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The Determinants of the Commitment to Corporate Social Responsibility: Case of Tunisia

Haifa Chtourou Rekik*

Abstract

The purpose of this paper is to highlight the main determinants explaining the behaviors of Tunisian companies on Corporate Social Responsibility (CSR). In fact, on the basis of a theoretically constructed questionnaire, we developed two measure of overall CSR activity (level of commitment and intensity of commitment) and two measures of the commitment by CSR action type (philanthropic CSR, integrative CSR and innovative CSR). The estimates were made from an OLS regression analysis in a first case and from an ordered PROBIT analysis in a second one.

The main result that emerges from this study is that the overall commitment and the commitment by CSR action type are determined by different factors, with the exception of “stakeholders integration” variable which seems to explain the commitment in any CSR action type. The industry is determinative only in the case of philanthropic actions marking a significant commitment of the chemical industry. Philanthropic commitment is still determined by respondents’ perception of CSR reflecting their ethical values, by firm’s size and by respondents’ academic training. Integrated commitment is primarily determined by the firm’s age and the firm’s CSR respondents’ ages. Finally, growing companies are the most involved in the innovative measures.

Keywords: CSR philanthropy, CSR integration, CSR innovation, ethics, stakeholders, competitive advantage.

I. INTRODUCTION

CSR, which has gained popularity, is considered as a broad concept that usually means the company’s responsibility towards its stakeholders being concerned of its tripartite namely “people, planet and profit” (Porter & Kramer, 2006). But its practical implementation is still a “black box” in the empirical literature. Much of the empirical literature on CSR seeks to justify in some economic terms, the various activities related to CSR.

Several reasons explain then the choice of companies to adopt more responsible behaviors in the absence of legal obligations. Some behaviors are strategic; others are defensive while others are considered as philanthropic. As part of this research, we will focus on some internal, external and organizational factors shaping the adopted CSR strategy. The first section presents the theoretical framework; the second section address the literature review about the determinants of CSR commitment and the hypotheses to be tested, the third section traces the methodology while the last section provides an analysis and interpretation of outcomes.

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II. THEORETICAL FRAMEWORK

Several reasons search to explain the choice of companies to adopt more responsible behaviors in the absence of legal obligations. These reasons find theoretical supports in the stakeholder theory and competitive advantage theory. Similarly, some specific factors to the company are presumed to have an influence on the manner of CSR commitment.

2.1. Determinants of CSR Commitment as Part of the Stakeholder's Theory

The stakeholder theory as developed by Freeman (1984) shows that CSR is primarily a questioning of the ethics and a search for legitimacy. The company's moral and ethical imperative states that the company is able to play a role in solving social problems. The company's ethics is often discussed in terms of the entrepreneur's ethics stating that personal and ethical values of the management team provide a basis for the strategy formulation.

If ethics deal with the regulative principles of action and moral conduct, legitimacy, by focusing on compliance with morality, is intimately linked. The question of the company legitimacy is one of the most common themes addressed whenever the companies' responsible motivations are studied. Thus, CSR appears as a way of restoring legitimacy shaken by financial, social and environmental scandals. It is therefore permissible to say that the search for legitimacy is a reason for the social behaviors of companies.

The CSR movement is also explained by the sustained pressure or expectations from stakeholders. According to Freeman (1984), stakeholders are formed by all individuals or groups that can be (or are) affected by the achievement of the organization's goals. Supporters of active responsibility offer practices built around the analysis by stakeholders that include understanding their aspirations and expectations and the interaction and communication with them. Business Impact (2000) provides that the interaction with stakeholders can help the company assess its capabilities and constraints to behave in a way that reflects the needs and aspirations of all parties.

2.2. Determinants of CSR Commitment as Part of the Competitive Advantage Theory

The companies' competitive environment becomes a place of continual uncertainty showing more risk. Nowadays, the idea of a general model seeking to develop a model strategy seems to be abandoned. Companies are implementing strategies to permanently adapt to their environment. It is of utmost importance in positioning the company against its competitors. Integrated into the corporate strategy, CSR is a competitive advantage through positive differentiation: creating new opportunities for innovation, wealth creation, branding, etc. On the most competitive markets, companies engage less in social actions, whereas on normal competitive rivalry intensity, companies commit especially in social actions. This result is interpreted by Bagnoli and Watts (2003) by the fact that strong competition resulting in low profit margin and subsequently a low capacity to provide additional social attributes to products. Conversely, a low competition results in high profit margin and provides additional capacity to engage in social actions. Moreover, Campbell (2007) gave a further explanation of the relationship. He concluded that in the case of intense competition, the company's shareholder value and survival become risky. This pushes companies to act irresponsibly because they think that this way of acting help them divert profits and survive. However, under normal conditions of competition, when a moderate level of profit is provided to the company and its sustainability is not at stake,

