

## **Commitment to Corporate Social Responsibility and Financial Performance: An Empirical Study in North Africa Context**

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**ABSTRACT:** *The objective of the study is to measure the impact of the commitment in corporate social responsibility (CSR) in its various forms on the financial performance (FP). Thus, on the basis of a questionnaire theoretically constructed and administered to 327 managers operating in four business sectors, we have developed two measures of the global commitment and commitment by nature of CSR action (scope and intensity of: altruistic CSR, integrated CSR, innovative CSR). Multiple regressions are implemented to assess the nature of the relationship between financial performance and each of the responsible actions. The Examination of the impact of the CSR commitment on financial performance partially approved the social impact hypothesis stipulating a positive association between FP and responsible commitment, only the positive effect of altruistic CSR is demonstrated. Moreover, for the integrated and innovative actions, the weak implication in these actions compared to the altruistic actions could explain the absence of significant link. But this result is also important since it marks the absence of a negative effect. Regarding the predominance of the strategic approach over the altruistic approach, this assumption is only true for companies operating in the chemistry sector.*

**KEYWORDS:** *Altruistic CSR; Integrated CSR; Innovative CSR; Stakeholder theory; Financial Performance*

**JEL CLASSIFICATION:** *M11; M12; M14; M49*

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### **I. INTRODUCTION**

In recent years, researchers have devoted considerable attention to the managerial implications of corporate social responsibility. Although there is a significant debate about the moral choices that leaders face when deciding to engage in CSR, most CSR studies focus on the relationship between CSR and financial performance (Mc Williams and Siegel, 2000; Margolis and Walsh, 2001; Orlitzky, Schmidt and Rynes, 2003), the challenge is to understand if the company benefits financially from engaging in this activity. Margolis and Walsh (2003) investigated 127 empirical studies and found mixed results, but concluded that the positive relationship predominates. They also suggest that although the relationship is positive, it may be illusory given the imperfect nature of studies that face problems related to defining and measuring CSR and measuring financial performance.

Despite a large growth in the CSR literature, it seems difficult to find a single and complete definition of CSR (Lockett et al., 2005). Several causes explain this: firstly, CSR is essentially a contested concept, quite complex and has extensive and opened rules of application; second, CSR is a term that brings together many other concepts, overlaps with some (such as corporate sustainability, corporate citizenship) and is consistent with others; finally, the concept of CSR has been clearly seen as a dynamic phenomenon (Caroll, 1999). The theoretical developments of the 20th century of CSR have led to the conclusion that CSR has gone through two phases in its construction, the first one spreading over the years 1950-1980, it was marked by the integration of

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ethical philosophies in the field of economy and by delimiting the content of CSR. The second phase spans the years 1980-2000, and was marked by the new strategic orientation of CSR.

Margolis and Walsh (2003) predict that it is difficult to believe that managers take actions that they know are detrimental to the financial performance of the company. Even if the personal values of the leaders are aligned with the responsible values, it is difficult for them to decide to engage in responsible activities if they do not see the possibility of promoting financial performance. In the same year, Orlitzky et al. (2003) presented the first quantitative meta-analysis of thirty years of study of the relationship between social performance and financial performance. The authors concluded that financial performance and social performance should not be presented as two compromises. They also conclude that a good social performance is both a determinant and a consequence of financial performance. The positive impact of social performance on financial performance is mainly due to good reputation, whereas the influence of financial performance on social performance is easy to understand because a good financial performance provides the necessary resources for investment in socially responsible activities.

Researchers then encounter a lack of direct theoretical and empirical evidence on the strategic aspects and the benefits and gains to the enterprise from CSR commitment. From the theoretical point of view, little attention is devoted to the strategic aspects of CSR and from the empirical point of view, it is difficult to evaluate the benefits of responsible actions because such actions usually constitute an intangible resource or competence. In addition, CSR is often associated with product attributes or the existing production process or management practices of managers, making it difficult to quantify the added value of socially responsible activities. Finally, we note that there is little emphasis on studying the conditions around which CSR can contribute to a sustainable competitive advantage. By analogy, not all market projects create value, social projects are not all creators of value. Indeed, many social projects increase costs, and although they can be positively evaluated by different stakeholders, shareholders can see the value of their shares decreased. It is therefore likely that the mode of implementation of CSR influences the expected results of such societal action (Porter and Kramer, 2006). The Hillman and Keim (2001) study has shown that the content of CSR makes the difference in the financial performance of the company. Likewise, mutual funds that invest in socially responsible investments show that the financial returns from these investments vary according to the CSR's operationalization by the fund (Barnett and Salomon, 2006). As a result, researchers are able to refine the question and ask, "What kind of responsible actions improve financial performance the most?"

