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## **Ownership Structure, Board Characteristics, and Firm Diversification: Evidence from an Emerging Country**

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Manel Gharbi<sup>1</sup>, Anis Jarboui<sup>2</sup>

**Abstract:**

**Purpose:** *The purpose of this paper is to argue the effect of ownership structure and board of directors on firm diversification.*

**Design/Methodology/Approach:** *The data is gathered via a questionnaire administered to 111 managers from Tunisian in small- and medium-sized companies. To analyze collected data we used SPSS and Amos graphics software. Hypotheses were tested using the regression analysis technique. The study gives empirical information on the relationship between cognitive variables and strategic decision-making, specifically diversification.*

**Findings:** *The findings reached following the logistic regression prove to reveal well that companies whose executives a certain capital share do not count as actually diversified firms. Thus, the assumption stipulating that the directors' shareholding is negatively associated with diversification seems verified. Still, the results attained prove to demonstrate that family structure is negatively related to diversification policy. In addition, company size and leverage appear to not affect diversification decisions. Yet, performance turns out to have a positive and significant relationship with such a decision.*

**Research implications :** *Although the Tunisian corporate governance reform concerning the independent director system which is mandatory only for newly-listed companies is successful, the regulatory authority should require all listed companies to appoint independent directors to further enhance the Tunisian corporate governance. Future research could include other proxies of corporate governance and ownership structure such as board diversity and meetings, audit committee and managerial ownership, etc.*

**Originality/Value:** *First, unlike most of the previous literature on emergent countries, this study examines the effects of corporate governance mechanisms on firm diversification in Tunisia. Second, while several studies used a single indicator of firm diversification, this study examines both accounting-based and market-based firm diversification. Third, this study addresses the endogeneity issue between corporate governance factors and firm diversification, a strategic decision.*

**Keywords:** *Board characteristics, ownership concentration, firm diversification.*

**JEL classification:** *G32, G34, L25.*

**Paper type:** *Research article.*

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<sup>1</sup>*Doctor of Finance and Accounting at the University of Sfax, Tunisia.*  
[gharbimanel81@gmail.com](mailto:gharbimanel81@gmail.com);

<sup>2</sup>*Professor of Finance and Accounting at the University of Sfax, Tunisia*  
[anisjarboui@yahoo.fr](mailto:anisjarboui@yahoo.fr);

## **1. Introduction**

The separation between ownership and corporate control has appeared to result in persistent interest conflicts involving managers and shareholders (Berle and Means, 1932). Indeed, while shareholders prove to be more interested in maximizing corporate value, executives most often seek to minimize the risk of losing their position along with preserving and maintaining their pecuniary, as well as non-pecuniary, benefits.

A review of the literature helps identify several governance mechanisms likely to help companies reduce agency problems and align the executives' interests with the shareholders. Among these mechanisms, there exist managerial, the majority shareholders' ownership, the institutional investors' propriety, the council board, as well as the executive compensation system (Boateng, Tawiah, and Tackie, 2022).

Actually, the study objective is twofold; in the first place is an exposition of the diversification strategy theoretical predictions. In the second place, an empirical test will be conducted, whereby the relationship between the diversification strategy and the below-listed variables will be checked, through consideration of the contractual theory (Waheed, 2019 ) and a sample of Tunisian companies.

The remainder of this work is structured as follows: the first section is devoted to exposing the study context and research hypotheses. As for, the second section, it serves to discuss the methodological aspects. Analysis and results discussion will be the subject of the third section.

Finally, the last section bears the concluding remarks and sums up the major achieved findings while recalling the research-associated limits and paving the way for potential research horizons.

## **2. Literature Review and Hypothèses Development**

In a corporate governance-related analysis, a fundamental variable seems worth imposing, namely, that of shareholding structure. As a continuation of Berle and Means's elaborated work, the agency theory has been developed under the assumption of a dispersed ownership structure (Noorlailie and Mayang, 2018).

Certainly, as demonstrated by several conducted analyses, ownership dispersion, a striking characteristic of the Anglo-Saxon corporate capital structure, has not proven to stand as a universal phenomenon, as certain US companies' ownership structure has turned out to be concentrated. Besides, shareholder concentration proves to be dominant across continental Europe and Asia-sited businesses.