companies undertake least irresponsible actions. Finally, in an extreme case where the competition is almost zero, companies will no longer be interested to be engaged in socially responsible actions. Others, including Branco and Rodrigues (2006) assumed that the adoption of CSR varies in the same direction as the level of competition within the industry. Indeed, in a market where competition is strong, the comparative advantage that can provide CSR approach is important and the company tends to adopt this approach. However, the results of their study show that the level of commitment is unaffected by the intensity of competition. An equilibrium situation is, however, demonstrated by McWilliams and Siegel (2011) stipulating that, firms engaged in CSR earn as much profit as those firms not engaged in CSR.

On the other hand, McWilliams et al. (2006) assume that the level of investment in CSR actions is higher in firms established in mature sectors due to the fact that for these sectors, the scope of differentiation of production becomes wide and the consumers have sophisticated tastes and preferences on products and firms. It seems that every company seeks to make more profits through their commitment in CSR for the protection and enhancement of their reputation.

III. LITERATURE REVIEW AND HYPOTHESES

Studies based on the CSR perceptions by managers and senior managers within the company develop the emphasis on managerial values in determining the level of commitment to CSR. Almost all studies agree on the fact that the leader, by his profile, his personality, his personal ethics and values may influence CSR strategy adopted by the company. It therefore seems obvious that the overall direction plays an undeniable role in the formalization of the firm's CSR commitment (Quazi & O'Brien, 2000; Lankoski, 2000; Rashid & Ibrahim, 2002; Waldman et al., 2006; Husted & Allen, 2007; Basu & Palazzo, 2008; De Hoogh & Den Hartog, 2008; De Luque et al., 2008; Matten & Moon, 2008; Waldman & Siegel, 2008; Walumbwa et al., 2008; McWilliams & Siegel, 2011).

H₁: CSR perception by respondents influence the overall CSR commitment and CSR action type commitment.

Besides CSR perception by responsible, we also test the impact of its individual characteristics (profile). We highlight the possible correlation between respondents' academic training and respondents' age and the CSR commitment of the company's.

H_{2.1}: academic training of respondents influences the overall CSR commitment and CSR action type commitment.

H_{2.2}: respondents' age influences the overall CSR commitment and CSR action type commitment.

Many researchers including Hillman and Keim (2001), Preston et al. (2002), Blowfield and Frynas (2005), McWilliams et al. (2006), Miles et al. (2006) explain the company's behaviors by a desire to integrate its partners. The integration of stakeholders is manifested in building a long term relationship that is characterized by listening, understanding and positive response to their current and future expectations. It seems clear that the company's reaction will differ depending on the partner's type and power. According to Hillman and Keim (2001), the fact of maintaining good relations with primary stakeholders is likely to lead to a potentially integrated and innovative commitment strategy leading to increased financial returns.

H₃: stakeholders' integration influences the overall CSR commitment and CSR action type commitment.

Many researchers argue that the intensity of competition and the stage of the life of firm's product are likely to cause impacts on the CSR strategy adopted and disseminated. Some of them have concluded that CSR activity varies in the opposite direction of the level of competition within the industry. Others including Branco and Rodrigues (2006), McWilliams et al. (2006), and McWilliams and Siegel (2011) assumed that the adoption of CSR varies in the same direction as the level of competition within the industry. The hypotheses to be tested are the following:

H_{4.1}: level of competitive intensity influences the overall CSR commitment and CSR action type commitment.

H_{4.2}: stages of the life of firm's product influence the overall CSR commitment and CSR action type commitment.

3.1. Organizational Factors Determining the Commitment to CSR

We assume that the size and the age of the company and the industry are of paramount importance when it comes to determining the behavior of the company in terms of CSR. Many authors have shown significant differences in the forms of business organizations according to their sizes. The majority of studies show that large companies are brought more to identify important stakeholders and respond to their requests through socially responsible specific and formal strategies while SMEs are still unaware of the importance of such strategies, they tend to focus on a few distinct practices such as waste management, energy conservation, participation in community projects.