This questioning is at the origin of the general stake of this study, it is about determining, from the theoretical point of view, then through an empirical study, the types of societal actions that allow increasing the financial performance of the company. This research work is an extension of the previous work done in the Tunisian context such as the study by Ghazzi Nekhili and Kammoun Chouk (2012) which dealt with the social responsibility strategies of companies of organic actors in Tunisia (which have identified four CSR strategies that are the business-versus-society strategy, the green washing strategy, the good citizen strategy and the CSR / SD leadership strategy, the one carried out by GIZ<sup>1</sup> (2012) which tried to give an overview of CSR in Tunisia, the study of Turki (2009), who studied the ecological behaviors of Tunisian business leaders, measured the intensity of environmental commitments in order to arrive at a typology of the ecological behavior of Tunisian leaders (which he classified as behavioral defensive, conformist and citizen), the study of Ben Boubaker Gherib and Berger Douce (2008) who analyzed the environmental commitment of SMEs in the Tunisian and French contexts (by understanding the commitment to CSR according to three dimensions which are the integration into the strategy of the SME, the voluntarism of the approach and the degree of formalization) and the study of Ghazzi Nekhili (2008) who drew attention to the operational orientation of human resources management in Tunisian companies that sometimes adopt practices CSR without being part of a strategic vision. As part of this research, our efforts focus on some internal and external factors that appear to shape CSR initiatives by using

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<sup>1</sup>Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) "German Development Cooperation" on behalf of the Federal Ministry for Economic Cooperation and Development strives to support responsible business practices. As a first step, the DPP-GIZ program embarked on a study of the state of play of CSR in post-revolution Tunisia.

The classification typology of CSR actions developed by Halme (2009) while adopting it in Tunisian context. This typology is based on the dominant mode of CSR activities practiced by the company and takes a more pragmatic focus; it is seen as the most realistic solution for examining CSR results. This category extends the existing typologies of CSR (Carroll, 1979; Frederick, 1987-1998; Wood, 1991; Baron, 2001; Carroll, 2001; Husted and Salazar, 2006; Winsdor, 2006) and proposes another typology based on the link between the responsible activities practiced and the core business of the company. Halme (2009) and Halme and Laurila (2009) distinguish three types of actions that are philanthropic CSR that focuses on charity, sponsorship and sponsorship actions, integrated CSR that focuses on driving the company's existing operations in a more responsible manner (preserving high quality products, paying fair wages, preserving the health and safety of employees) and innovative CSR that refers to the development of new models and processes of exploitation to solve social and environmental problems.

The following parts of the study are organized around five sections. In a first section, the theoretical framework and a review of previous work are presented; the second section is based on the hypotheses to be tested; the third section traces the methodology followed while the fourth section is devoted to the analysis and interpretation of the results found. The fifth section concludes the paper

## **II. THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE**

Different theoretical approaches tend to clarify the nature of the relationship between social performance and financial performance. Three main approaches are distinguished: the first one foresees the existence of linear relationships between the two constructs; the second one suggests the existence of nonlinear relationship and finally, the third postulates the absence of relationship. It is the first category that will be studied as part of this research. This category of relationship is framed by two theoretical currents of thought. The first stream comes from the classical school of Chicago, it is represented mainly by Friedman (1970), according to which, the only responsibility of the company is the maximization of the profits of the shareholders within a legal framework and the custom of the country. The second current that can be described as "socialist" establishes that a good social performance is a condition of legitimacy of the company in its environment and therefore, social performance and financial performance are positively correlated, it is the premise of Stakeholder Theory as developed by Freeman in 1983.

### **2.1 EXAMINATION OF THE RELATIONSHIP IN THE FRAMEWORK OF CLASSICAL THEORY**

This first trend supposes the existence of a negative relationship between responsible commitment and financial performance. Proponents of this position consider that a firm that engages in responsible actions will suffer a competitive disadvantage to the extent that these actions will generate additional costs for the firm. According to this approach, the company only invests in social projects that increase shareholder value without deception or fraud. The goal of maximizing value remains the highest point of any social action; Friedman (1970) predicts that the mere existence of CSR is a signal of an agency problem within the company. Many reasons can support this suggestion. First, societal actions tend to remain disconnected and isolated from business units; secondly, most philanthropy actions consist of incidental initiatives towards generic social issues; Finally, the social impacts of these initiatives are often dispersed (Porter and Kramer, 2002-2006) and the benefits from these activities are limited to improving the reputation in the short term; Indeed, the manager who draws on the resources of the company to engage in CSR is to make a gesture specific to the political process, to practice CSR with the money of others, shareholder money which he decreases return, or the one of the consumers for whom he raises the prices, or the one of the employees whose remuneration is lowered. Several studies are carried out to prove this link (Vance 1975, Brammer et al., 2006).

### **2.2 EXAMINATION OF THE RELATIONSHIP WITHIN THE FRAMEWORK OF STAKEHOLDERS THEORY**

Stakeholder theory as developed by Freeman (1984) is a theory of managing potential conflicts due to diverging interests. According to Freeman (1984), stakeholders are formed by all individuals or groups who may be (or are) affected by the achievement of the organization's objectives. The Stanford Research Institute<sup>2</sup> (SRI) defines stakeholders as "groups that, without their support, the organization would cease to exist" (SRI 1963, cited in Freeman 1984, p. 31). This definition clearly implies that business leaders are able to bring about constructive contributions from their stakeholders to achieve the expected results (for example: the survival and sustainability of the organization, profitability, stability, growth).

