should bear in mind that

respondents may dictate a higher willingness-to-pay price in the survey than they are willing to pay in a real purchase situation.

*Table 4 – MC (%) vs MB (%) no outliers – health insurance and coffee pods.*

| | | Environment | Employees | Community | Governance |
|---|---|---|---|---|---|
| *MB* (%) | Health Insurance | 199 | 268 | 59 | 152 |
| *MC* (%) | Coffee Pods | 58 | 40 | 41 | 63 |

**5.3. Limitations**

Throughout this study, some limitations were detected: (1) certain CSR initiatives did not have associated monetary cost data, and it was necessary to estimate this data using assumptions and information from other sources; (2) it was only possible to carry out the interview with the company *Fidelidade*, so the estimated data for the company *Delta Cafés* were not subject to comparison; (3) the most current sustainability report publicly available by *Delta Cafés* was for the years 2015-2018, while the most current report of accounts was for 2010-2011; (4) the BDM method was not carried out in person, which may not have simulated a real purchase situation.

**6. Conclusions and Future Work**

The present study concludes that the increase in costs per category is proportional to the categories chosen by the company as main areas of activity, i.e., in the case of *Fidelidade*, the community is an important area of intervention being its focus. As expected, it can be concluded that the MC is increasing for all categories, as the initiatives developed always reflect an associated additional cost. The difference lies in the prioritisation of companies in each category. Regarding willingness to pay (MB), it appears that, for services, the Community, Employees and Governance categories receive the most awards. Considering regular consumer goods, the most awarded categories are Employees, Community and Environment. It was also found that consumers' willingness to pay decreases from a certain value depending on the category. In addition, the socio demographic factors: gender and level of education of the participant, were reflected to be related to willingness to pay. In this sense, companies can adjust their communication campaigns to be more effective in impacting consumers' purchase intention. For example, for females, the willingness to pay for health

insurance is greater, which may suggest communication campaigns to highlight CSR initiatives designed to reach the female audience. Similarly for the coffee pods product with education. Another added value of this study is to explore the costs and benefits of CSR actions at the level of several categories and help companies to determine the optimal investment in CSR, something extremely relevant in the context of scarce resources. To continue the present study, it is suggested that real cost data related to the CSR initiatives developed in companies be used to avoid estimates and assumptions that could bias the conclusions. In addition, it is suggested that the study sample be broader, probabilistic and that it represents the reality of the Portuguese population. Finally, we suggest the use of an even more adequate method to study consumers' willingness to pay, i.e., as similar as possible to real purchase situations.

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