Different engagement levels can be described as levels of dedication, which in turn can be linked to the company's commitment period. This implies that the level of commitment in CSR is associated with the age of the business. The age of the firm is indicated by Zadek (2007) as a factor influencing the quality of the commitment (in terms of specificity, formality) describing CSR as a learning process that is built with the time. However, new studies have identified a growing demand for integrated and innovative responsible actions as a market opportunity for newly established companies.

Membership in a particular sector is also likely to have a significant impact on the adopted CSR strategy. So, every company is faced with the opportunities and risks according to its sector activity, shaping its way of CSR activity (Rashid & Ibrahim, 2002; Yam, 2012).

H_{5.1}: firm size influences the overall CSR commitment and CSR action type commitment.

H_{5.2}: firm age influences the overall CSR commitment and CSR action type commitment.

H_{5.3}: industry influences the overall CSR commitment and CSR action type commitment.

IV. METHODOLOGY

4.1. Sample and Data Collection

Data for this study were obtained through a survey based on a questionnaire with 82 managers (CEO, human resources managers or CSR managers) of companies established in Tunisia and operating in different industries (foods, capital goods, textiles and chemicals). The sample selection method is that of convenience sampling, i.e. we chose companies agreeing to answer the questionnaire. In the case of this study, it is a deductive approach which is concerned with developing hypotheses based on existing

theory and designing a research strategy to test the hypotheses. The objective of the questionnaire is then data collection and verification of hypotheses.

Data collection was done via two methods namely personal survey (face to face) and the internet survey (mailings).

4.2. Definitions and Measures of Variables

4.2.1. The Overall Commitment and the Commitment by CSR Action Type

The literature analysis brings out the items that operate the company's commitment in each of the three themes of CSR namely the CSR philanthropy, CSR integration and CSR innovation. The aggregation of the engagement in the three themes¹ of CSR is the overall commitment of the company.

- a. Items operating CSR philanthropy are six in number and reduced to four after the scale purification. The reliability analysis of selected items shows a value of Cronbach's alpha equal to 0.74. This scale has acceptable internal consistency reliability; it is not possible to improve the alpha by eliminating one or more items. CSR philanthropy focuses on charity activities, the sponsorship activities etc.
- b. Items operating CSR integration are nineteen in number and reduced to nine after the purification of the scale. The reliability analysis of selected items shows a value of Cronbach's alpha equal to 0.642. CSR integration focuses on the conduct of existing business operations in a responsible manner (the preservation of a high product quality, the payment of fair wages).
- c. Items operating CSR innovation are eleven in number and reduced to eight after the purification of the scale. The reliability analysis of selected items shows a value of Cronbach's alpha equal to 0.845. CSR innovation refers to the development of new models and business processes to solve social and environmental problems.

The level of commitment in every CSR action type is measured by a score formed from the summation of item responses thereto for each type of action. The intensity of overall CSR commitment and the intensity of commitment in each CSR action type are determined by converting the scores to a nominal variable with three modalities: 0 low intensity of commitment, 1 medium intensity of commitment, 2 strong intensity of commitment.

- a. CSR perception: measuring instruments for CSR perception were inspired from studies executed by Rashid and Ibrahim (2002), Papavasileiou et al. (2006), Muwazir et al. (2013). Items are ten in number and reduced to five after the purification of the measuring scale, the reliability analysis of selected items shows a value of Cronbach's alpha equal to 0.631. CSR perception is then measured by calculating a score that tells the level of agreement or disagreement of the respondents with these items.
- b. Respondent's profile: it is measured by the age and the academic training. The age is measured by a dichotomous variable; it takes 1 "young" if the age is below 40 years and 2 "adult" if the age exceeds or equal to 40 years. Also, academic training is measured by a dichotomous variable; it takes 1 if respondent had "management training" and 2 if another.

¹ Halme (2009) recognizes four main types of CSR typologies: typologies based on the company's motives to commit CSR, typologies based on the responsibilities that a company is supposed to assume or also normative responsibilities, typologies by stage and the action-oriented corporate responsibility typology. This last typology is based on the dominant mode of CSR activities practiced by the firm and on its link with the core company's business.