The instrumental focus of stakeholder theory is able to partly explain the CSR-financial performance relationship. The instrumental focus of stakeholder theory is used in collaboration with the descriptive / empirical approach of stakeholder theory to identify the existence or absence of a link between stakeholder management and the achievement of traditional business objectives (for example, profitability and growth). Studies based on the instrumental approach of stakeholder theory suggest that adherence to stakeholder principles and practices enables the company to achieve its performance objectives as well as or better than competitors' performance. Donaldson and Preston (1995) have established a framework to examine the connections, if any, between stakeholder management practice and the achievement of various performance objectives in the enterprise. The main focus here is the assumption that companies that conduct stakeholder management will, other things being equal, be more profitable in terms of conventional performance (Profitability, Stability, Growth, etc.). Thus, the instrumental focus of stakeholder theory seeks to link stakeholder interests to business objectives such as desired profitability.

Within this group of theories, CSR is seen only as a strategic tool for achieving economic goals and therefore for creating value. CSR can be an opportunity for differentiation when the company presents an offer that is not comparable to others. Product differentiation through the use of products with the attributes of social responsibility (a socially responsible product or a socially responsible production process such as innovation in products that meet new needs, production of green products, innovation in specifically tailored products and preferred prices to address issues of poverty reduction and improved quality of life) creates new markets that create value for consumers who are willing to pay a price premium for products that incorporate the societal dimension (Burke and Logsdon, 1996; Husted and Allen, 2007). Socially responsible practices such as fair wages, a clean and secure work environment, training opportunities, health and education benefits for employees and their families, flexible work hours and work sharing can produce direct benefits to the company by increasing employee morale and their productivity, by reducing their absenteeism and turnover. Also, the company gains in cost of recruiting and training new employees. Similarly, the environmental component can lead to more efficient production processes, improvements in productivity, lower compliance costs and new market opportunities. Hillman and Keim (2001) analyzed the relationship between social performance and financial performance by referring to a theoretical model based on stakeholder management.

For these authors, they see the need to distinguish between two components of corporate social performance, namely the management of stakeholders and participation in social problems. They believe that these two components have opposite effects on financial performance. Maintaining good relationships with primary stakeholders is likely to lead to an increase of financial returns as these processes performances support the development of intangible assets that can be valued within the enterprise that can be a source of competitive advantage. On the other hand, engagement in societal actions that are not directly related to their relationship with primary stakeholders cannot create benefits because participation in social problems can be easily duplicated by competitors. For Post et al. (2002), the company's ability to create sustainable value for its shareholders over the long term is determined by its interaction with its various stakeholders. Bird et al. (2007) support this same point of view and assume that managers are able to assess the impact of their actions on different stakeholders, but at the same time, to assess the impact of their decisions on the market value of the company (neoclassical opinion). Prahalad (2002) analyzed the Indian experience and suggested changing minds to convert the poor into active consumers. The first element is to consider the poor as an opportunity for

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<sup>2</sup>It is an American institution that conducts research in different fields of science and technology.

innovation and not as a problem. To reach the lower level of the pyramid, the author proposes a disruption of the innovation strategy. Disrupted innovation consists of producing goods and services using different skills and production conditions different from those used for the production of usual goods for consumers in the dominant markets. These are goods with low production costs and adapted to specific needs. For example, a telecommunication company has invented low-cost telephone systems, with limited services tailored to the customers of the base of the economic pyramid. Disruptive innovation can then improve the economic and social conditions of the population belonging to the base of the pyramid and at the same time, create a competitive advantage to companies mainly in underdeveloped countries in different sectors of activity such as telecommunications, electronics, energy and other sectors (Hart and Christensen, 2002; Prahalad and Hammond 2002). Wagner and Shaltegger (2004) tested the relationship between economic performance and environmental performance, demonstrating that companies that follow an environmental strategy focused on shareholder profit value the relationship more than companies without a strategic approach. The result is that the impact of CSR on economic performance depends on the company's own strategy. This study complements previous work by proposing a model that allows managers to measure the company-specific value provided by its societal commitment. Boga, Canpos and Blasco (2008) conducted an event study in the Brazilian context that tests the impact of integrating the company into a sustainability index of companies on the price of the stock, they seek to know whether companies' CSR efforts are recognized by the market, they have tested the assumption that the announcement of information on the inclusion of the company in the ISE<sup>3</sup> index generates positive abnormal returns for this enterprise. The results show that neither cumulative returns nor abnormal returns are statistically significant, but at the same time, there is no negative abnormal return. This result does not negate the existence of a relationship between good societal practices and the creation of value for the company. This lack of correlation can be explained by the weakness of statistical tests. The authors put forward other possible explanations for this weak relationship, they think that investors are already aware of information about the company's societal commitment and this information is already included in the price of the company share. So, the event of "inclusion of the firm in the ISE index" can be seen as confirmation to the public that the company is engaged in CSR. Again, investors may refuse to pay "more" for companies that are linked to societal indices and as such, the company does not exhibit positive abnormal returns.

