ISSN NO. 2320-5407

Journal homepage: http://www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH

RESEARCH ARTICLE

Does diversification strategy affects financial, social and environmental performance companies?

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Manuscript Info

Manuscript History:

Received: 18 October 2015
Final Accepted: 22 November 2015
Published Online: December 2015

Key words:

Diversification strategy, social performance, financial performance and environmental performance

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Abstract

In the very study, the emphasis lays on the specific problem of analyzing the impact of the diversification strategy on the financial, social and environmental performance. After discussing this subject theoretically, we propose our research hypotheses which, in turn, will be corroborated by an empirical study of 96 Tunisian companies. Indeed, the results are noteworthy and important to the extent that one can say that the diversification strategy has a crucial impact on the performance of the companies.

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INTRODUCTION

For several decades, the concept of performance has been the focal point of numerous researches. This term was broadened to cover not only the financial performance but also the social and environmental responsibility of the company which is also established into listed and unlisted companies. This concept is presented as a precautionary stakeholder model established by Freeman (1984) who highlights the problem of profitability.

CSR was defined by Bowen (1953) as the prerequisite that business leaders must implement. CSR entails strategies, decisions and practices that go along with the goals and values of the community in general. In the 1990s, CSR became the crux of the matter of the long-lasting development within the company. Thereafter, Bansal and Hoffman (2012) stated that companies must consider the environmental issues as a strategic problem by focusing on the relationship between the company and its environment. Carroll (1979) provided a conceptual model based on three dimensions: the principles, manner, and the values of social responsibility. Wartick and Cochran (1985) maintained CSR as the principles which incorporate the structure of this notion; the procedures that were implemented to develop the ability to be socially responsible and the policies resulting from this same ability.

Equally important, Wood (1991) proposed a model that incorporates the principles, the procedures, the organizational practices and responsibility as well as the results brought about by the actions and the choices carried out by the company. At the institutional level, Rubinstein (2006), in his studies, defined CSR as a social and an environmental contribution at the same time. It is also an implementation of practices and ways leading to the results that inspire the corporate performance which involves the environmental performance.
Whereas, some researchers keep integrating the study of the relationships between business and environment (Business and Natural Environment) in the field of study of the relationship of the concept CSR the relation between this concept and the financial performance builds the concept of total performance.

Hence, the company grows so as to maximize not only its financial performance but also its social and environmental performance. So, the company chooses to be established in several projects, strategies and others which aim at growth, profitability and perennial. In this context, companies are seeking to be distinctive either by creating, renewing or maintaining by means of innovation and diversification through their divisions. In this paper; we try to contribute to the literature by investigating the relation between diversification and CSR, diversification and the financial performance and diversification and the environmental performance. We, first, present a theoretical context of this relation. Second, we study the impact of diversification on the financial, social and environmental performance of the Tunisian companies.

Our objective is to study the effect of diversification strategy on the financial, social and environmental performance of the Tunisian companies; the main contribution of this work is to explain how the diversification strategy can affect not only financial performance but also social and environmental performance, that we applied the method of rating agency KLD to the Tunisian companies. The results are noteworthy and important to the extent that one can say that the diversification strategy has a crucial impact on the performance of the companies

This article is structured as follows: Section 2 presents the literature overview which motivates the empirical work; Section 3 presents discuss the empirical strategies that were adopted; and Section 4 presents the main results and discussion.

2-Literature Overview

The study of the effect of diversification on the firm performance is a key issue. In fact, several researchers are inclined to the study of the relationship that may exist between the diversification strategy and the financial performance but in an increasingly turbulent environment as indicated by Kaplan and Norton (1996). Nevertheless, this study is not enough, we must, therefore, consider the relationship that may exist between the diversification strategy and the social and environmental performance. Hence, for researchers, the study of the influence of the diversification strategy on performance is one of the most important researches in finance.

2-1-The relationship between financial performance and diversification strategy

Diversification can be defined as an investment strategy in which you spread your investment property among different sectors, industries, and securities in a number of asset classes. Diversification of a portfolio of securities or assets allows either to reduce the risk for a given level of profitability or to improve profitability for a given level of risk. A portfolio maximum diversification is obtained for the market portfolio. For a group, in fact, diversification reduces the risk of the yields volatility. Nevertheless, it is often difficult to manage because of the differences of cultures and the key success factors which it implicates in order to bring different markets under control. The question that arises itself is **how can we benefit from the advantages of the diversification strategy?**

To answer this question, we lay emphasis on the relationship between the diversification strategy and the financial performance. As a matter of fact, the relationship between financial performance and diversification has been the focal point of many studies. As such, in his first works, Rumelt (1974.1982) deduces that diversification has a negative impact on the business performance.

Stimpert and Duhaime (1999) also reject the diversification strategy on account that the company that invests in diversification has a low performance. In the study of Mantgomery (1994), we find that the diversification strategy is an efficient way for the leader to increase his personal wealth, but the high cost of diversification affects the financial performance of the company “on average, the most diversified companies are less profitable than the least diversified ones ".

According to the research of Lang and Stulz (1994) and Berger and Ofek (1995), the diversification strategy can destroy the value of the companies' .Fleming and al (2001) also think that, for the shareholder, the sector diversification is a source of destruction for the value. The explanations of this assumption are based on the agency costs (Doukas and Pantzalis 2003) and managerial opportunism (Perdreau 2000). Besides, the geographic diversification may affect the agency problems since the shareholders can not efficiently control distant activities (Mansi and Reeb 2002) and Campa and Kedia 2002). This type of diversification increases the number of competitors. Based on the stock performance measures in the French context (1992), the study of Godard (1996) implies that the diversification strategy has a negative and significant effect on financial performance.

Additionally, the study of Perdreau (2000) comes to the same conclusions (the study was carried out in the French context in 1991-1997 measuring performance by Tobin's Q). This study shows that the diversification strategy is negatively related to financial performance; i.e. the negative effect may depend on the leader's skills and abilities, the used resources as well as the internal and external environment of the enterprise. Nonetheless, the researches of Geringer and Osler (2000), Gourlay and Seaton (2004), Lee, Hall and Rutherford (2003), and Nachum (2004) show that the diversification strategy could be used to improve the performance of the company.