- c. Stakeholders' integration: survey show that respondents are able to classify the stakeholders (customers, suppliers, shareholders, employees, community, government and media) listed from 1 (most important for the company) to 7 (least important for the company). As part of this work, stakeholders are incorporated in the model according to their importance (primary or secondary). According to the theoretical and empirical literature, primary stakeholders are formed by shareholders, employees, customers and suppliers while secondary stakeholders are formed by community, government, and the media. The "stakeholders' integration" variable is a dichotomous that takes the value 1 if the most important stakeholder belongs to the primary stakeholder group and 0 if the most important stakeholder belongs to the group of secondary stakeholders.
- d. Level of competitive intensity in the industry: it is determined by each force's intensity in the sector. It, therefore, involves not only competitors but also suppliers and customers that may hold some bargaining power. Along with, there is also the threat of new entrants and substitutes. For each of the five forces, the respondent determine if the intensity of pressure is low (and he check 1), moderate (and he check 2), or high (and he check 3). The sum of responses by each respondent provides the level of competitive intensity, the values that can take the intensity of competition vary from 5 to 15 and that can be ranged into three intervals: the intensity is considered low if it belongs to the range [5-10]; the intensity is considered moderate if it belongs to the range [10-15]; the intensity is considered high if it is equal to 15. The level of competitive intensity is a dummy variable; it is set to 0 if it is considered high or low and to 1 if it is considered moderate.
- e. Stage of the life of firm's product: the two stages of the life of a firm's product that interest us as part of this work are the growth phase and maturity phase. Hence, this variable is rated 2 terms, it is set to 1 if the company is in a growth phase, and the value 2 if the business is in mature phase.
- f. Firm's size: the size is measured by a categorical variable that takes the following values: 1 small company if it has fewer than 100 employees; 2 medium companies if the number of employees varies between 100 and 500 employees; 3 large company if the number of employees is greater than or equal to 500 employees.
- g. Firm's age: age is measured by a categorical variable and it takes the form of three ways depending on the number of years of existence since the company's creation date; it shall take the following values: 1 if the number of years since creation is between 1-20 years; 2 if the number of years since creation is between 21 and 30 years; 3 if the number of years since creation is over 30 years.
- h. Industry: the industry (or sector activity) is measured by a categorical variable that takes the following values: 1 if the company belongs to the food industry sector; 2 if the company belongs to capital goods industries sector (construction and glass materials, mechanical and electrical industries); 3 if the company belongs to the textile industry sector; 4 if the firm belongs to the chemical industry sector.

4.3. Model

The objective is to model, in a first stage, the determinants of the overall commitment in CSR and then, in a second step, the determinants of each CSR action type commitment. The models to be tested take the following general form:

$$\begin{aligned} \text{CSR (Overall, Philanthropy, Integration, Innovation)} = & \\ & \beta_0 + \beta_1 \text{PERC} + \beta_2 \text{RESP'S AGE} + \beta_3 \text{TRAIN} + \beta_4 \text{STAK} + \beta_5 \text{COMP} + \beta_6 \text{LIF} \\ & + \beta_7 \text{SIZE} + \beta_8 \text{FIRM'S AGE} + \beta_9 \text{INDU} + \varepsilon \dots\dots\dots 1 \end{aligned}$$

V. DATA ANALYSIS AND RESULTS

We first present the results of the descriptive analysis and then the results of the regression analysis modelling the level and the intensity of CSR commitment. We use OLS regression for modelling the level of the commitment and PROBIT regression for modelling the intensity of the commitment successively.

5.1. Descriptive Statistics: State of CSR in Tunisia

Initial results show that the executives surveyed have a positive attitude towards corporate social responsibility and the average score of their perception of CSR is 3.9 being strictly greater than the average of 3. These results show that 40.2% of managers have good perception of CSR against 58.5% with medium perception and 1.2% only have a low perception. The 1.2% shows that CSR started to dominate the minds of leaders of Tunisian companies. The results of descriptive analysis show that the Tunisian companies practice a social responsibility and that the average score for the overall commitment was higher than the average of 3 (the average score of overall commitment is equal to 3.15), indicating a commitment in CSR but a level of commitment that is considered as moderate. This level of commitment appears to be close to the result provided by another study conducted by a private consulting agency. Indeed, the study produced by Sustainable square Consultancy and Think Tank², is entitled “report: company’s accountability and sustainability - Algeria, Morocco, Tunisia, June 2013”³ it is shown that more than half of the companies surveyed in Tunisia (62%) confirmed their commitments in CSR activities. The frequency analysis shows that 35.4% of companies have a score of CSR activity less than 3, so they are weakly engaged. 52.4% of companies that score between 3 and 4 are considered moderately engaged and only 12.2% of companies whose score is higher than 4 are considered highly engaged in CSR. The reports of the company’s surveyed have shown that each type of behavior is usually present with a different weight according to the company. Descriptive statistics also show that the average of commitment in CSR philanthropy actions is the highest (the average score is equal to 3.29), followed by commitment in CSR integration actions but with a small difference (the average score is equal to 3.24), followed by commitment in CSR innovation actions (the average score is equal to 2.95). These results show that the Tunisian companies are weakly involved in CSR innovation action type. For a more detailed analysis, the flat sorting questionnaire provides the following findings:

