The Link between Corporate Social Responsibility and Financial Performance: The Case of the Tunisian Companies

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Abstract
This research examines the effects of Corporate Social Responsibility on the financial performance. The corporate social responsibility is measured by an investigation which is addressed to a 30 companies. Thus the financial performance is measured using two accounting variables: return in assets (ROA) and return in equity (ROE). The financial data are those of 2004, 2005, 2006, and 2007 reports. The results show the absence of relationship between the RSE and the financial performance measured by ROA, whereas there is a positive relationship if the financial performance is measured by the ROE.

Keywords: Corporate Social Responsibility, Financial Performance, Tunisian Corporate, Stakeholder theory.

Introduction
In the 1850s, the role of the company was seen as a purely economic, and delimited on profit maximization of shareholders. In this regard, such approach is consistent with a classical view of the firm where the management concerns mainly managers and shareholders. Now the idea of corporate social responsibility responds this challenge by offering a broader representation of the environment of firms, understood not simply in its economic and financial but also social, human and ecological McGuire (1963). Any company that wants to ensure its sustainability, passes inevitably by the financial performance, should not also ignore the advantage to engage in a societal approach. The objective of this research is twofold, first to study the impact of corporate social responsibility on financial performance. Second in a more explicit, we wish to study the degree of perception of the concept of social responsibility in Tunisian companies through five dimensions namely: economic, legal, ethical, discretionary and Environmental. In this context, our problem is as follows: What is the impact of corporate social responsibility on financial performance?

Social Responsibility of Company towards the Emergence of a New Concept
“Being responsible is to ensure their actions and their consequences and agree to render Account”. But when this term is applied to the company, it is a concept that can be understood in different ways. Today, the definition and delimitation of the concept of social responsibility is still the subject of controversy and differences conceptual. It has been the subject of increased attention by many organizations of diverse nature like European and global institutions, professional associations and business networks, also many Researchers have continued to develop this concept for about fifty years. Subsequently, McGuire (1963) advance in its work that "The idea
of social responsibility implies that the company did not only legal or economic obligations but also has responsibilities to society that go beyond these obligations”.

Then, Davis (1973) emphasizes that “CSR refers to the consideration taken by the companies that go beyond its economic, technical and equal obligations. This means that CSR begins where the law stops”. For Carroll (1979) “CSR integrates all economic, legal, ethical and philanthropic expectations that may company have in respect of a society at a given time”. Wood (1991) anchors his discussion of “the meaning of responsibility can be seen through the interplay of three principles: legitimacy, public responsibility and distinction of three levels of analysis, institutional, organizational and individual”.

In reality, these definitions are content in general to highlight the character discretionary of CSR, emphasizing the fact that it recognized the dimensions that beyond the purely economic and legal activity of the company.

**Approach to CSR Measures**

Measuring CSR is a necessary condition for knowledge of their own social responsibility and thus to control environmental and social impacts. Assessing the social and environmental performance, the establishment of a steering system for the performance and accountability on these external dimensions imply the existence of metrics to assess the quality of management of the business related to non-financial aspect. In fact, the existence of these metrics is also of particular importance to other stakeholders that ethical investors who require such information to select the best performing companies. This leads companies to establish a legal and socio-technical infrastructure to make measurable CSR stakeholders. In theoretical terms, the extent of CSR faces similar problems to those identified to define the concept of CSR: the multiplicity of approaches and dimensions of this complex concept, difficult to report objectively its components more subjective often linked to an assessment based on criteria related to ethics or a social context.

Among the different methods of measurement of CSR that have been used, we can distinguish five categories:

- **Measures of speech**, such as content analysis of annual reports, which are to be based on remarks made by companies to assess their CSR, for example by counting the number of lines or words dedicated to themes CSR in the annual report of a company;

- **Indicators of pollution** provided by some agencies to assess the pollution of businesses, such as the Toxic Release Inventory “in the U.S., or for example measurements of the diffusion of CO2 by businesses;

- **Measures of attitudes and values** aimed at assessing the sensitivity of members of the organization (eg managers, employees) to the various dimensions of CSR and are generally administered in the form of a questionnaire;

- **Measures of reputation**, such as the indicator of reputation developed by Markowitz in the 1970s in the American magazine Fortune, which includes criteria related to CSR that are assessed by a panel of industry experts to which operates within the enterprise in question;

- **The behavioral measures or audit**, developed by the agencies that specialize in the assessment of social behavior and environmental responsibility, such as the U.S. KLD, EIRIS in Britain or in France Vigeo.