Lewellen (1971) believes that the diversification strategy can improve the debt capacity of the enterprise. Moreover, Stulz (1990) and Stein (1997) see that this strategy is more likely to create an internal market. Equally important, Amihud and Lev (1981) conclude that diversification can reduce the total risk. In the work of Bodnar and al (1997), we find that this type of strategy allows exploiting the surplus assets. Again, Chang and Hong (2000) find that diversification has a positive influence on the business performance. Jung and Yu (2012) also find that diversification is significantly and positively related to the business performance.

Similarly, Chang (2014) shows that technology has a positive moderating effect on the relationship between diversification and performance. Yet, Kakani (2000) predicts an opposite relationship. Khanna and Palepu (2000) think that there is a curvilinear relationship. Saple (2000) and Chu (2004) argue that the relationship between diversification and the firm performance does not exist. According to Berger and Ofek (1995), diversification reduces the overall risk of the company by combining the activities with the associated financial flows which are imperfectly correlated and this, consequently, has a positive effect on performance.
Bettis and Hall (1982) declare that related diversification can simultaneously reduce the risk and increase profitability.

In contrast, Amit and Livnat (1988) state that the studied firms cannot simultaneously increase profitability and reduce the risk and suggest that there is no "optimal" diversification strategy. Comment and Jarrel (1995), Denis and al (1997), Bhagat and al (1999), Campa and al, (2002), Rajan and al (2000), and Rajan and Zingales (2003) believe that a negative effect may occur between the strategy of diversification and performance since the increase in the degree of diversification can generate susceptible costs. Miller (2006), Bodnar and al (1997) and Stein (1997), however, notice that there is a strong positive relationship. Indeed, most works agree on the possibility of establishing a significant relationship between performance and the diversification strategy. With reference to what has been cited in the literature, the following hypothesis is formed:

H1: The diversification strategy has a (positive or negative) impact on the financial performance of the company.

Regarding the size of the field covered by the concept of performance, Venkatraman and Ramanujan (1986) distinguished three types of financial performance. The first type is financial and is based on financial measures. The second is social and consists of non-financial criteria including customers, employees, etc. Actually, (Capron and Quairel - Lanoizelée , 2007) suggest that the company is safe and sound as long as it is at the core of a set of relations with the partners who are not only shareholders but also stakeholders who are keen on its activities and decisions.

2-2-The effect of diversification strategy on social performance.

Managerially speaking, several studies (Bender and Pigeyre, 2004, Belghiti and Rhodain 2001) perceived the existence of a relationship between diversification and social performance in terms of customer satisfaction. Although some management literature based on the Theory of Resources and Skills, (Thomas, 1991; Morrison, 1992; Jackson et al , 1992 . Cox, 1993) speak for the recognition of the significant and positive impact of diversification on the effectiveness of work groups and employees of the organizations.

As brought to mind by Ely and Thomas (Ely, David. And Thomas, 2001), many academic studies dealing with the impact of a particular form of diversification on the social performance lead to non- convergent conclusions. Despite the abundance of empirical researches, no consensus seems to be in favor of the existence and significance of the impact of diversification on the global performance.

To give a good account of the heterogeneity of the empirical results about the relationship between diversification and performance, Ely and Thomas (Ely, Thomas and David 2001) develop a theory about the conditions under which the diversification of the segments can improve or impair the operation of a work-group. That makes us think that the impact of diversification on the social performance deserves to be questioned not only in a positive way (does more diversity imply an increase in performance or organizational effectiveness?), but also in a negative way: (if not to identify, develop and invest the inherent potential for diversification existing in the business is not likely to affect the performance of the company?) From a positive point of view, diversification is worth being given undivided attention to the key resource that it involves which is liable to exert a positive impact on the performance of the organizations (Belghiti - Mahut, Lafont, 2009) and to provide them with advantages and a better adaptation of goods and services to the segmented and volatile requirements of the various customers.

In accordance with the theory of resources and skills (Edith (1959) , Barney (1991), a whole flood of thoughts (Landrieux - Sophie (2005) Belghiti - Mahut , Lafont , 2009) accentuate that diversification has a significant effect on the performance of the organizations and, in particular, on the creativity of the employees.
Kochan and al (2003) see that diversity enables the company to better understand the requirements of its clients. Also, the ability of the company to manage its resources helps motivate, satisfy and increase the employees' productivity. According to Denis and al (1997), the decision to diversify the activities of the company is the reason for the agency costs and the conflicts of interest that may occur between the leader and the shareholder have a negative impact on the company's relationship with its various subordinates.

The works that focus on the study of the influence of the diversification strategy on the social performance are limited; therefore, we can rely on the works cited above to suggest our second hypothesis:

H2: diversification strategy has a positive effect on social performance.

Most researches are now moving towards a new management concept; namely, the global performance. Such a concept is more likely to cover not only the financial performance but also the social and environmental performance (Freeman et al., 2010).

2-3- The impact of diversification strategy on environmental performance.

Environmental performance indicators are different from one researcher to another depending, Herva et al (2011) there are four environmental performance indicators: energy indicators and material flows, indicators with a territorial dimension, indicators of life cycle assessment and environmental indicators related to risk assessment. James (1994) shows that environmental performance is linked to six indicators: production, auditing, environmental, accounting, economy and quality. All these indicators may influence the environmental performance of companies diversifiable.

Besides improving the way the company is seen in its external environment, diversification is reckoned as an important factor that explains the competitive advantage (Davel and al (2009)) by taking the environmental responsibility into account which is a factor of success in the business performance, environment is an important factor in determining the benefits of diversification for technology companies (Lee and Liu 2013).

According to Delmas et al (2011), not only is the company training capacity able to improve the environmental performance but also to gain a competitive advantage (cost control, reputation, and innovation - differentiation); ie, they altogether increase the benefits of the company. In another research area , the findings of a study undertaken by the research consortium Diversity Research Network with four large companies in different industries confirmed that diversity is, in fact, tightly related to the knowledge of what the consumers need, the adaptation to the enquiries of the customers and to the human benefits (the best management of human resources is likely to endow the enterprise with high-potential profiles by increasing motivation; i.e. the satisfaction and the productivity of the employees) (Kochan and al 2003).In fact, researchers agree on the existence of the effect of diversification on performance. Yet, some of them think that this effect is positive and others see that it is negative.