1. The highest scores relate in the first level to the items related to the preservation of the quality of the product (an integrated action: average score= 4.84) and the preservation of the health and safety of employees (an integrated action: average score= 4.60). So the highest scores relate to primary stakeholders for the company who are the clients and employees. This can be explained through the prism of the resource dependence theory (Pfeffer & Salarick, 1978), indicating that companies will pay more attention to the actors who control the key resources of the organization in relation to stakeholders who do not control vital resources.
2. The lowest scores are related primarily to environmental responsibility. In fact, 64.2% of companies are not certified in the field of environmental management,

² A consulting firm located in Dubai, specializing in practical responsibility and sustainability in business.

³ This survey aimed to give an overview and draw up an inventory of CSR practices in Morocco, Algeria and Tunisia.

74% of respondents did not agree on the fact that their company seeks to maintain a green supply chain, 64.2% of companies do not proceed to the recycling of end of life products (after use). We see then the lack of importance given to environmental responsibility by Tunisian companies.

3. The lowest scores are related largely to the formalization of CSR. In fact, 76.5% of companies affirm not having an official position dedicated to CSR and 67.9% of companies do not have their own budget to responsible action. The majority of companies surveyed do not have dedicated department for the management of CSR but have a person in a subdivision in another department (human resources department, sales, marketing, and office of the CEO).

5.2. Multivariate Regression Analysis

5.2.1. Determinants of the Overall Commitment to CSR

The OLS regression results (Table 1) shows that the overall level of CSR commitment is significantly correlated (at 1% significance level) with stakeholders' integration, in second place and in less significant level comes the CSR perception by respondents and finally, come respondents' academic training and the firm's size.

The significant effect of the "stakeholder's integration" variable seems to be obvious as a company that places importance to its stakeholders is committed to responsible actions that meet their needs and expectations. The perception of CSR by respondents is also crucial in explaining the extent of CSR activity. The significant effect of the variable "firm' size"⁴ is consistent with some previous studies' results arguing that the company's size motivates commitment in CSR and influences the organization of responsible actions, as well. By decreasing effect on the level of commitment in CSR, we therefore have the following classification: large firms > medium firms > small firms. The significant effect of "respondents' academic training" could be explained by the fact that the respondents having management training are able to analyze the opportunities, strategic issues and the implantation conditions of a CSR approach.

Table 1

OLS Regression Analysis of Determinants of the Overall Level of CSR

| Explanatory Factors | Model 1 | | | Model 2 | | |
|----------------------|----------------|--------------|--------------------|----------------|--------------|--------------------|
| | Sum of Squares | D | Partial Eta Square | Sum of Squares | D | Partial Eta Square |
| CONSTANT | 298.704 | 1331.695*** | 0.947 | 209.433 | 950.327*** | 0.933 |
| PERC | 0.931 | 4.152** | 0.520 | - | - | - |
| TRAIN | 0.870 | 3.878* | 0.049 | 0.590 | 0.590 | 0.038 |
| RESP'S AGE | 0.195 | 0.868 | 0.011 | 0.132 | 0.598 | 0.009 |
| STAK | 5.424 | 24.183*** | 0.244 | 5.108 | 23.177*** | 0.254 |
| COMP | 0.016 | 0.073 | 0.001 | 0.006 | 0.029 | 0.000 |
| LIF | 0.561 | 2.502 | 0.032 | 0.215 | 0.974 | 0.014 |
| SIZE | - | - | - | 1.287 | 2.921* | 0.079 |
| FIRM'S AGE | - | - | 0.075 | 0.081 | 0.184 | 0.005 |
| INDU | - | - | - | 0.515 | 0.779 | 0.033 |
| R² | | 29.9% | | | 31.2% | |

⁴ The difference in level between level 1 (small company) and level 2 (medium company) is statistically significant at the 1% level, while the difference between level 2 (medium company) and level 3 (large company) is not statistically significant.

The PROBIT regression results (Table 2) show that the variables “CSR perception”, “respondents’ academic training” and “firm’s size” have significant effect on the overall intensity of CSR commitment but the predictive power of the models, however, is low since it is 7.7% and 8.1%. The results show that a moderate level of CSR perception affects negatively and significantly the overall intensity of CSR commitment while a strong CSR perception influences it positively. Similarly, respondents, having high quality training in management, affect positively and significantly the overall intensity of CSR commitment. Finally, we observe that the coefficients associated with small firms’ size (size 1 and size 2) are less than 0 while that associated with large firms’ size (size 3) is positive although at a lower level of significance (10%).