### **2.1 Executive Shareholding and Firm Diversification**

The executives' shareholding lies at the heart of the debate dealing with corporate governance defined by Caby and Hirigoyen as a network of relationships binding several intervening parties within the context of determining business strategy performance. It is set within a shareholding value creation and enhancing perspective. About shareholding governance, stressing the shareholders' interests with a strategic decision-making process, the leaders' shareholding lies within the framework of aligning both the executives' and shareholders' interests.

The origins of such a debate refer actually to the "power sharing" concept, as recognized by Neerpal Rathi (2015). For several decades, power sharing between the shareholder and manager has been unofficially developed particularly with the growth of large-size enterprises. Indeed, while economic leaders have become less identifiable, their decisions have gained more ground and influence. Hence, the executives' identity dissipation has not proven to noticeably influence their strategic and organizational decisions.

Consequently, the power detention and legitimacy issue would imperatively emerge, urgently calling for a reflection on the business owners' identity and action rationality of action (whether internal or external), as well as a reflection on the nature of maintained relationships, the executive's detained capital, and exerted power. In the early 1980s, this debate manifested anew, with particular intensity, under the influence of three major economic actors.

Firstly, the apparent malfunctioning of the executives' control system, who have witnessed their faults and misconducts inappropriately sanctioned, testifying the various recurrent financial scandals marking the business area worldwide. Secondly, there have been remarkable changes affecting the shareholding activity, reflected by the institutional investors' leading role and the minority shareholders' increased vigilance (Gharbi and Jarboui, 2017).

Finally, there is a development in business funding sources, as most businesses have initiated a deleveraging process and turned more readily to the financial markets, thus, strengthening the shareholders' role even more. This phenomenon soon spread to continental Europe, particularly to France and, more recently, to the Central and Eastern European countries (Di Vito, 2011).

In reality, the motives and mechanisms enticing leaders to diversify their activities are numerous and emanate from several favoring circumstances (Amihud and Lev, 1981). Most corporate governance-related studies have predominantly focused on explaining the different aspects of the shareholder-executive relationship, and the solution it might well provide for maintaining further effectiveness of the business management process.

The theory involves several studies dealing with the executive managerial practices and value creation subject (Norena-Chavez and Thalassinos, 2022a; 2022b). Based

on Table 1, several remarks could be drawn. The state of the art regarding the executive's practices reveals well that he enjoys the power and capacity to control and appoint the Board members. As depicted by the relevant literature, executive compensation proves to be positively related to the capital share he detains.

However, English literature most often considers that part of the company ownership structure is held by the executive. Most of the elaborated research works dealing with the executives' managerial contribution have examined even their relevant quality. Most often, executives appear to make great efforts to exchange information qualified as being clear and transparent while helping highlight the investment choices' major features to maintain short-term performance.

Besides, the Anglo-Saxon literature along with the French one, also underlines the executive's various skills, by closely examining his personality as well as his capacity to manage the available resources ownership (Azhar and Nasir, 2019). Literature has stressed such personal characteristics as age and seniority, which appear to have a considerable impact on the director's decisions and know-how expertise. Thus, most of the elements necessary for drawing the hypothesis concerning the executive's shareholding impact on diversifying decisions seem to be collected, as based on this section developed literature, namely:

***H1: The executives' ownership concentration negatively affects the company's diversification level.***

## **2.2 The Control Block and Firm Diversification**

The form and degree of shareholding prove to have a remarkable influence on company strategic decisions and help greatly examine the nature of conflicts prevailing between the executive and the shareholder. In a dispersed ownership case (Dispersed ownership structure DO), conflicts are most often triggered between the directors and the minority shareholders, whereas in a concentrated ownership (Azhar and Nasir, 2019) case (structure Concentrated ownership DO), the conflict appears to persist mainly between the majority shareholders (the control block holders) and the minority ones.

Majority control has proven to demonstrate a noticeable hindrance to freedom, from which leaders often derive profit and seize the opportunity to favor certain decisions, whereby the dominant controlling shareholders could influence the strategy. The research conducted by (Jensen, 1986) regarding the analysis of their contracts has led them to establish two fundamental propositions namely the separation of ownership and decision-making, along with the concentration of control and decision-making functions.