**Financial Performance**

The classical view of performance is maximizing the wealth of agents who are shareholders. It is based on market efficiency that ensures the best allocation of resources and rejects any idea of corporate responsibility other than making profit for its shareholders. It is a concept of
performance based on the design of shareholders which is often linked to the share value of company stock.

The performance measures are based on data from financial statements. In fact, the accounting measures provide most of the time positive correlations between CSR and financial performance. (Cochran and Wood, 1984; Waddock and Graves, 1997; Preston and Bannon, 1997).

In addition, these measures from the accounts have the advantage of providing a more relevant economic performance of the company and predict how a more reliable the possible link between CSR and financial performance.

On the other hand, stock measures have the advantage of being less subject to managerial manipulation. However, these variables represent a specific assessment to the investor and not allowing revealing the economic reality of the company (Ullmann, 1985).

Social Responsibility and Financial Performance: Theoretical Approaches

The theoretical approaches to corporate social responsibility are essentially based on the current contractualist and sociological neo-institutionalist. Those questioned the compatibility of market logic and the objective of maximum profit that underpin the economic rationale of the business and societal concerns such as sustainable development, intergenerational equity, the public interest purposes that are appearing priori foreign or contrary to the entrepreneurial logic.

The theoretical basis is between two opposite poles: on one side, neoclassical theories, which rely on market efficiency, reject any idea of corporate social responsibility other than making profit for its shareholders. On the other, theories that mobilize a teleological principle and argue that there is a moral responsibility of policy makers towards future generations and many of the societal problems.

However, the only approach “moralist-ethical” is not sufficient to illuminate the strategic behavior of firms in the field societal because it does not understand the motivations of corporate behavior.

The responsibility of the company depends on leaders who are “agents” in explicit or implicit contractual relationships with several categories of stakeholders: shareholders, community, etc., ... Consequently, they must manage the different expectations of a balanced way, which could affect the sustainability of the company. An implicit social contract provides the framework for the dissemination of information, and the consultation of stakeholders. The actors representing stakeholders will then exert a monitoring role in order to avoid misleading communications and ensure that societal strategies are not simple clearance officers. In this approach, stakeholders influence strategic decisions of managers and they must be accountable to them about how they took into account their expectations.

The Stakeholder Theory

From the 1980s, the theory of stakeholders is gradually established itself as a framework to further specify the group's that the company should have social responsibilities.

In fact, the company is in the middle of a set of relationships with partners who are not only the shareholders, but the actors interested or affected by the activities and decisions of the company. The stakeholder theory is not free from a normative and ethical vision but seeks to integrate economic objectives: it asserts that the cooperation agreements establish trust between firm and its stakeholders and provides a competitive advantage to the company. A first theoretical approach suggests that the company is more powerful socially; it is more efficient economically and financially. Instead, the company will be more successful economically and socially least it will be.
Finally, beyond these two extreme views, it is possible to consider the assumptions of positive synergy and negative cross the different conceptual foundations. With these assumptions also adds a generic assumption of neutrality of interactions and an assumption of more complex relationships.

Corporate Social Responsibility and Financial Performance: Empirical Approaches

Clarification of the economic impact of CSR has always been a major concern in the field of study on the relationship between business and society. It is therefore not surprising that empirical work on this issue have been very numerous; in 2007 there were over 160 empirical studies on the subject?

This work focused on the nature of interactions between the ability of firms to achieve a high level of CSR and financial performance by studying the interaction between on the one hand, social performance (or societal) of the company, and, secondly, financial performance.

Numerous publications over the last twenty years have highlighted the link between social responsibility and financial performance of the company. But these studies show conflicting results do not allow to clearly establishing the existence of a positive or negative relationship between social responsibility and financial companies. Studies the most recent research work (Margolis and Walsh, 2003) found a slight advantage for the identification of positive links between social performance and financial performance.