Table 2**PROBIT Regression Analysis of Determinants of the Overall Intensity of CSR**

| | Model 1 | Model 2 |
|---------------------|------------------|-------------------|
| CONSTANT 0 | -0.173 (0.286) | -0.081 (0.314) |
| CONSTANT 1 | 1.526*** (0.325) | 1.626 *** (0.355) |
| PERC 1 | -0.516** (0.264) | - |
| TRAIN 1 | 0.581** (0.268) | 0.620** (0.268) |
| STAK 0 | 0.277 (0.263) | 0.245 (0.268) |
| LIF 1 | 0.414 (0.597) | 0.506 (0.600) |
| | 0.406 (0.281) | 0.423 (0.282) |
| SIZE 1 | - | -0.712* (0.377) |
| SIZE 2 | - | -0.130 (0.328) |
| Cox et Snell | 0.138 | 0.144 |
| Nagelkerke | 0.161 | 0.169 |
| McFadden | 0.077 | 0.081 |

5.2.2. Determinants of CSR Philanthropy Commitment

The OLS regression results obtained with the two models (Table 3) show that the importance given to primary stakeholders, academic training of respondents and the size of the firm are the key determinants of CSR philanthropy. The sector affiliation induces also significant differences in the level of CSR philanthropy commitment. Finally and at the 10% threshold, the perception of CSR determines the extent of the philanthropic CSR. Indeed, companies with responsible having medium or high CSR perception, who give importance to primary stakeholders and who belong to the chemical sector have the best scores of CSR philanthropy commitment. This result is consistent with the findings of other studies that classify the chemical industry among the most sensitive in terms of CSR, and therefore more involved in philanthropic actions.

Insert Table 3 here.

The PROBIT estimated coefficients in both models (Table 4) show that the intensity of CSR philanthropy commitment is low in the case of a low CSR perception, weak integration of interest of primary stakeholders as well as in other sectors rather than chemical industry. However, the commitment intensity is more likely to be high when the responsible of the social action passed through management training.

Table 3
OLS Regression Analysis of Determinants of the Level of CSR Philanthropy

| Explanatory Factors | Model 1 | | | Model 2 | | |
|----------------------|--------------|--------------|--------------------|--------------|--------------|--------------------|
| | Coef-ficient | D | Partial Eta Square | Coef-ficient | D | Partial Eta Square |
| Constant | 405.196 | 877.309*** | 0.919 | 261.093 | 629.746*** | 0.900 |
| PERC | 1.432 | 3.100* | 0.039 | 0.454 | 1.095 | 0.015 |
| TRAIN | 2.602 | 5.633*** | 0.068 | 1.264 | 3.049* | 0.042 |
| RESP'S AGE | 0.058 | 0.125 | 0.002 | 0.115 | 0.279 | 0.004 |
| STAK | 14.521 | 31.440*** | 0.290 | 12.817 | 30.913*** | 0.306 |
| SIZE | | | | 3.244 | 3.912*** | 0.101 |
| FIRM'S AGE | | | | 0.179 | 0.216 | 0.006 |
| INDU | | | | 3.770 | 3.031** | 0.115 |
| R² | | 34.6% | | | 41.3% | |

Table 4
PROBIT Regression Analysis of Determinants of the Intensity of CSR Philanthropy

| | Model 1 | Model 2 |
|---------------------|-------------------|-------------------|
| CONSTANT 0 | -2.141*** (0.424) | -0.885*** (0.263) |
| CONSTANT 1 | -0.700* (0.378) | 0.492* (0.253) |
| PERC 1 | -0.550** (0.271) | -0.517** (0.260) |
| STAK 0 | -1.017*** (0.360) | -1.000*** (0.352) |
| INDU 1 | -0.845* (0.461) | - |
| INDU 2 | -1.164** (0.393) | - |
| INDU 3 | -1.209** (0.461) | - |
| TRAIN | - | 0.526** (0.255) |
| Cox et Snell | 0.256 | 0.200 |
| Nagelkerke | 0.290 | 0.227 |
| Mc Fadden | 0.138 | 0.105 |