### **2.3 EXAMINATION OF THE RELATIONSHIP IN THE CONTEXT OF THE THEORY OF RESOURCES AND SKILLS**

The theory of resources and skills has its origins in the work of Penrose (1959), which has emphasized the role of corporate resources in the phenomenon of diversification.

It has since developed tremendously in the area of strategic management since the suggestions of Wernerfelt (1984), the statement of fundamental principles by Barney (1991) and the argument of Conner (1991) to elevate the approach by resources at the rank of theory. The theory of resources and skills is thus accepted as a theory that explains the sources of competitive advantage and informs managers on how to identify these resources (valuable, rare, inimitable, non-substitutable and controlled by the company).

Several studies have been conducted for more than 20 years to identify resources with these attributes (Wright, Mc Mahan and Mc Williams, 1994; Hart, 1995; Mata, Fuerst and Barney, 1995; Russo and Fouts, 1997). This theory emphasizes the importance of internal and specific company factors for understanding its performance. CSR practices are then likely to maintain and develop internal resources (know-how, loyalty of employees, expertise to reduce costs ...) but also external resources, particularly in terms of reputation and relationships with different external stakeholders. These analyzes consider CSR as a repertoire of orderly and consistent practices in which companies can invest while waiting for returns in terms of reputation and increased stakeholder loyalty. Based on this perspective, several authors have identified social and ethical resources and skills that can become a source of competitive advantage such as the decision-making process as well as the development of clear and appropriate relationships with important stakeholders (employees, consumers,

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<sup>3</sup> The indice of sustentabilidade empresa (The indice of business sustainability)

suppliers, etc.) and the community (Harrisan and St. John, 1996; Hillman and Keim, 2001). Hart's (1995) study is presumed to be the first to apply the theory of resources and skills to CSR with a special focus on environmental responsibility. Their model is based on available resources and seeks to determine the conditions under which they can provide a competitive advantage. It is the conjunction between the strategic factors of the sector on the one hand, and the resources and skills of the firm on the other hand, that defines the strategic assets of the firm. These resources and skills are likely to lead to a competitive advantage. Hart assumes that for some firms, environmental responsibility is a resource or skill that can lead to a sustainable competitive advantage. Russo and Fouts (1997) also empirically tested this theory and demonstrated that companies with good environmental performance also show better financial performance. Russo and Fouts (1997) see CSR as a mechanism for developing environmental resources and skills.

### **III. HYPOTHESES OF THE STUDY**

The hypothesis of social impact assumes the existence of a positive relationship between responsible commitment and financial performance and that social performance affects financial performance. Several studies are done to prove this link but their results remain inconclusive. The analysis of Hillman and Keim (2001), Baron (2001), Husted and Salazar (2006) and Porter and Kramer (2006) have made strong arguments for strategic accountability, they see that companies are able to foster an approach that identifies actions that can lead to a more competitive advantage. For them, the more the societal action is linked to the business and the activity of the company, the more the company is able to influence its resources and obtain a benefit from these actions. Companies must select social issues that are strictly related to their business because no company can solve all social problems and cannot bear additional costs that exceed its capabilities. Halme (2009) summarizes the main levels of CSR integration in business as well as the potential financial and social benefits inherent in each level. He suggests that from the three types of CSR he has described, altruistic (philanthropic) CSR tends to be less integrated with the core business of society, while integrated CSR and innovative CSR are more closely intertwined with heart of the job. For the reasons mentioned above, it is proposed that the type of innovative CSR can accumulate the greatest potential benefit for the company. Most of the time, companies have a portfolio of societal actions that coincide with different types of CSR. For instance, a company that engages in integrated actions may also carry out philanthropic actions, particularly in a context where such commitment is important to guarantee "its operating license". Still, it is possible that a company that is engaged in innovative CSR is probably encouraged to conduct societal actions that go back to the category of integrated CSR. In addition, when a multinational or a large company adopts a societal strategy of the "base of the pyramid", its societal actions integrated into the core of the business are likely to maintain and coexist with the actions of the "base of the pyramid". Despite this coexistence, it is generally difficult to distinguish between firms with respect to dominant societal actions. According to the theoretical developments already presented, "Integrated" societal actions are generally closely correlated with the core business of the company, these types of CSR strategies allow the company to benefit from particular profits rather than creating collective goods that can be shared within the sector, the community, and society (Burke and Logsdon, 1996; Porter and Kramer, 2006; Halme, 2009). As with the case of integrated CSR, innovative CSR is usually locked in the heart of the business. However, its strategic role may be different from the one of integrated CSR. Innovative CSR involves the creation of new products, services or business models that can be particularly important for the future of the business, it also means the conquest of new markets, particularly in the case of the "base of the pyramid". Since societal actions of an "innovative" and "integrated" nature are generally closely correlated with the core business of the company, they are more often considered strategic. We can then say that strategically oriented approaches are better than philanthropy and charity.

Hence the following two hypotheses:

**H1.** The commitment to societal actions of altruistic, integrated and innovative types positively affects the financial performance of the company.