Actually, no matter what the conclusion is, one has to accentuate the increasing importance of the following assumption: the context proves to be crucial in determining the nature of the impact of diversification on the social and environmental performance. Others see that the strategy of diversification has little effect on the environmental performance. After wondering about the specific link between the management of diversification and the organizational competitiveness, Cox and Blake (1991) come to a similar conclusion. By testing the impact of diversity on six key dimensions of the economic performance (cost, the attractiveness of human resources , success in marketing, creativity and innovation , the quality of trouble shooting , organizational flexibility) , Cox and Blake have proven the strong and positive effect of diversification on the organizational competitiveness. In this context, our assumptions rest on the fact that:

H3: diversification strategy has an effect on environmental performance.

3-Methodology

Our study is aimed at investigating the effect of diversification strategy on the performance companies. Thus, this research attempts to answer our central question: How can diversification strategy affect the performance of Tunisian companies? Our methodology consists of two parts. The first is used to identify the data collection method and the second is devoted to the results interpretation.

3-1- Sample

Our sample involves 96 Tunisian companies (our strategy is diversification activities) divided into 10 industries which are: chemistry, distribution, food processing, transportation, industries, computer, other consumer goods, consumer services, buildings, and services. Companies belonging to the financial sector are excluded (banks, insurance company ...) because they have a unique financial structure. The following table1 summarizes the distribution of the sample by industries

3-2-Collection and the data sources

Our purpose is to verify the role of diversification strategy in performance. So, we need to know about the data concerning the diversification strategy, social performance, environmental performance and financial performance. Regarding diversification strategic, we gathered the needed data from the annual reports of the listed companies on the Tunisian tustex site, accessed the web-sites of the unlisted companies and contacted them by mail, fax and telephone to find out the necessary information to measure this variable. By using a questionnaire, we measured social performance and environmental performance (the questionnaire is sent to the leader of the companies which have diversification activities. The data collection was carried out in 2013. We used several methods to gather information: personal investigation (by appointment: direct interview with the company leader of a duration of 45 minutes), telephone survey, fax inquiry and internet survey. The Ministry of Tunisian industry as well as several business centers, namely the business center of Sfax, helped us.

The questionnaire was based on the dimensions that seek to assess the company management with respect to its stakeholders (employees, customers, suppliers, shareholders, etc.). In the Tunisian context, the concept of social performance is limited and restricted. Therefore, we limited this performance to four main areas: employees, customers, community, country.

3-3- Variables

In this context, it is appropriate to separate the dependent variables from independent ones:

3-3-1-Measurement of the dependent variables

The dependent variables are the three forms of performance: financial performance, social performance and, finally, environmental performance.

3-3-1-1-Financial performance (FP)

It is measured through several methods such as ROA, ROE …To measure financial performance; we used Return on Equity (ROE) which is used by many authors such as Bouri and Bouaziz (2007) and Brown and Caylor (2004) The "return on equity" or "equity return rate " or the "equity return» is the ratio between the net income and the shareholders' equity. It measures the ability of a business to generate profits from its net equity .The data is extracted from the income statements of the sample firms for the years from 2009 to 2013. According to these data, we calculated the ROE for each year. On this basis, we calculated the average ROE 2009-2013.

ROE = Net income / equity

3-3-1-2-Social and environmental performance

In the previous paragraph, we have shown that we have adopted a questionnaire to calculate the social and environmental performance. We have adopted the methodology of the KLD[1](Kinder,Lydenberg,Domini) rating agency to measure the dependent variables which are the social and environmental performance.

• Social performance: we have 4 axes:

- Customer relationships: we used 8 items to measure the firms' social involvement regarding their relationships with their customers in terms of loyalty, satisfaction and encouragement. For each firm, we assigned a score ranging from 0 (no item is taken into account) to a maximum of 8 (all elements are taken into account). Then, we brought back the number to a value ranging from 0 to 1 by dividing the total by 8.
- The relationship with the employees: as we used 8 items for customers, we measured this variable in the same way; a score ranging from 0 (no item is taken into account) to a maximum of 8 (all elements are taken into account). Then, we brought back the number to a value ranging from 0 to 1 by dividing the total by 8.
- The relationship with the country and community: each axis took 3 items to check the social responsibility relationship, community and territory (with the same method of calculation).

Finally, to calculate social performance, the sum of the four axes is divided by four

Social Performance (SP) = (clients' aggregate score + employees' aggregate score + community aggregate score + territory aggregate score) / 4

• Environmental performance: is calculated on the basis of 6 items which are defined to measure the firms' environmental performance. For each firm, a score ranging from 0 (no item is taken into account) to a maximum of 6 (all items are considered). Then, we brought back the number to a value ranging from 0 to 1 by dividing the total by 6.

Environmental Performance (EP) = (∑ items)/ 6

3-3-2-Measurement of independent variable

Here, we talk about the measurement of diversification strategy

3-3-2-1- Diversification

Most authors use the specialization ratio, the index of Berry-Herfindahl, the entropy measurement, Utton index and Rumelt classification (1974) or the number of sectors as diversification measurements. The problem is that all these measurements assume to have data by activity. The entropy measurement requires knowledge of the sales of each strategic business area and the total sales of the group. In our case, it is difficult to know the sales of each area of activity of Tunisian companies. Therefore, we used an approximation of the specialization ratio (RP Rumelt 1974). The specialization ratio is the ratio of sales of the core business and the total sales of the group.

[1] **Rating agency which estimates large companies quoted Americans (together of the indication (index) Russel 3000) according to a series of criteria of exclusion (example: alcohol, tobaccos…) and of criteria of evaluation (Human resources, environment, sponsorship, customers…)**

In our case, we assume that the parent company is the principal company's activity (in terms of sales). This is the same approach used by Stephany and Ngobo (2001) in their study of the French context. According to their study, we can calculate diversification as follows:

Diversification = (1 - (the parent company turnover / the group turnover)) * 100.