5.2.3. Determinants of CSR Integration Commitment

The OLS regression results (Table 5) indicate that the creation date (firm's age) and focus on primary stakeholders affect significantly the level of commitment in CSR integration. Thus, and according to the results, young companies with less than 10 years of age⁵ are more involved than other companies, similar to the companies that place greater emphasis on primary stakeholders. For the variable "firm's age", the effect on the commitment level is not linear since in decreasing order, we have the aged companies, then the youngest companies and finally the middle-aged companies. These results could be explained as follows: firstly, the young companies usually run by young

⁵ The difference between level 1 (companies with less than 10 years of age) and level 2 (companies aged between 20 and 30 years) is statistically significant at the 1% level, and the difference between the level 2 (companies aged between 20 and 30 years) and level 3 (companies with more than 30 years of age) is significant at the 1% level, and it can be concluded that this difference is significant between level 1 and level 3.

managers⁶ or leaders constituting a new “generation of creators” who include in their business plans some aspects of CSR. Secondly, aged companies, usually managed by adult persons⁷ with a capacity to act in the long or even medium term. are able to incorporate aspects of CSR yet with a less extent than young companies. As for the variable “stakeholders’ integration”, this result seems obvious since a company that attaches importance to its primary stakeholders is able to integrate some responsible actions which meet their needs and expectations.

Table5**OLS Regression Analysis of Determinants of the Level of CSR Integration**

| Explanatory Factors | Model | | |
|----------------------|-------------|-------------|--------------------|
| | Coefficient | D | Partial Eta Square |
| CONSTANT | 312.393 | 547.845*** | 0.876 |
| TRAIN | 0.187 | 0.328 | 0.004 |
| STAK | 3.545 | 6.216** | 0.075 |
| FIRM’S AGE | 3.325 | 2.915** | 0.070 |
| R² | | 8.4% | |

The PROBIT regression results (Table 6) indicate that neither the stakeholders’ importance, nor the company age acts on the intensity of commitment to CSR integration. Only young respondents are able to significantly and positively influence the intensity of commitment in this type of responsible actions.

Table 6**PROBIT Regression Analysis of Determinants of the Intensity of CSR Integration**

| | Model |
|---------------------|------------------|
| CONSTANT 0 | -0.423* (0.252) |
| CONSTANT 1 | 1.611*** (0.301) |
| RESP’S AGE 1 | 0.595** (0.278) |
| STAK 0 | -0.213 (0.609) |
| FIRM’S AGE 1 | 0.231 (0.435) |
| FIRM’S AGE 2 | -0.354 (0.322) |
| Cox et Snell | 0.102 |
| Nagelkerke | 0.124 |
| Mc Fadden | 0.061 |

5.2.4. Determinants of CSR Innovation Commitment

According to the models 1 and 2 (Table 7), it appears that only the variable “stages of the life of firm’s product” has a significant effect on CSR innovation commitment. Moreover, these results show that companies being in the growth phase are more involved in such actions than those companies reaching maturity. It indicates that growth stocks are more focused on economic priorities. The CSR perception by respondents is also significant but with a lower level of significance proving that all

⁶ In the bivariate analysis, we found a statistically significant relationship between the CSR integration and the respondent’s age, but in the multivariate model, the association was not significant, other variables “firm’s age” and “stakeholder’s integration” outweigh the variable “respondent’s ages”.

⁷ The result of the chi-squared test shows a significant association at the 5% threshold (0.012) between firm’s age and the respondent’s age, young companies are usually run by young leaders while established firms for more than 30 years are run by adult leaders.

the company's actions are based on a value element. Stakeholders' integration and respondents training determine the extent of innovative CSR but at a lower level of significance.

Table 7

OLS Regression Analysis of the Determinants of the Level of CSR Innovation

| Explanatory Factors | Model 1 | | | Model 2 | | |
|----------------------|--------------|------------|--------------------|--------------|------------|--------------------|
| | Coef-ficient | D | Partial Eta Square | Coef-ficient | D | Partial Eta Square |
| CONSTANT | 264.891 | 433.244*** | 0.852 | 178.478 | 280.986*** | 0.805 |
| PERC | 1.445 | 4.605** | 0.058 | 1.296 | 2.041 | 0.029 |
| TRAIN | 2.132 | 3.487* | 0.044 | 2.193 | 3.452* | 0.048 |
| RESP'S AGE | 0.092 | 0.150 | 0.002 | 0.091 | 0.143 | 0.002 |
| STAK | 2.377 | 3.888* | 0.049 | 2.319 | 3.651* | 0.051 |
| COMP | 0.281 | 0.460 | 0.006 | 0.490 | 0.771 | 0.011 |
| LIF | 5.634 | 9.215*** | 0.109 | 4.920 | 7.746*** | 0.102 |
| SIZE | - | - | - | 2.286 | 1.800 | 0.050 |
| FIRM'S AGE | - | - | - | 0.042 | 0.033 | 0.001 |
| INDU | - | - | - | 0.155 | 0.081 | 0.004 |
| R² | 16.9% | | | 13.7% | | |