The executives' capital detention level stands as an important indicator for the diversification decision. As already stated, since the executive is supposed to draw

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certain benefits, he would then be highly interested in engaging in a diversification strategy. In this regard, our research concerning the impact of the leader's participation level in the company's capital on diversification decisions has enabled us to distinguish two relevant cases, namely, that of an executive detaining a small capital share along with the inverse case, and their impact on diversification.

Within the agency problem resulting from the interest conflicts between managers and shareholders (Di Vito, 2011) the leaders' opportunistic behavior (kindling agency costs) would help greatly in influencing the company's strategy. Most studies dealing with the relationship between ownership structure and corporate strategy have predominantly focused on treating the issue of whether shareholder concentration helps improve corporate strategic decisions.

Ever since the 1920s, leaders have been considered revolutionary individuals given the capacity they enjoy to implement innovative strategies (Schumpeter, 1928). Nowadays, the executive appears to be well aware of the need to influence his environment as he is, himself, subject to market constraints (the constraints school). Such constraints turn out to constitute a critical premise enticing leaders to diversify their businesses (Norena-Chavez and Thalassinou, 2023).

Initially, this theory dates back to the original pioneering works elaborated by Jensen and Meckling, (1976), Fama and Jensen (1983). Most often, leaders have recourse to diversification even if such a procedure would result in reducing the shareholders' wealth, and according to the leadership school, the executive is considered as someone likely to help, and even determine the organization's success (Laroche and Nioche, 2006).

In turn, this typology will also be applied to study the ownership structure effect on the diversification policy. It seems rather harmonious to us to expose the typology as based on the subject of agency theory, namely, the agency relationship binding the executive and shareholder, rather than on the analysis of the executive detained capital proportion (or the Directors' Board). It is worth noting that according to the agency theory, the executives' interests do not prove to be aligned with the shareholders (Singh and Pillai, 2021).

The directors, supposed to act as agents on behalf of the shareholders and to maximize shareholder value, do not appear to be less tempted by the opportunistic behavior based on the internal and external corporate growth strategies, on company diversification. Still, agency problems may stand as the major cause for maintaining diversification or the quest for diversifying (Amihud and Lev, 1981).

In this respect, the director could take advantage of this firm diversification decision in two ways namely: through risk reduction both financial and human, as well as reducing risk cost (internal and external). Indeed, there is another advantage likely to

be drawn in a private order, which could be summed up in the power the executive could derive or enjoy along with maintaining prestige (Jensen, 1986).

According to the agency theory, interest divergence between managers and shareholders can be restrained by increasing the directors' held capital (Hussain, 2022). This solution proves to exhibit several advantages, firstly, it helps shift the executives' arbitration towards a further firm value maximization (Phan and Zhou, 2014).

Secondly, the increased executive detained capital share is likely to help reduce the shareholder incurred control cost, for such an increase would, in turn, help reduce the executives' proper opportunism itself. Besides, aligning both the shareholders' and managers' interests would never be maintained once the directors appear to detain the entire capital (Jensen, 1980).

Hence studying the executives' management control systems seems well imposed for a further consolidation of their performance, and a better understanding of the organizations' functions (Handley and Molloy, 2022). It is, actually, through this analysis perspective that corporate governance appears to raise several questions, although it sometimes helps in providing certain answers regarding the companies' management process and the relationships they maintain with partners (shareholders, banks, employees, suppliers, customers, etc).

In terms of such a deep vision, the executives turn out to occupy the center of any theoretical discussions and are incited to undertake rooting strategies in a bid to restrict the risks they bear and effectively develop more efficient activities. In effect, the rooting thesis argues that the executive detaining an overall majority of capital would likely escape any form of control, at least partially, and carry out the management procedure according to a counter-value maximizing process (Hussain, 2022)

The rooting hypothesis can be summed up as being the control mechanisms' potential failure to constrain and entice executives to manage companies in harmonious conformity with the shareholders' interests. So, for agency costs to be minimized, it sounds necessary to monitor the executives. In turn, and to escape control, directors would usually resort to a strong rooting strategy. Executives with low capital share would often seem less entrenched (Soelton and Yanto, 2020),

Regarding the present study, the aim is focused on empirically analyzing the impact of the director's participation in company capital on the diversification strategy, through the effects of control variables likely to constrain the executive's decisions. So, one could advance the following hypothesis:

***H2: There is a positive relationship between the shareholders' control intensity and the executives' capacity to diversify.***