3-3-3- Measurement of the control variables

In our model, we included four control variables which explain the level of business performance. These variables are proxies of the firm size, debt, age and industry

3-3-3-1- DEBT

Hovakimian and al (2004) utilized the total debt ratio, but Myers (2001) used the long-term average debt ratio. Nevertheless, ION measured this variable by using the financial leverage which resides in the total debt divided by the total assets. This measurement is also used by Kochhar and David (1996), Barker and Mueller (2002), Lee and O'Neill (2003), Koh (2003), Demaria and Dufour (2007), Jarboui and Olivero (2008), Ben Kraiem (2008), and Sahut and Gharbi (2008).

DEBT= (total debt / total assets) in percentage

3-3-3-2-Size

According to Hovakimian and al (2004) and Dufour and Molay (2010), the size of the firm affects its financial policy. Indeed, larger companies have higher performance and are more investment in research and development than small and medium sized ones (Booth and al 2001) .The company size, in fact, is calculated by several methods; namely, the log total assets , the workforce and turnover. According to Bahagat and Black (2001), Durnev and Kim (2003), Andres and al (2005), and Hergli and al (2007), the size is measured as follows: "log (sales)." Others, like Brown and Caylor (2004), Ben Cheikh and Zarai (2008), Bauer and al (2007), and Adjaoud and al (2007) used the value "log (the total assets)."We used the (Ln (CA)) as a size-measurement in this research. It is identified by the logarithm of the group turnover. This same measurement is used in several studies such as Bujadi and Richardson (1997), Barker and Mueller (2002) and Chen and al (2008).

SIZE=Ln (CA)

3-3-3-3-Age

The company age has a very significant effect on performance. It is expressed by the logarithm of the number of working years (Brown and Caylor (2004) Ben Cheikh and Zarai (2008)).

Age=Ln (number of years)

3-4- Questionnaire validation

Our objective is to test the validity of 22 items about social performance and 6 items about environmental performance. The internal consistency validity test of our questionnaire is achieved with Gronbach alpha (a measurement of the internal consistency between the different items of measurement (between social performance, and environmental performance) equals ($\alpha = 0.623$).

The internal consistency between the 22 items of social performance is very important, it equals 0, 781. For the 6 items of environmental performance, it is less important as it equals 0, 650. Thus, one can say that the scale generated for the measurement of the various items is reliable and includes the aspects of the theory. The Principal Component Analysis suggests a structure of 4 factors representing 95.138% of the total variance for the factors of social performance. For environmental performance, we have three factors representing 73.838% of the total variance. Thus, the index of Kaieser-Mayer-Olkin (KMO), which reflects the adequacy of the factor solution, is very important for the 3 variables. The factor solution of social performance is summarized in the following table:

4- Empirical Validation of the research hypotheses

We will try to verify the effect of innovation companies on the performance of the firms:

4-1-Descriptive Analysis

This part is dedicated to the presentation of the descriptive statistics related to: the average financial performance, diversification strategy, social performance, environmental performance, the company size, the company age and the debts

Div: diversification SP: Social Performance FP: Financial Performance EP: environmental Performance

4-2- Verification of the absence of multicollinearity between the Independents variables

Our goal is to verify the absence of multicollinearity between the explanatory variables, our first case is when our dependent variable is financial performance, our second case is if Y1 is equal to social performance and finally when the variable explained is equal to the environmental performance:
As the correlation matrix of Pearson (all correlation coefficients are below 0.7 which corresponds to the restricted from which it usually begins to have serious multicollinearity problems. In addition, from table5, table6, table7, we can see that all our explanatory variables have a value of FIV which is much lower than 2. These results allow us to conclude that we do not have a serious problem of multicollinearity.

*:signification 5% **:siginification 1%

4-3-Tests of spécification, heteroscedasticity and d'autocorrélation

Our study focuses on a sample of 96 Tunisian companies examined over a whole year. This leads to the estimation of time series rather than panel data. The estimation is done by Least Squared. In other words, we tested heteroscedasticity by performing the Breusch -Pagan test. In the context of a heteroscedasticity test, the null hypothesis is homoscedasticity and it will be the case when all the coefficients of regression of the squared residues are zero. To perform this test, we regressed the squared residues resulting from the fixed-effect model with the explanatory variables of the different regression equations. According to this test, the statistics F of Fisher is not significant for all equations (prob < F =4,768980, F =0,669401, F =1,563082.....) .This leads to the rejection of the alternative hypothesis and the acceptance of the null hypothesis (they are all homogeneous and we do not have a problem of heteroscedasticity).

4-4-Results

Table 1: Sample distribution

Industry	**Number of business**	**%**
chemistry	5	5,2%
distribution	2	2,083%
food processing	15	15,625%
transportation	2	2,083%
industries	15	15,625%
computer	9	9,375%
Consumer services	31	32,291%
other consumer goods	3	3,125%
Buildings	2	2,083%
services	12	12,5%

Total	96	100

Table 2: social performance factors: 22 items

Items	**Factor1 :** motivation of employees **(35,665% VE)**	**Factor2** loyalty, encouragement and satisfaction of clients **: (35,379% VE)**	**Factor3 :** relation with community **(13,16% VE)**	**Factor4** F4 : relation with the country **(10,934% VE)**
1-We put child-care centers	,986			
2-A 3-month-high-production bonus for most employees	,986			
3-Ensure transport for employees	,937			
4-Ensure trainings for my employees	,919			
5-Ensure the medical coverage for all my employees	,905			
6-a canteen is set up in my business	,847			
7-the provision of an infirmary with a doctor available on-site during all work-hours	,964			
8-They have the right to strike	,945			
9-Providing quality service		,929		
10-ensure that the product sold is in line with what has been previously negotiated		,914		
11-free delivery		,876		
12-ensure a high quality of commercial relations between the customer and the company's interlocutors		,982		
13-ensure that the sales process is optimal and effective		,940		
14-offert additionnel Product		,939		
15-Minimizing waiting time		,934		
16-Proliferation of the products offered		,985		
17-I contribute to the financing of the infrastructure in my area			,985	
18-I participate in the cultural activities within my business			,907	
19-I assure the funding of schools and mosques in my city			,862	
20-I participate in local associations				,789
21-I suggest trainings for employees of companies in difficulty				,703
22-I help small and new businesses to get them on their feet in the Tunisian market				,804