The synthesis of the literature lists 122 studies published between 1971 and 2001 with an accelerating pace of recently published (35 studies between 1997 and 2001) and far (2007) lists 160 on empirical studies on this subject, but also that this research were sometimes biased in the direction of the illumination of a positive relationship. Example of the 122 study, fifty-one concluded positive association between social responsibility and financial performance, twenty get mixed results, and twenty seven concluded the absence of links and seven observe a negative relationship.

The Hypothesis of Impact-Social "Social Impact Hypothesis"

The stakeholder theory explained the origin of the favorable influence of social behavior on financial performance. Indeed, CSR is an indicator of the company’s ability to effectively meet the demands of various stakeholders.

This has therefore to regain their confidence and thus improve profitability. Waddock and Graves, (1997) speak of “Good Management Theory” that there is a high correlation between good management practices and CSR, an improvement in social activity leads to a special relationship with “Key Stakeholders Group”, implying more performance.

The 'Trade-off Hypothesis'

This hypothesis refers to the conventional view that CSR is an investment that increases costs and comes at the expense of financial performance. For example a decision to invest in the acquisition of equipment environmentally friendly while other competitors do not, can generate a competitive disadvantage.

This finding was also confirmed by Aupperle et al, (1985), the authors conclude that social activities such as donation to charity, environmental protection and community development dissipate more resources and generate additional costs, which disadvantages the company against its competitors less engaged in social actions. Searches return the negative relationship to abnormalities in particular methodological tools to measure financial performance. The negative association is due to the use of market variables as a measure of financial performance (Griffin et Mahon, 1997).
The Lack of Connection between the Two Dimensions

Some authors suggest that CSR and financial performance are two totally separate built. Ullmann, (1995) points out that the link comes from a chance. The correlation is generated according to the author, for intermediate variables that occur in an unpredictable manner and that connect the two built. Meanwhile, Waddock and Graves (1997) show that the methodological problems in the operationalization of CSR tend to obscure the link.

CSR and Financial Performance: The Effect of Control Variables

Research has shown that the relationship between CSR and financial performance is not absolute, it must consider the weight of the elements of each company (Ullmann, 1985; Waddock et Graves, 1997) and are likely to moderate the relationship between the two built.

Effect Risk

The risk is a variable, which several studies in different contexts, have shown that it controls the relationship between the two dimensions. The argument in favor of risk assumes that companies have a low risk to commit more social activities, and vice versa.

Effect Size

The argument in favor of the size states that the large size organizations engage more in social action, for cons, small organizations do not give importance to the social activity (Waddock and Graves, (1997)).

Effect Sector

The area of activity as it is conceived in the literature is a moderating effect of the relationship between CSR and the financial performance, e.g. the extent of recognition of responsibility environment by a chemical company is not the same for a financial institution.

Research Methodology

The objective of empirical research is to empirically verify our research hypotheses and the theoretical model proposed.

In order to test the validity of our hypotheses on a sample drawn from all the Tunisian companies, we proceeded in two stages the first is to measure the perception of Tunisian companies in the concept of CSR and then study his impact on financial performance.

As part of our research, we chose the method of face interviews; we conduct a field investigation, by adopting the technique of direct inquiry on the basis of a questionnaire. The survey covered a sample of 30 Tunisian companies chosen from different sectors.

The Scale of Measurement of CSR: Explanatory Variable

For the measurement of CSR we will adopt the one designed by Maignan et al (1999), which fits into the work of measuring social performance. This scale operationalizes the concept of social performance by measuring the dimensions of the construct. In fact, two main scales have been developed in this perspective: The oldest is that of Aupperle, Carroll and Hatfield (1985) measuring the orientation of the leaders to social responsibility, the latest and most complete is that of organizational citizenship of Maignan and al. (1999), reused by Maignan and Ferrell (2000). Both instruments take over the traditional classification into four types of social responsibilities of Carroll (1979): economic, legal, ethical and discretionary or philanthropic, those reflect the wishes of society to see the company actively involved in their local and global environment, to defend social causes and community service. With regard to the scale of Aupperle al (1985), it is intended to measure only the views of leaders on the relative importance of each of the four dimensions of corporate social responsibility.
While the scale of Maignan and al. (1999) aims to gather perceptions of corporate social performance across stakeholders of the company (Maignan and Ferrell, 2001). Indeed, the scale was constructed from academic studies describing the activities commonly accepted as citizens by the three main stakeholders: employees, customers, stakeholders public. These authors manage this work, mainly to officers (Maignan et al, 1999, Maignan and Ferrell, 2001) to have completed the questionnaire appropriately, because the leaders have general information and transverse about the company. Therefore, our questionnaire is composed of five dimensions are that of Carroll (1979), added an environmental dimension in which the items were inspired by the Global Compact (1999).