### 3. Research Methods

The study objective lies in studying the relationship between diversification policy and the above-cited variables. Based on the already developed literature review, the following hypotheses seem worth recalling:

|                 |                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------|
| Hypothesis (H1) | <i>The executives' ownership concentration negatively affects the company's diversification level.</i>                         |
| Hypothesis (H2) | <i>There is a positive relationship between the shareholders' control intensity and the executives' capacity to diversify.</i> |

#### 3.1 Sample and Data

Following the qualitative research methodology, the choice of sample size appears to be equally important concerning quantitative studies. Yet, the selection criteria appear to exhibit a different nature, while the adequate sample size proves to be that which helps in achieving the theoretical saturation. Given our particular study context, we have considered it useful to find our empirical study on a questionnaire survey, with the major objective being to test the research's advanced hypotheses. In elaborating the survey, special care has been paid to combine two different objectives, namely:

- The questionnaire should help in accurately measuring the entirety of the theoretical model's variables.
- It should be clear enough and not too long for responders.

In addition, particular attention has been paid to developing a coherently structured questionnaire. Our initial sample consists of 186 listed and non-listed Tunisian companies. After removing the insurance and banking sectors' pertaining companies, along with firms whose management access to the questionnaires response has been impossible and regarding which data necessary for conducting the study have been insufficient. Hence, our final sample turns out to consist of 111 Tunisian companies undertaking either industrial, service, or commercial activities (Table 1).

**Table 1.** *The applied sample analysis*

|                                                    |            |
|----------------------------------------------------|------------|
| Description                                        |            |
| Initial BVMT sample for 2011                       | 55         |
| Financial firms excluded                           | -23        |
| Other non-financial firms                          | 113        |
| Insufficient data on psychological characteristics | -27        |
| Insufficient data for asset revaluation            | -7         |
| Final sample                                       | <b>111</b> |

**Source:** *Own study.*

Ownership and diversification-related data have, sometimes, been collected by proper means, based on annual reports, companies' websites as well as the Tunisian Stock Exchange (TSE) relevant site BVMT. At other times, data have been gathered through managers' proper responses to the questionnaire. Other data stem from the directors' proper and direct responses to the questionnaire.

### **3.2 Research Variables' Measurement**

At this level, each set of variables will be dealt with separately, namely, the variables to explain, the explanatory variables, along the control ones.

#### **3.2.1 *The variables to be explained (endogenous): the diversification decision***

Concerning the present work, the diversification consists of a binary variable that takes value 1 if diversification proves to be high, and 0 if it is low. We have opted for calculating diversification mean as recorded during the three years ( $DIV(2011) + DIV(2012) + DIV(2013) / 3$ ); we have then proceeded with classifying the high and low qualifications by computing the reached values' median. so : 0: would denote low diversification, and 1: a strong one.

#### **3.2.2 *The explanatory and exogenous variables***

- *Ownership concentration:* It consists of measuring the capital share held by the major shareholder. This measure has also been applied by Jarboui (2008) , as well as (Gharbi and Jarboui, 2017) regarding the Tunisian one.
- *Executive shareholding:* A variable measured through the director-detained capital share. This measure has also been used in the tunisian context by (Gharbi and Jarboui, 2017)

#### **3.2.3 *Control variables***

It is worth noting that ownership structure and the directors' board, along with other factors, are not the only elements that help influence the diversification decision within the company. There exist other pertinent elements, such as leverage level, company size, financial structure, and performance which jointly intermingle to determine the strategic choices, particularly, the firm's decision to diversify.

- *Leverage ratio:* In this respect, Taylor and Lowe (1995), along with Mansi and Reeb (2002), have documented that in most cases the most diversified companies appear to have the highest level of debt (at book value). The level helps greatly control several factors. In the first place, it helps control managerial discretion, which has made Stiglitz (1988) affirm that debt issuance participates in increasing the managers' voting power by rendering control of their activities hard to implement. In a second place, as put by



Jensen (1986) managers often resort to issuing debt as a signal of their ability to generate enough cash flow necessary for paying both the interest and principal.