**H2.** Societal actions of integrated and innovative types are more profitable than altruistic actions.

## **IV. METHODOLOGY**

### **4.1 SAMPLE AND DATA COLLECTION**

The data of this study are obtained from a survey carried out on the basis of a questionnaire with 327 managers (general managers, human resources managers, CSR managers ...) of companies established in North Africa precisely in Tunisia and exercising in different sectors of activities (food, capital goods, textiles, chemistry). For the case of this study, it is a deductive approach; the objective of the questionnaire is then the collection of data and the verification of hypotheses. To develop measurement tools related to the company's commitment to CSR (philanthropic, integrated and innovative), we used two methods. We have, where possible, taken up and adopted items from previous research and, where this was not possible due to the lack of previous empirical studies, we generated the items as a result of the review of the literature. These two methods allowed us to build a first version of the questionnaire which we then submitted to a review with some experts in the field of CSR, then did a pre-test with sixteen industrial companies. This double pre-test made it possible to modify the order of the questions, to clarify certain questions and remove others that appear redundant. The list of Tunisian industrial companies was consulted via the Tunisian industry website<sup>4</sup>. In order to get a general idea of the company and the possibility of being involved in CSR, an overview of the company's website is realized. The contact is established by telephone to initially request the possibility of the company for participating in the survey. The method of selection for which we have resorted is then the non-probabilistic method which resides in a subjective selection where the probability of selection of each element is not known in advance, it is more precisely the sampling by convenience, that is, the companies that agreed to respond to the questionnaire<sup>5</sup>. This method is designed for convenience. After this procedure, the number of companies that expressed a willingness to participate in the study is determined. The initial sample consists of 700 enterprises (initial base) established in industrial zones of the cities of Nabeul, Sousse, Sfax, Tunis and Gabes. The data collection was carried out by two methods namely the personal survey (face-to-face) and the internet survey (mailings). The sending of e-mails containing the link to access the online questionnaire started in June 2017.

For some companies, sending the email has been relaunched to four or even five times, we opted for frequent reminders that remobilized respondents.

The online questionnaire was closed at the end of January 2018. The final sample is made up of 339 companies, for a response rate of 48%. This response rate is considered moderately good for this type of survey since the practice of CSR is considered new in Tunisia. Twelve companies are eliminated in the statistical tests due to the existence of some missing data.

### **4.2 DEFINITIONS AND MEASURES OF VARIABLES**

#### **4.2.1 Dependent variable: Financial performance**

The consequences of CSR are numerous. CSR has become a lever for ecological, economic and social performance, and is a source of profit improvement. As part of this study, we seek to measure the profitability of CSR in financial terms. Among the main profitability ratios of the financial analysis, we chose the ratio ROS (Return On Sales). It measures the operational efficiency of a firm or its commercial profitability. It measures the profit generated by the firm for a monetary unit of turnover. Calculations are made using the ROS (2017) and the average ROS (2016-2017).

Our choice focused on the ROS because we are trying to link the CSR commitment to the sales volume, this measure is used by Waddock and Graves (1997); McGuire et al. (1988); Griffin and Mahon (1997); Stanwick and Stanwick (1998).

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<sup>4</sup>[www.tunisieindustrie.nat.tn](http://www.tunisieindustrie.nat.tn) (accessed on April 24<sup>th</sup> 2017)

<sup>5</sup>Questionnaire available on request

#### **4.2.2 Independent variables**

##### **➤ Commitment in CSR**

As already mentioned in the previous section, the theoretical measures of CSR are numerous, they are based on different tools such as the analysis of the content of the annual report, the use of pollution indices or reputation indicator. , the use of data from measurement organizations or rating agencies, and lastly, the questionnaire survey to which we referred in this research. Each of the three types of CSR actions is measured by a score consisting of the summation of item responses for each type of action. Each company then has an altruistic CSR score, integrated CSR score and innovative CSR score. A global CSR score is calculated again. For each company, this score varies from 1 to 5. For example for the altruistic CSR, we used 6 items, we assigned a score of 1 to 5 for each item, then we proceeded to the summation of the scores obtained by the 6 items, finally we reduced this number to a value between 1 and 5 by dividing the total by 6.

- The items that operationalize the altruistic CSR are six and reduced to four after the purification of the scale, these items focus on charity, sponsorship and sponsorship activities
- The items that operationalize the integrated CSR are nineteen and reduced to nine after the purification of the scale, these items focus on the conduct of the company's existing operations in a responsible manner (the preservation of a high quality of the product, the payment of fair wages ...)
- The items that operationalize the innovative CSR are eleven and reduced to eight after the purification of the scale, these items refer to the development of new models and processes of exploitation to solve the social and environmental problems.

##### **➤ The age of the firm**

The age of the firm has often been considered as a variable that can have a very significant effect on performance. In general, the variable "age" is expressed as the log of the number of years of exercise (Brown and Caylor, 2006).  $AGE = \text{Log}(\text{number of years since creation})$

##### **➤ The size of the firm**

The size of the firm is also considered as a key variable in the explanation of the performance. Used by multiple authors, this variable can have both direct and indirect effects on performance. It is recognized that large firms are able to generate better financial performance than smaller firms by their ability to access resources and achieve economies of scale. Several measures have been selected to assess the size of the company; we retain the number of employees as a measure of size.