Table 3: Environmental Performance Factors (6 items)

Items	**Factor1 :** Environnement Protection **(28,821%VE)**	**Factor2 :**energy saving **(28,148%VE)**	**Factor3 :** recycling **(16,869%VE)**
1-I choose energy sources that protect the environment	,929		
2-I choose low-cost means of transport	,928		
3-I apply the highest standards of environmental standards		,919	
4-I make an energy saving plan		,916	
5-I recycle my products			,899
6-The raw materials chosen by our company limit the depletion of natural resources			,446

Table 4: descriptive Analysis:

variables	**Minimum**	**Maximum**	**Moyenne**	**Ecart type**
FP	-,50	,75	,4534	,19847
DIV	,02	,97	,4778	,26605
SP	,06	,94	,5145	,23796
EP	,25	,75	,4658	,17902
AGE	,3	1,91	1,4920	,31502
Size	,04	13,25	2,4545	1,68914
Debt	,02	1,00	,4891	,25370

Tableau 6 : Pearson correlation (relation diversification-FP)

Variables	**VIF**	**PF**	**DIV**	**AGE**	**TAI**	**END**
PF	1	1				
DIV	1,005	-,212*	1			
AGE	1,018	,046*	-,024	1		
TAI	1,906	,037**	,027	,687**	1	
END	1,929	-,058**	-,022	-,123	-,055	1

Tableau 7 : Pearson correlation (relation diversification-SP)

variables	**VIF**	**PS**	**DIV**	**AGE**	**TAI**	**END**
PS		1				
DIV	1,005	,104**	1			
AGE	1,929	,267**	-,024	1		
TAI	1,906	-,329**	,027	,687**	1	
END	1,018	,158**	-,022	-,123	-,055	1

*:signification 5% **:siginification 1%

Tableau 8 : Pearson correlation (relation diversification-EP)

variables	**VIF**	**PE**	**DIV**	**AGE**	**TAI**	**END**
PE		1				
DIV	1,005	-,156**	1			
AGE	1,929	-,038	-,024	1		
TAI	1,906	,068**	,027	,687**	1	
END	1,018	-,132	-,022	-,123	-,055	1

*:signification 5% **:siginification 1%

The models to be tested are:

Model 1: $FP = \beta_0 + \beta_1 * DIV + \beta_2 * SIZE + \beta_3 * AGE + \beta_4 * DEBT + \varepsilon \longrightarrow$ **H1**

Model 2: $SP = \beta_0 + \beta_1 * DIV + \beta_2 * SIZE + \beta_3 * AGE + \beta_4 * DEBT + \varepsilon \longrightarrow$ **H2**

Model 3: $EP = \beta_0 + \beta_1 * DIV + \beta_2 * SIZE + \beta_3 * AGE + \beta_4 * DEBT + \varepsilon \longrightarrow$ **H3**

The results of the linear regression are presented in the following table:

Variables Dépendantes	**Model 1** **Coefficients** **(t-statistic)**	**Model 2** **Coefficients** **(t-statistic)**	**Model 3** **Coefficients** **(t-statistic)**
C	0,268875 (3,511276)*	0,298734 (3,904702)*	-0,202444 (-2,171811)**
DIV	-0,958449 (-3,88494)*	0,100802 (3,080361)*	-0,003017 (-4,000524)**
Size	0,000366 (3,000366)*	-0,001997 (-4,072246)*	0,093536 (3,752623)*
Age	0,079221 (3,728828)*	0,010329 (3,228661)*	-0,124810 (- 0,237508)
Debt	-0,002629 (-3,53048)*	0,000262 (4,253251)*	0,000465 (0,367882)
R squared	0,273298	0,028892	0,078731
Log likelihood	28,97809	30,55526	10,10130
F-statistic	14,768980	16,669401	19,944198
Prob>F	0,0002	0,0001	0,0006

* Siginification at level 10%, **siginification at level 5%,***siginification at level 1%

Actually, the obtained results indicate the existence of a negative and significant impact of diversification on the financial performance of the company at about10%. This coincides with the works of Comment and Jarrell (1995), Denis and al (1997), Bhagat and al (1999), Campa an al, (2002), Rajan and al (2000), and Rajan and Zingales (2003).

In this, a negative effect can occur between the strategy of diversification and performance due to the fact the increase of the degree of diversification can generate susceptible costs. Thus, one can say that the Tunisian companies are short of the necessary resources and the sufficient powers in order that diversification improves the financial performance (according to the skills and resources theory). Also, the diversification strategy may destroy the value (Mantgomery 1994) .The Tunisian leader adopts this strategy to serve his own interests. Thus, owing to the diversity of activities, the shareholders become unable to control the leaders. So, the agency costs appear (agency theory).

If the Tunisian companies adopt specialization, the financial performance may be more significant and more positive. But can this strategy directly influence the company's relationships with its stakeholders and its environment?

The hypothesis H2 attesting the positive effect of the diversification strategy on the social performance of the companies comes after the second-model estimates which recognize that the diversification of activities or products implies a positive effect on the social performance of the companies at about 10 %. These results fortify the hypothesis of the social impact which states that the more diversifiable the company is, the more efficient it will be on the social level; this agrees with the resource and skills theory. This means that when the company produces more than one product, its profit rate will be higher; thus, it will be able to grant the employees a good fringe-benefit such as trainings, transportation, performance bonus ... . It is the same result found by Sophie and Mahut-Sophia (2005) and Anne-Laurence (2009). When speaking about community, this study shows that most Tunisian companies contribute to the financing of the infrastructure of their regions and the cultural activities within the businesses. This assumption is rooted in the stakeholder theory. (Freeman, 1984).