This choice is argued for the importance placed today on the environment and the pressures that companies face to reflect the impact of its activities on the environment in which it operates, it is relevant to know the impact of the inclusion of the natural environment on the financial performance of Tunisian companies.

**Measurement of Financial Performance: Variable to Explain**

Various empirical studies testing the relationship between CSR and financial performance have opted to measure the latter, by accounting measures or measures for stock market for listed companies or both together. In our case we use accounting measures that our sample consists of listed and unlisted companies. Measurements from accounting are:

- The return on assets "ROA": \( \text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \)
- The return on equity "ROE": \( \text{ROE} = \frac{\text{Net Income}}{\text{Equity}} \)

**The Control Variables**

We included three control variables that may affect what's over CSR or financial performances, which are the size effect, the effect of risk and impact of industry.

The size is measured by the logarithm of total assets.

Risk is measured by the debt ratio as recommended by Waddock and Graves (1997) and Ullman (1985): Debt Ratio = Total Debt / Equity.

The business is taken as a moderator variable (Waddock and Graves, 1997, McWilliams and Siegel, 2000).

**Measure of CSR**

We present in what follows procedure that we used to verify the reliability and validity of the measurement scale of CSR. The analysis was performed using the software for data analysis SPSS13.0. Different steps must be followed to ensure that the analysis is properly conducted.

We first present the scale factor analysis. In terms of "characteristics", we selected the "initial structure" in the "Statistical Area" and "coefficients", "significance levels" and KMO index and Bartlett’s test in the "correlation matrix". The KMO test used to quantify the degree of correlation between variables and the appropriateness of factor analysis. This indicator is between 0 and 1.

The test of sphericity of Bartlett (1954) tests the hypothesis of no correlation in the correlation matrix. This test must be significant that the data are factorizable (p <0.05). As a result, we used principal component analysis as extraction method with orthogonal rotation (Varimax).

Through the results emerged, each variable must be correlated to a single axis.

This happens when the difference between the saturation on the principal axis and saturation of any other axis is greater than 0.3. Otherwise, it means that the variable is correlated with both axes, we must eliminate it and re-factor analysis. After determining the number of items presented in each scale, we calculate the Cronbach alpha that's estimate the reliability coefficient and the degree of internal consistency of the isolated structure.
The value of alpha which is generally considered acceptable in basic research is 0.7, but this value can be lowered to 0.6 in exploratory research (Hair et al, 1998). Measuring CSR consists of four dimensions (economic, legal, ethical and discretionary) developed by Carroll (1979) and psychometrically validated by Maignan et al (1999). Our extension is the addition of the environmental dimension whose items are inspired by the Global Compact in 1999.

In what follows, we analyze the results of factor analysis of each dimension of our variable CSR. Subsequently, we present the Cronbach’s alpha which is used to verify the reliability of items.

On the first economic dimension it includes 4 items. The KMO index (0.693), the significance of Bartlett (p = 0.002), shows that the original data matrix is factorized. Factor analysis shows that four items are related to the first factor (maximize profit), this factor is 52.285% of the total variance and a value greater than 1 is to 2.091. The correlations of items with factor chosen are all above 0.5 (with the exception of item 4 that a correlation equal to 0.489).

The Cronbach’s alpha releases worth 0.639, so the scale used to measure the economic dimension is reliable. The second dimension which is legal shows a KMO index of 0.610, the significance of Bartlett is equal to 0.002. Two successive factor analysis was performed where we removed the first item because it has the lowest correlation (0.437) compared to others items. The Cronbach’s alpha is equal to 0.509 we can admit it because our sample is small.