##### **➤ The debt of the company**

The level of indebtedness expresses the burden of indebtedness borne by the company and can have an effect on its financial profitability (Andres, Azofra and Lopez, 2005; Peter, Young and Shapiro, 2005). Thus, when the economic profitability is higher than the interest rate, the financial profitability is therefore a growing function of the debt ratio that is to say, the higher the debt and the higher the financial profitability, it is the leverage effect of indebtedness. On the contrary, when economic profitability is lower than the interest rate, financial profitability becomes a decreasing function of the debt ratio. It therefore seems possible to consider the moderating effect of this variable on the relationship financial performance - responsible commitment.

#### **4.3 Empirical model and statistical tool**

The objective is to model the impact of responsible commitment on the financial performance of the company. The multiple regression is implemented in order to evaluate the nature of the relationship between the financial performance and each of the CSR actions adopted by the companies constituting the sample of the study. It is a question of measuring the capacity of each type of action to affect the financial performance. To

achieve this, we operated in three stages. As a first step, we integrated the aggregate score measuring the overall commitment in CSR and combined this variable with the other explanatory variables; in a second step, we integrated the three types of societal actions and we combined them with the other explanatory variables; and finally, we performed the regressions again but with the actions that are the most significant. The models to be tested take the following general form:

$$FP_{t,i} = f(\text{Global CSR, Altruistic CSR, Integrated CSR, Innovative CSR, Age, Size, Debt, } FP_{t-1})^6$$

## V. PRESENTATIONS AND ANALYSIS OF THE RESULTS

We first present the results of the descriptive analysis and then the results of the regression analysis.

### 5.1 DESCRIPTIVE ANALYSIS: STATE OF CSR IN TUNISIA

The first results show that the executives interviewed have a positive attitude towards CSR and that the average score of their perception of CSR is 3.9 strictly higher than the average of 3 (level +/- or neutral at the level of the scale). . These results show that 40.2% of managers have a good perception of CSR against 58.5% who have an average perception and only 1.2% who have a low perception. This percentage of 1.2 shows that CSR has begun to dominate the minds of Tunisian business leaders and managers. The results of the descriptive analysis show that Tunisian firms practice CSR and that the average score for overall engagement was higher than the average (3.1563), indicating a commitment to CSR but a level of commitment that is considered average.

This level of commitment seems to be close to the result provided by the study produced by Sustainable Square Consultancy and Think Tank<sup>7</sup>, and titled "Report: Corporate Responsibility and Sustainability - Algeria, Morocco and Tunisia, June 2013", it is demonstrated 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 CSR commitment score of less than 3, so they are weakly engaged, 52.4% of companies with a score between 3 and 4 are considered to be moderately committed and only 12.2% of companies with a score above 4 are considered to be strongly committed to CSR. The reports of the companies surveyed showed that each type of behavior is usually present with a different weight depending on the company. Descriptive statistics also show that the average engagement in philanthropic CSR is the highest (mean equal to 3.29), followed by the commitment to integrated CSR but with a small gap (mean equal to 3.24), followed by commitment to innovative CSR (mean equal to 2.95).

### 5.2 TEST OF HYPOTHESIS 1: HYPOTHESIS OF SOCIAL IMPACT

OLS regression was performed on all independent and control variables. The results are shown in Table 1. Based on these results, it appears that the three models as a whole are important and account for some of the variance of the dependent variable. According to Model 1, there is no significant relationship between overall CSR (which includes commitment to all three types of CSR actions) and financial performance. This result corroborates with some previous results that say that there is no link between CSR and financial performance. In this model, only the size variable is significant and has a negative impact on financial performance. The results obtained by model 2 show that the regression is significant as a whole ( $F = 2.309$ ,  $\text{sig} = 0.068$ ) at 10% level.

The  $R^2$  coefficient, although low ( $R^2 = 27.1\%$  and adjusted  $R^2 = 15.4\%$ ), explains some of the variance in financial performance. At the level of the explanatory variables of the regression, only the "altruistic CSR" contributes significantly at the 10% level for the explanation of the financial performance measured by the average

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<sup>6</sup>This variable is integrated when the ROS (2017) is used as a measure of financial performance in that the performance of the current year is explained in part by the performance of the N-1 year by application of the continuity of results hypothesis.

<sup>7</sup>A consulting firm located in Dubai, specializing in corporate responsibility and sustainability practices.