According to Caroll (1979), social responsibility is what society expects at a given time from the organizations at the economic, legal, ethical and voluntary levels. This relation guarantees faithfulness, satisfaction and encouragement of the customers; this result is similar to the one found by Thomas and al (2003). So, the Tunisian company had better choose a strategy of diversification instead of specialization in order to build a good relationship with its customers, communities and employees; this results in a significant social performance as Mahut Sophia and Anne-Laurence (2009) state it. Then, a good social performance will result in a better allocation of part of these resources in areas of a social nature; also, a good financial performance can foreshadow a good social performance. This is affirmed by the financial resource theory and the stakeholder theory.

The hypothesis H3 is used to identify the relationship between diversification and environmental performance. We assume the existence of a significant relationship between them. Then, the obtained regression-results imply the negative significance of this variable (environmental performance). This means that when the company diversifies, it seeks to achieve its financial and social performance without coping with the environment. Hence, according to this study, we can perceive that the Tunisian companies do not adopt measurement tools to improve environmental performance. It is possible to say that some companies choose their activities regardless of the environment. To achieve this goal, the companies need to develop environmental indicators to monitor their environmental performance.

They also need to set plans for energy saving, to protect the environment and they should choose the raw materials that limit the depletion of natural resources. This stands out against the works of Eduardo, Jean-Pierre, Jean-François (2009) who see the inclusion of an environmental responsibility is a factor of the business performance success.

We note that the control variables of size and age have a positive effect on the performance of the Tunisian companies since, according to several studies; major companies have a higher financial performance than small or medium sized ones. Also, older companies can achieve more significant results than newer ones. According to Mintzberg (1996): "The larger an organization is, the more elaborate its structure will be: the more specialized its tasks are, the more the units are differentiated, and the more its administrative component is developed. The larger the organization is, the larger the mean size of the units will be. The larger the organization is, the more it is formalized." During their growth, the Tunisian firms exhaust their profitable investment opportunities for the shareholders. The indebtedness of the company has a positive impact, but it is not always significant. We stress the fact that the highly indebted companies exhaust part of their investment opportunities. Several studies show that diversification has advantages in terms of improving the debt capacity (Lewellen, 1971), reducing the risk (Amihud and Lev, 1981), using the specific surplus assets (Bodnar andd al, 1997), and creating an internal market (Stulz, 1990; Stein, 1997) .Chang and Hong (2000) also find that diversification has a positive influence on the business performance.

5-Conclusion

In contrast to many topics in management in which we could perceive certain popularity at first, then a decrease of interest, the choice and the implementation of the performance indicators witnessed an increasing importance in recent years. During the 1990’s, as a matter of fact, the companies were eager to improve the measurement of their performance either by using new tools to assess the performance or by expanding the non-financial performance measurements.

The article, therefore, is aimed to update the theoretical researches dealing with this concept and to fortify the first part by another empirical one which is used to identify the relationships that may exist between the diversification strategy and the financial, social and environmental performance. First, we presented the various theories dealing with this issue. Then, we presented the different results stemming from our empirical study on a sample of Tunisian companies in the Stock Exchange of Tunis. The results of the various statistical tests clearly show the significant effect of the diversification strategy on the financial, social and environmental performance. Hence, we obtained negative and significant results for the first, positive and significant for the second and no significance for the third variable.

Accordingly, one may conclude that the Tunisian companies are always looking to brighten their image by improving their relations with the various stakeholders. According to the work of Rajan et al , 1998; Rajan and Zingales , 2000) , the negative impact of diversification on the performance of the company is due to problems of coordination and control of productivity because of the limited ability of the leaders to control all the divisions. So, the power struggles between the strategic units negatively affect the value of the firm. Hence, the question that arises is how can we identify the relation between diversification and the corporate leadership?

References

Adjaoud, F., Zeghal, D., Andaleeb, S. (2007). The Effect of Board's Quality on Performance: a study of Canadian firms. Journal compilation Volume 15 Number 4 July.

Agrawal A., and Jayaraman N. (1994) .The Dividend Policies of All- Equity Firms, a Direct Test of the Free Cash Flow Theory. Managerial and Decision Economics, vol. 15, No. 2, pp. 139-148.

Amihud Y., Lev B.(1981).Risk Reduction as Managerial Motive for Conglomerate Mergers , Bell Journal of Economics, vol. 12, p. 605-617

Andres, P., Azofra, V. and Lopez, F. (2005). Corporate boards in OECD countries: size, composition,functioning and effectiveness. Blackwell Publishing Ltd. Volume 13 Number 2 March.

Bahagat, S. and Black .S, (2001).The non-correlation between board independence and long term firm performance. Journal of Corporation Law 231-274.

Barney .J, (1991). Firm resources and Sustained competitive advantages" ,Journal of Management ,vol 17,1,pp 99,120

Belghiti. S and Rhodain . F. (2001), « Les femmes constituent-elles un potentiel pour les entreprises ? , La Revue des Sciences de Gestion, Direction et Gestion,n°190-191, pp. 107 - 121.

Belghiti-Mahut .S and Lafont A. L, (2009).Présence des femmes dans le top management et performance financière des entreprises: une étude exploratoire, Actes du Colloque de l'AGRH, disponible en ligne (http://www.reims-ms.fr/agrh/docs/actes-agrh/pdf-desactes/= 2009belghitimahut-lafont013.pdf)

Ben Cheikh, S., Zarai, M, A. (2008). Importance des facteurs organisationnels sur le pouvoir managérial et la performance de la firme. Colloque international fiscalité droit gestion, 8, 9 et 10 Mai 2008.

Ben Kraiem, R. (2008) The influence of institutional investors on opportunistic earnings management, International Journal of Accounting Auditing and Performance Evaluation, Vol. 5, No. 1, pp. 89-106.

Bender. A.F and Pigeyre F. (2004).De l'égalité professionnelle à la gestion de la diversité : quels enjeux pour la gestion des carrières des femmes ? , in Guerrero Sylvie, Cerdin Jean-Luc, Roger Alain, La gestion des carrières, enjeux et perspectives, Vuilbert AGRH, Paris.

Bender. A.F and Pigeyre F. (2009), .Mieux conceptualiser la diversité, un enjeu de gestion , Actes du Colloque international La diversité : questions pour les sciences sociales Egalité dans l'emploi, Discrimination au travail et Management de la diversité, EM Strasbourg, Université Robert Schuman 2-4 décembre.