The third ethical dimension consists of five items. The KMO index (0.681) and significance of Bartlett is equal to 0,002 are satisfactory. Factor analysis shows that five items are related to the first factor, which represents 46.571% of the total variance, and it is above 1 (2.329). The Cronbach’s alpha is 0.7 which shows the reliability of the scale measuring this dimension.

The fourth dimension is discretionary, it consists of 4 items. Two iterations were performed where it was eliminated the third item. KMO index is 0.578 and the significance of Bartlett shows a value (p = 0.000), releasing an acceptable result. The Cronbach’s alpha showed a value of 0.793, which means that this scale is reliable. Finally the environmental dimension is measured by 4 items.

The KMO index (0.762) and significance of Bartlett (p = 0.000), showing that the original data matrix is factorized. Two factor analyses were conducted in which we removed the first item. Regarding the reliability of this measurement scale items selected show good internal consistency. Indeed, Cronbach’s alpha has a value of 0.854.

The first factor obtained is the environmental dimension. The value of Cronbach’s alpha was 0.854. This factor includes items relating to undertake a great responsibility to the environment, promote the development and dissemination of technologies that respect the environment and finally the provision of a program to reduce energy consumption and water.

This result seems logical, since after the ecological disasters suffered by our planet, there is a great pressure from various stakeholders to ensure that businesses take into account the natural environment in their business processes.

Tunisian companies are aware of the need to protect the environment where they operate. The second factor is the dimension discretion for Cronbach’s alpha of 0.793, indicating the potential role of enterprises in Tunisian society. So there is no doubt that the company as an organization located in the heart of social, expands its environment to take account some aspects of social, human and other.

The third factor, it is the ethical dimension to a Cronbach’s alpha of 0.7 this position may be explained by the fact that the Tunisian companies want to appear first as trustworthy to its stakeholders, therefore created a climate of trust shared, especially after the financial crises that affected everyone.
Secondly, provide accurate and complete information, this may pose a strategic asset to attract more investors. In fourth place comes the economic dimension, which leads us to relativize the neoclassical theory which states that the only responsibility of company is to maximize profit (Friedman 1962, 1970). The last dimension concerns the legal dimension. This can be explained by the fact that the law is a requirement that all companies must comply, so the law does not present a liability that the company must ensure voluntarily such as ethics or the protection of the environment. In the case of a dismissal or recruitment company is required to respect the labor code. All these results support the idea of a social responsibility to the company that expands the environment of the firms understood in its dimensions, not only economic and legal but also social, human and ecological. Thus we can conclude that CSR consists of five dimensions mentioned above.

Regression Analysis

In what follows we will try to present the regression results, using the method of panel data for each variable of financial performance (ROA, ROE) on the five dimensions of CSR.

Impact of CSR on Financial Performance Measured by ROA

Before presenting the results we first define the regression function as follows:

\[ \text{ROA}_{it} = \alpha_0 + \alpha_1 \text{DECO}_{it} + \alpha_2 \text{DLEG}_{it} + \alpha_3 \text{DETH}_{it} + \alpha_4 \text{DDISCR}_{it} + \alpha_5 \text{DENV}_{it} + \xi_{it} \]

With:

- ROA: Return on assets
- DECO: Economic Dimension
- DLEG: Legal Dimension
- DETH: The Ethical Dimension
- DDISCR: discretionary Dimension
- DENV: Environmental dimension

- \( \alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5 \): The regression coefficients
- \( \xi \): The error term
- T: time
- I: number of companies [1, 30]

The result of the study of the impact of social responsibility on financial performance measured by ROA reveals no relationship between these two variables (see table below). Indeed, the low value of \( R^2 \) (3%) and adjusted \( R^2 \) Absolute (5%) show a linear fit small, so a small explanation of financial performance based on social responsibility.

The overall significance of the model is examined by Fischer's test that has a value greater than 0.005, which proves that the model is not globally significant. A review of estimates inherent in each of the five dimensions of CSR shows no significance, except that the economic dimension has a coefficient ( ) negative and statistically significant. The analysis therefore shows a neutral effect of CSR on financial performance.