ROS<sup>8</sup> (2016-2017) and the "altruistic CSR" positively affects the financial performance. In Model 3, we integrated only the altruistic CSR that is significant and the control variables (size and level of indebtedness<sup>9</sup>). The results show that the model is globally significant and that the "altruistic CSR" still contributes significantly to the explanation of the financial performance. These various results allow partially verifying (only for the altruistic CSR) the hypothesis of the social impact stipulating that the more the company is performing at the social level, the more it is economically efficient. This verified part joins the results found by Dkhili et al (2014) and by Zribi and Boussourra (2007) in the Tunisian context. Both studies have shown the positive relationship between CSR and the financial performance measured by the ROE indicator, meaning that the change in ROE is partly explained by the variation in societal actions. These results are also similar to the results of the study conducted by Lu et al. (2013) in the US context, this study aimed to identify quantitative indicators of CSR that significantly affect the performance of semiconductor companies. Empirical results show that CSR investments in these companies have a positive effect on their performance. This study also suggests that these companies should pay more attention to quantitative indicators on CSR including human rights, employee relations and environmental protection issues to improve performance. Integrated and innovative actions have no significant effect on financial performance, and this result can be explained by the fact that the companies surveyed are not heavily involved in these actions while they are more involved in altruistic actions.

**Table 1. Ordinary Least Squares Regression Results**

| Dependent variable:<br>Average ROS<br>Number of<br>observations: 327 | Model (1) |         | Model (2) |         | Model (3) |          |
|----------------------------------------------------------------------|-----------|---------|-----------|---------|-----------|----------|
|                                                                      | Constant  | 2.113   | 0.042**   | 2.043   | 0.05**    | 2.492    |
| Global CSR                                                           | 1.145     | 0.261   | -         | -       | -         | -        |
| Altruistic CSR                                                       | -         | -       | 1.851     | 0.074*  | 1.890     | 0.068*   |
| Integrated CSR                                                       | -         | -       | -0.332    | 0.742   | -         | -        |
| Innovative CSR                                                       | -         | -       | -0.407    | 0.687   | -         | -        |
| Size                                                                 | -2.695    | 0.011** | -2.723    | 0.011** | -2.896    | 0.007**  |
| Level of indebtedness                                                | -1.272    | 0.212   | -1.572    | 0.126   | -1.570    | 0.126    |
| F                                                                    | 2.961     | 0.046** | 2.309     | 0.068*  | 3.881     | 0.018*** |
| R <sup>2</sup>                                                       | 21.12%    |         | 27.1%     |         | 26.1%     |          |
| Adjusted R <sup>2</sup>                                              | 14%       |         | 15.4%     |         | 19.4%     |          |

\*, \*\* and \*\*\* indicate respectively the significance at the 10%, 5% and 1% level.

### 5.3 Test Of Hypothesis 2: A Dichotomic Variable As A Measure Of The Approach To Csr Commitment

Given that many researchers distinguish between altruistic CSR and strategic CSR (Burke and Logsdon, 1996; Baron, 2001; Hillman and Keim, 2001; Porter and Kramer, 2006; Halme, 2009) and given the fact that integrated and innovative actions are considered strategic, we have defined a new variable measuring the commitment to CSR, this variable is dichotomous and takes the value 1 strategic approach if the company is more involved in integrated or innovative actions and 0 altruistic approach if the company is more involved in altruistic actions. The same tests are performed first on the total sample and then by sector of membership. The results are not significant for the global sample as well as for the agri-food and capital goods industries, only the results for the textile and chemistry sectors provide significant results. For the textile sector, the results of model 4 (Table 2) show that the model is globally significant at 5% level, that all the explanatory variables are significant at 1% and 5% level and that the quality of fit is very good. For this sector, strategic CSR contributes

<sup>8</sup>The same models estimated by the ROS 2017 are not significant on the basis of the F statistic and therefore are not presented.

<sup>9</sup>The "Firm Age" variable is removed since its effect is not significant in all estimated models.

Significantly and negatively to the explanation of the model, as well as the level of indebtedness and size; indeed, the most indebted and large companies have poor performance compared to the least indebted and small companies. As for the variable of interest, it is shown that commitment to strategic actions in the textile sector is less profitable than commitment to altruistic actions. This result corroborates with the altruistic approach that supports the role of altruistic actions in promoting the firm's performance. This result can be explained by the importance of the costs incurred compared to the profits from the commitment in strategic actions in the textile sector (for example, a textile company engages in the use of natural fibers from hydrocarbon chemistry such as organic cotton, in the use of fibers from renewable and recycled materials, in the implementation of environmentally friendly processes throughout the production chain, whereas these actions are not well perceived by consumers who are only interested in the price of the final good). Regarding the chemistry sector, the results also seem significant, the results of model 5 (Table 2) are globally significant at 5% level ( $t = 22.147$ ,  $sig = 0.015$ ) and the quality of adjustment is very good. For this sector, strategic CSR makes a significant and positive contribution to the explanation of financial performance, while size contributes significantly and negatively, proving that large companies are less profitable than small firms. For our variable of interest, the commitment in the strategic actions is more profitable than the commitment in the altruistic actions for the companies operating in the sector of chemistry, thus the hypothesis H5-2 is verified affirming that the strategic actions are more beneficial than altruistic actions.