Berger P.G. and Ofek E. (1995).Diversification's Effect on Firm»,journal of financial economics, volume 37,Issue 1,January 1995,Pages 39-65

Bettis R.A. and Hall W.K. (1982). Diversification Strategy, Accounting Determined Risk, and Accounting Determined Return , Academy of Management Journal, vol. 25, p. 254-264.

Bhagat, S., D. Carey and C. Elson (1999). Director Ownership, Corporate Performance, and Management Turnover, Business Lawyer 54: 885-920

Bodnar G.M, Tang C. and Weintrop J. (1997), Both sides of corporate diversification: The value impacts of global and industrial diversification. Working paper 6224, NBER

Bodnar, G.M., Tang, C., Weintrop, J., (1999). Both sides of corporate diversification: The value impacts of geographic and industrial diversification. Working Paper, Johns Hopkins University.

Bowen, H. R. (1953). Social responsibilities of the business man. New York: Harper & Row.p 25

Bujadi, M. L. and Richardson, A. J. (1997) A Citation Trail Review of the Uses of Firme Size in, Accounting Research, Journal of Accounting literature, Vol. 16, pp. 1-27.

Campa, J.M., Kedia, S., (2002). Explaining the diversification discount. Journal of Finance vol 57, p1731–1762

Capron, M., and Quairel-Lanoizelée, F. (2007). La Responsabilité Sociale de l'Entreprise.Collection Repère, Paris Edition la Découverte.p 12

Caroll A.B. (1979). A Three Dimensional Conceptual Model of Corporate Social Performance, Academy of Management Review, Vol. 4, N°4, p 657-668

Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance.Academy of Management Review, 4(4), 497-505.

Chakrabarti, Abhirup, Kulwant Singh and Ishtiaq Mahmood (2007). Diversıfication and Performance: Evidence From East Asian Firms, Strategic Management Journal vol 28:p 101-120

Chang Y. and Thomas H. (1989) The Impact of Diversification Strategy on Risk-Return Performance , Strategic Management Journal, vol. 10, p. 271-284.

Chang, SJ and Hong, J. (2000). Economicperformance of group-affiliated companies in Korea; intragroup resource sharing and internal business transaction . Academy of Management Journal , **43** , pp. 429 – 448

Choi, K., Kang, K.H., Lee, S., Lee, K., (2011). "Impact of brand diversification onfirm performance: a study of restaurant firms". Tourism Economics vol 17 (4), p 885–903

Chu,W. (2004). Are group-affiliated firms really more profitable than nonaffiliated? Small Business Economics , **22** , pp. 391 – 405

Comment R. and Jarrell G.A. (1995). Corporate Focus and Stock Returns , Journal of Financial Economics, vol. 37, p. 67-87.

Cox T, (1994), Cultural diversity in organizations: Theory, research, and practice, Berrett- Koehler, San Francisco.

Cox T, Stracy B, (1991).Managing Cultural Diversity: Implications for Organizational Competitiveness , Academy of Management Executive 5(3), pp. 45-57.

Davel, E., Dupuis, J.-P. and Chanlat, J.-F. (éds.) (2008), Gestion en contexte interculturel. Approches, problématiques, pratiques et plongées, Les Presses de l'Université de Laval, Québec

Delmas, M., Hoffmann, V. H., and Kuss, M. (2011). Under the Tip of the Iceberg: Absorptive Capacity, Environmental Strategy, and Competitive Advantage. Business & Society 50(1), 116-154.

Denis, D. J, Denis D.K and Sarin A. (1997).Agency problems, Equity ownership, and corporate diversification. Journal of Finance vol 52(1), p 135-160

Ely R J., Thomas David A., (2001).Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes, Administrative Science Quarterly, 46, pp. 229-273.

Freeman, R. E. (1984). Strategic Management: a Stakeholder Approach. Boston: Pitman. Développement, Croissance et Progrès vol 36(1), p 213-229.

Freeman, R. E., Harrison, J. S., Wicks, A., Parmar, B. L., & de Colle, S. (2010). Stakeholder Theory: The State of the Art. Cambridge University Press.

Godard, O. (1998). L'Eco-Développement revisité. Cahier de l'ISMEA 1, Série F,

Gourlay, A. & Seaton, J. (2004). The determinants of diversification in UK quoted companies. Applied Economics, vol 36, p 2059-2071.

Griffin, J.J. and J.F. Mahon, (1997).The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research, Business and Society, vol 36(1), p 5–31.

Hartman F,and Perego P (2005).Influence of environmental strategy on the design and use of performance measurement systems, working paper RSM ERASMUS University Juillet

Hergli, M., Bellalah,M., and Abdennadher, N. (2007). Gouvernance d'entreprise et valeurs de marché en Tunisie. 4th International Finance conference. 15-17 Mars 2007, Hammamat, Tunis.

Herva, M., Franco, A., Carrasco, E.F.,and Roca, E., (2011). Review of corporate environmental indicators. J. Clean. Prod. 19 (October (15)), 1687–1699, 13p, 10.1016/j.jclepro.2011.05.019

Hillman.A.J and Keim.G.D (2001) . Shareholder value,stakeholder Management and social issues:what's the bottom line?" ,strategie management journal ,volume 22,issue 2 ,pages 125 -139

Hochschild, A. R. (1983). The managed heart: Commercialization of human feeling .Berkeley, CA: University of California Press.

Hoffman .A. J and Bansal .P,(2012),"Retrospective ,perspective and prospective Introduction ,the oxford Handbook on Business and the Natural Environment (Oxford ,UK:Oxford University Press):vol 3-p 28

Hovakimian, A., Hovakimian, G., and Tehranian, H. (2004) Determinants of target capital structure:The case of dual debt and equity issues. Journal of Financial Economics, Vol. 71, pp. 517-540.

Ilies, R., Schwind Wilson,and ali .K. (2009). The spillover of daily job satisfaction onto employee's family lives: the facilitating role of work-family integration. Academy of Management Journal, Vol. 52, No. 1, p. 87-102.