When we moderate the relationship by size we observed that \( R^2 \) increases and becomes 10%, which indicates that the variable size slightly improves the estimate. We noted also that F Fischer displays a value of 3.9% <5%, which shows that the model is globally significant. Despite this improvement, the relationship remains neutral. With the introduction of variable risk (F = 0.039) and industry (F = 0.46) we noticed that the model is generally not significant, which means that the risk variables and sector have no effect on the relationship between CSR and financial performance. We therefore conclude that with the introduction of control variables (size, risk, and industry) the relationship between social responsibility and financial performance remains neutral. In this respect and according to the study by Ullmann (1985), this indicates that there are many variables that can intervene and moderate the
relationship between social responsibility and financial performance.

The author argues further that the possible exception that social responsibility moderates the financial performance, there may be random, and the problem of measuring of social responsibility can mask the potential link between the two built. In this context, other authors have argued that the relationship between social responsibility and financial performance was so complex and indirect that it is not possible to postulate the existence of a stable relationship between the two variables (Gond and Igalens, 2008).

Impact of CSR on Financial Performance Measured by ROE

The regression function is defined as follows:

\[
\text{ROE}_{it} = \alpha_0 + \alpha_1 \text{DECO}_{it} + \alpha_2 \text{DLEG}_{it} + \alpha_3 \text{DETH}_{it} + \alpha_4 \text{DDISCR}_{it} + \alpha_5 \text{DENV}_{it} + \xi_{it}
\]

With;
- ROE: Return on Equity
- DECO: Economic Dimension
- DLEG: Legal Size
- DETH: The Ethical Dimension
- DDISCR: Size discretionary
- DENV: Environmental dimension
- \(\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5\): The regression coefficients
- \(\xi_{it}\): The error term
- T: time
- I: number of companies [1, 30]

Contrary to ROA, social responsibility of the company explains better financial performance which is measured in this case by the ROE. Indeed, \(R^2\) is around 38%, that is to say, the change in ROE is explained at a rate of 38% by social actions.

The variable components of social responsibility have no effect on financial performance measured by ROE at 95% of confidence. But at the risk of 10% certain variables become relevant in explaining the financial performance like the discretionary dimension.

The probability of Fischer displays a value \((p = 0.000)\) indicating that the model is globally significant.

With moderation by the control variables we found no improvement. In fact decreases \(R^2\) and has a value of 27% with variable size, 33% with the risk variable, and 27% with the variable area. So we can conclude the lack of moderating effect of control variables on this relationship. Similarly, with the introduction of variable size and risk, we have noted that the discretionary dimension has a positive effect on financial performance measured by ROE.

This can be explained by the fact that large firms and less risky Debt undertake more in philanthropy to gain in terms of image. It is also appropriate to conclude that the environmental dimension in both cases of the measurement of financial performance produced a negative effect.

This can be explained by the fact that investment in environment is very expensive, which negatively affects financial performance. In conclusion we can say that social responsibility of the company has a positive impact on financial performance measured by ROE.

Indeed, the inclusion of stakeholders will result in improved economic performance, that is to say, the most successful companies on non-financial criteria, benefit from a more favorable behavior of the stakeholders than their competitors and will therefore have a higher financial performance.

Conclusion

In this work we tried to study the impact of corporate social responsibility on financial performance on a sample of 30 Tunisian
companies. To do this, we first administered a questionnaire to take the measure of social responsibility. We concluded that the average trend of the respondents were directed towards the environmental dimension, then the dimension discretion, then the ethical dimension, economic dimension and finally the legal dimension. Once one has specified the factors of social responsibility we then studied the impact of that on the financial performance indicators measured by ROA and ROE.

The results show the absence of a link between social responsibility and financial performance measured by ROA, while the relationship is positive when the latter is measured by ROE. We can also conclude that the control variables (size, risk, and sector) do not moderate the relationship between social responsibility and financial performance.

Hence, we can conclude that social responsibility has a positive impact on financial performance, if the latter is measured by the ROE, but we note that there is no relationship between the two built if financial performance is measured by ROA. We can also conclude that the control variables (size, risk, and sector) do not moderate the relationship between social responsibility and financial performance.

References