This result can be explained as follows: the chemistry sector is very dangerous to human health and the environment and therefore, the commitment to altruistic actions through donations to the disadvantaged people or those who have suffered the harmful effects from toxic products do not solve the problems of this sector, this requires serious commitments that materialize in the design of products and chemical processes that reduce the use and production of hazardous substances, this is what researchers ,in the field call green chemistry or renewable chemistry or ecological chemistry (the designed chemicals products must fulfill their primary function but at the same time minimize their toxicity).

**Table 2. Regression Results: A Dichotomous Variable as a Measure of the Engagement Approach in CSR**

| Dependent variable: Average ROS<br>Number of observations: | (4)<br>Textile sector<br>78 |          | (5)<br>Chemistry sector<br>82 |          |
|------------------------------------------------------------|-----------------------------|----------|-------------------------------|----------|
|                                                            | Constant                    | 34.241   | 0.000***                      | 4.642    |
| Strategic CSR                                              | -6.259                      | 0.008*** | 6.992                         | 0.006*** |
| Size                                                       | -4.800                      | 0.017**  | -4.484                        | 0.021**  |
| Level of indebtedness                                      |                             |          |                               | 0.289    |
| F                                                          | 573.171                     | 0.000*** | 22.147                        | 0.015**  |
| Adjusted R <sup>2</sup>                                    | 94%                         |          | 91.4%                         |          |

\*\* and \*\*\* respectively indicate significance at 5% and 1% level.

#### 5.4 Summary of Results and Conclusions on Hypothesis

When CSR is measured by scoring and for the entire sample, Hypothesis H5-1 is verified only for altruistic actions; indeed, there is a positive relationship that verifies the hypothesis of the social impact of altruistic actions but without pronouncing on the effect of integrated and innovative actions (their effect is not significant). None of the hypothesis is verified when testing the effect of CSR on financial performance within each activity sector, not all models are significant and cannot allow extracting conclusive results. When CSR is measured by a dichotomous variable, and for the entire sample, none of the hypothesis is true, but results are drawn when considering firms by industry. For the textile and chemistry sectors, the social impact hypothesis is verified, but differences between the two sectors are found in the importance of the altruistic approach or the strategic approach. As a result, the strategic approach prevails in the case of chemical firms stating that strategic actions (integrated and innovative) are more profitable than altruistic actions, while the altruistic approach is confirmed in the case in the textile sector that altruistic actions are more profitable than strategic actions, and these results can be concluded if we take into account the specific characteristics of each sector. Most important of all is that the hypothesis of compromise that foresees the negative impact of societal actions is not verified in any case.

## VI. CONCLUSION

This study has updated the relationship between commitment to CSR and financial performance but with the specificity of examining each type of CSR action in a separate model. The aim was to verify empirically the possible link between societal actions and financial performance. Two hypotheses are therefore developed from the conceptual model developed, and tested on a sample of 327 North African industrial companies. The social impact hypothesis stating that the positive association between FP and responsible commitment is verified in the three cases. The most important is that the hypothesis that states a negative link (called arbitration or compromise hypothesis) is not verified in all tested models, which eliminates the evidence that commitment to societal actions negatively impacts financial performance. From these results, we anticipate that this study will be useful for leaders who often find doubt and ambiguity when deciding to undertake societal actions. Doubt and ambiguity relate to societal actions to be undertaken and societal actions to be suspended or stopped. Also, the existing literature does not give any pronouncement on the societal actions to consider as strategic and the moment from which the action can be regarded as strategic. But although not empirically validated, this survey suggests the importance for companies to implement real CSR strategies. The results suggest that the relationship is complex but allows drawing practical conclusions. The first is that societal performance does not negatively affect financial performance. Even if it does not result in a better financial performance, it does not harm the company. The company is able to integrate CSR actions into its production chain and seek to innovate in terms of products and production processes and not to limit its commitments to philanthropic actions specifically conducted to legitimize the actions of the company and to obtain its operating license. These results do not mean that companies should refrain from conducting altruistic / philanthropic actions. So leaders are motivated to look for social performance that suits a certain level of integration and innovation.

The methodological and empirical advances first appearing in the construction of the questionnaire, which made it possible to provide two measures of the responsible commitment (scope of commitment and intensity of commitment) of certain Tunisian company in the industry sector. Secondly, this study has updated the relationship between CSR commitment and financial performance but with the specificity of examining each type of CSR action in a separate model. This research presents the specificity of being the first to use this typology of CSR actions in the North African context; these are CSR strategies oriented towards true responsible action as developed by Halme (2009).

However, this study is not without limits; the first is the size of the total sample and sample by industry, so we expect a larger sample to be able to provide more meaningful results. The second is related to measuring the benefits of CSR activities. These continue to be a barrier to understanding private profitability from societal actions. Profitability is always measured in terms of financial performance (ROA, ROS, ROE). There are no direct methods that measure the private and social profitability of CSR. Researchers need more direct methods such as interviews and case studies to identify the motivations of companies. The ideal level of engagement in CSR is the level that maximizes private return and can be theoretically determined by cost-benefit analysis. However, it is difficult to calculate these costs and benefits, even though the costs related to the provision of CSR can be determined by the managers, the associated benefits are not.

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