Jackson Susan E., Joshi Aparna, and Erhardt Niclas L (2003).Recent Research on Team and Organizational Diversity: SWOT Analysis and Implications, Journal of Management, *2003* 29(6), pp 801–830.

Jaffee, S. R. (2002). Pathways to adversity in young adulthood among early childbearers. Journal of Family Psychology, 16, 38–49.

James, P., (1994).Business environmental performance measurement. Bus.Strat. Environ.3 (2), 59–67

Jarboui, A., et Olivero, B. (2008) .Le couple Risque/ Horizon temporel des investissements est il gouverné par les institutionnels et les actionnaires dominants ?, Banque et Marchés, n° 93, Mars Avril, pp. 20-34

Jason, D., Shaw, Brian, R., Dinee, and Ali.K (2009).Employee-organization exchange relationships, HRM practices, and quit rates of good and poor performers . Academy of Management Journal, Vol. 52, No. 5, p. 1016-2009.

Johnson, R.A. and D.W. Greening, (1999).The Effects of Corporate Governance and Institutional Ownership Types on Corporate Social Performance, Academy of Management Journal, vol 42(5), p 564–576.

Jung and Yu (2012) .Managerial ownership, diversification, and firm performance: Evidence from an emerging market, International Business Review vol 21, p 518–534.

Kakani, RK (2000). Financial performance and diversification strategy of Indian business groups. Doctoral dissertation, Indien Institute of Management, Calcutta.vol 23, p15

Kaplan R.S., Norton D.P. (1992):The Balanced Scorecard Measure that Drive Performance,Harvard Business Review, January-February,vol 25 p.71-79.

Khanna, T. and Palepu, K. (2000). Is group affiliation profitable in emerging markets: an analysis of Indian diversified business groups? Journal of Finance, vol **55**, pp. 867 – 891.

Khanna, T. and Palepu, K. (2000). The future of business groups in emerging economies: long run evidence from Chile. Academy of Management Journal , **43** , pp. 268 – 285

Kim, WC Hwang, P., and Burgers, WP (1989).Global Diversification Strategy and Corporate Profit Performance Strategic Management Journal, vol 10 (1), p 45-57

Kochan.T,Bezrukova.K ,Ely.R, Jackson.S,Joshi.A, Jehn.K, Leonard.J, Levine .D and Thomas.D (2003).The effects of diversity on business performance: Report of the diversity research network ,Human Resource Management ,volume 42 Isssue 1,pages 3-21 Spring

Landrieux-K . S, (2005), Femmes et performance des entreprises, l'émergence d'une nouvelle problématique , Travail et Emploi, n°102.p 67

Lang LHP and Stulz RM (1994),Tobin's Q, corporate diversification, and firm performance. Journal of Political Economy vol 102(6), p 1248-1280

Lee C.Y., Wu H.L and Liu C.Y (2013).Contextual determinants of ambidextrous learning: evidence from industrial firms in four countries, IEEE Trans.Eng. Manage. 60 .529–540.

Lee, J., Hall, EH, & Rutherford, MW (2003). A Comparative Study of US and Korean Firms: Changes in Diversification and Performance. International Journal Commerce and Management, 13 (1)

Lewellen (1971), Apure financial rational for the conglomerate merger, Journal of Finance vol 26 pp 521-537

Lin, C. Chang .C (2014) .The effect of technological diversification on organizational performance: An empirical study of S&P 500 manufacturing firms, Technol. Forecast. Soc. Change.

Miller D., Le Breton-Miller I. (2006).Family Governance and Firm Performance: Agency, Stewardship, and Capabilities, Family Business Review, Vol. 19, Issue 1, p. 73-87.

Moskowitz MR (1972).Choosing socially responsible stocks. Business and Society Review 1972;vol 1(1):p71–5.

Nachum, L.(2004).Geographic and industrial diversification of developing country firms». Journal of Management Studies, vol 41(2), p 0022-2380

OCDE (2002), Manuel de Frascati méthode type proposée pour les enquêtes sur la recherche et le développement expérimental.

OECD (2000), Institutional investors, Statistical Yearbook.

Penrose E (1959), The Theory of the Growth of the Firm, 3e édition, Oxford University Press, Oxford

Rajan R., Servaes H. and Zingales L. (2000).the cost of diversity: the diversification discount and inefficient investment. Journal of Finance vol 30, p 35-80

Rajan, R. G., et Zingales, L. (2003.Savings capitalism from the capitalists: unleashing the power of financial markets to create wealth and spread opportunity. New York:Crown Business.

René .M Stulz B. (1990). Managerial discretion and optimal financing , Journal of Financial Economies ,volume 26 Issue 1,pages 3-27

Rumelt, R. (1974). Strategy, structure, and economic performance. Cambridge: M,Harvard University Press.

Rumelt, R. (1982) .Diversification Strategy and Profitability . Strategic Management Journal, vol 3, p359-369

Servaes H. (1996).the value of diversification during the conglomerate merger wave. Journal of Finance vol 51(4), p1201-1225

Sharfman, M. (1996).The Construct Validity of the Kinder, Lydenberg & Domini Social Performance Ratings Data, Journal of Business Ethics vol **15**(3): pp 287-296.

Stein,J (1997) .Internal Capital markets and the competition for corporate resources», journal of finance vol 52,p111-133

Stephany.E et Ngobo P.N (2001).Les différences de performance financière entre les entreprises : résultats du marché français, Finance Contrôle Stratégie Volume 4, n°, pp 89 – 121.

Stimpert, JL, and Duhaime, IM (1997).Seeing the big picture: The Influence of industry, diversification and business strategy on performance. Academy of Management Journal, vol 40 (3), p560-583.

Ullmann, A. A. (1985).Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U.S. Firms. Academy of Management Review, vol 10(3), pp 54 -57.

Venkatraman N.and Ramanujam V. (1986), Measurement of Business Performance in Strategy Research: A Comparison of Approaches"academy of management Review ,vol 11 ,N'4 pp 801-814

Wartick, S. L., and Cochran, P. L. (1985). The Evolution of the Corporate Social Performance Model. Academy of Management Review, vol 10(4), p758-769.491

Wood, D. J. (1991).Corporate social performance revisited. Academy of Management Review, vol 16(4), p691-718.