For the PROBIT regression results, in both estimated models (Table 8), the variable "stages of the life of firm's product" has a positive and significant effect nearing 5% on the intensity of CSR innovation commitment. Companies being in the growth phase are able to present a strong commitment in CSR innovation; this confirms the evidence that growth stocks are more focused on economic priorities. However, the "CSR perception" and "firm's size" variables remain without significant effect.

Table 8

PROBIT Regression Analysis of Determinants of the Intensity of CSR Innovation Commitment

| | Model 1 | Model 2 |
|---------------------|------------------|------------------|
| CONSTANT 0 | -0.188 (0.231) | -0.101 (0.284) |
| CONSTANT 1 | 1.366*** (0.270) | 1.452*** (0.323) |
| PERC | -0.292 (0.263) | - |
| STAK | -0.583 (0.357) | -0.612* (0.360) |
| LIF | 0.644** (0.274) | 0.665** (0.277) |
| SIZE 1 | - | -0.537 (0.380) |
| SIZE 2 | - | 0.118 (0.323) |
| Cox et Snell | 0.116 | 0.148 |
| Nagelkerke | 0.136 | 0.174 |
| McFadden | 0.065 | 0.085 |

5.3. Discussion

The predictive power of the variables used in different models is considered to be low as indicated by the values of adjusted R², but the results obtained to model the CSR philanthropy commitment are much better than those obtained for the other CSR actions type. This could be explained by several factors such as the weak sample size (82 observations) and the existence of other factors shaping the behavior of companies on CSR. The obtained results confirm some of the hypotheses stating that

companies' behavior is determined by different factors, the most important is the following:

1. Respondents' ethics as measured by the "CSR perception" seems to determine the overall commitment and commitment in CSR philanthropy. The philanthropic commitment is determined by the CSR perception on respondents that reflects the ethical values of these latter.
2. The integration of stakeholders' interests is a factor behind the overall commitment and commitment in any CSR action type but at different significance thresholds. This means that companies appreciate the extent of their stakeholders (primary and secondary) and engage in actions meeting all the expectations and pressures, but the integration of the interests of the primary stakeholders seems to be a determining factor of commitment in CSR integration.
3. The search for a competitive advantage materialized by a strong commitment in CSR innovation seems to characterize innovative companies being in the growing phase.

VI. CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH DIRECTION

The objective of this research is to consider the factors that differentiate the behaviors of companies in terms of their commitment in CSR in the absence of legal obligations. Some internal, external and organizational factors are dictated by the theoretical and empirical literature as determinants of corporate behavior. As expected, respondents' ethics, stakeholders' integration and the search for a competitive advantage are all determinants that explain the differences observed between the firms. The determinants can be grouped into motivation effect (ethical consideration), pressure effect (from stakeholders) and incentive effect (looking for a competitive advantage). The variable "firm's size", "firm's age" and "industry" seem to be decisive factors to explain the level and intensity of CSR practices.

The originality of this work comes from:

1. The measure of CSR commitment. In fact, based on a theoretically constructed questionnaire, we have developed two measures of responsible commitment (level of commitment and intensity of commitment) of some industrial Tunisian firms.
2. The use of a classification typology of CSR actions in terms of their interaction with the core of the firm's business as developed by Halme (2009).
3. This study takes into account various factors that can explain CSR strategy and CSR implementation.

Nevertheless, this work has some limitations; the first is due to the relatively small sample size while the second refers to the explanatory variables used. Although the results contribute to some extent to an understanding of the change in the scope and commitment intensity in CSR, other factors may account for this variation including, governance factors. Some governance factors may play a role in promoting CSR within the firm as the presence of socially responsible funds in the firm's capital. Thus, the presence of these funds is a binding force weighing on the managers for the implementation of CSR. Still, the control mechanisms within the firm, including the board of directors, are likely to influence the level of commitment in CSR. In future research, we suggest conducting similar studies on larger samples belonging to sectors more sensitive to societal issues. A large sample also offers the opportunity to examine other critical factors such as governance factors and to determine a more accurate engagement strategy.

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