Thus, debts are usually used as a means for resolving conflicts prevailing between managers and shareholders reducing managerial discretion along with lessening the consumption of benefits (Ellili Ould Daoud, 2007). In addition, high debt levels would entice managers to diversify activities in a bid to minimize risk (Jarboui, 2008). This variable is measured through the total debt to total assets ratio.

$$\text{LEV} = \text{Total debt} / \text{Total assets}$$

- *Company Size*: Company size could stand as an explanatory factor for the choice of the investment nature, financing mode, and performance. Most often, the diversification level is positively associated with firm size (Jensen and Murphy, 1990). So, the greater the firm size is, the more complex the company turns out to be; and the more significant the managers' discretionary score is, the more diversified the firm would appear to be (Jarboui, 2008). Regarding our study case, this variable is measured via the decimal logarithm CA, as follows:  $\text{Size} = \text{LOGCA}$ .
- *Performance*: This variable is measured by the net profit to equity ratio.  
 $\text{ROE} = \text{Net profit} / \text{Equity}$

The following model is used to test the hypothesis:

A Multi-varied analysis will be undertaken through the following logistic regression function, such as :

$$\text{DIV} = a_0 + a_1 \text{ACTDIRIG} + a_2 \text{BLC} + a_3 \text{LEV} + a_4 \text{SIZE} + a_5 \text{ROE} + \varepsilon$$

As a recapitulation, the following table depicts the different variables' relevant definitions and measurements, along with their corresponding descriptions:

**Table 2.** Variables' identification and measurements

| Variables             | Descriptions                 | Measurements                                                                                                     |
|-----------------------|------------------------------|------------------------------------------------------------------------------------------------------------------|
| Endogenous variables: |                              |                                                                                                                  |
| DIV                   | Diversification              | It consists in a binary variable that takes the value 1 if diversification proves to be high, and 0 if it is low |
| Exogenous variables:  |                              |                                                                                                                  |
| BLC                   | Ownership concentration      | This variable is measured through the capital share held by the major shareholder                                |
| ACTDIRIG              | The executive's shareholding | This variable is measured through the director-detained capital share                                            |

| Control variables: |              |                                                                        |
|--------------------|--------------|------------------------------------------------------------------------|
| LEV                | Leverage     | This variable is measured through the total debt to total assets ratio |
| SIZE               | Company size | This variable is measured via the decimal logarithm CA                 |
| ROE                | Performance  | This variable is measured through the Net profit to Equity ratio       |

*Source: Own study.*

## 4. Empirical Results

An initial empirical test has been conducted to help assess the board's supervisory role on managers, to determine the Tunisian firms' strategic behavior, and to provide a plausible consolidating answer to the question of a persistent link between the existence of outside directors and these companies' diversification level.

### 4.1 Descriptive Analysis

The following Table 3 presents, as regards ownership structure, the descriptive statistics, presented in the tables, reveal that it turns out to be fluctuating. 66.54% of sample firms appear to have a majority shareholder detaining less than 50% of company capital (BLC), while managers prove to hold an average of 22.20% of capital. The sample firms' major characteristics are depicted in the table below:

**Table 3.** *Descriptive statistics*

| Variables<br>N=111 | Mean     | Min    | Median | Max    | Std dev   |
|--------------------|----------|--------|--------|--------|-----------|
| BLC                | 66,54144 | 50,000 | 64,43  | 81,820 | 21,795765 |
| ACTDIRIG           | 22,2052  | ,0000  | ,000   | 30,000 | 33,25280  |

*Source: Own study.*

### 4.2 Correlation Analysis

The correlation matrix (Table 4) highlights a positive relationship between the director's shareholding (ACTDIRIG), ownership concentration of (BLC), and performance (ROE).

**Table 4.** *The dependent and independent variables' correlation coefficients*

| N=11     |                                                       | ACTDIRIG | BLC | DEBT | LOGCA | ROE |
|----------|-------------------------------------------------------|----------|-----|------|-------|-----|
| ACTDIRIG | Pearson<br>Correlation<br>Significance<br>(bilateral) | <b>1</b> |     |      |       |     |
|          | Pearson<br>Correlation                                | ,326**   |     |      |       |     |

|             |                                                       |                 |                 |                 |              |          |
|-------------|-------------------------------------------------------|-----------------|-----------------|-----------------|--------------|----------|
| <b>BLC</b>  | Significance<br>(bilateral)                           | ,000            | <b>1</b>        |                 |              |          |
| <b>LEV</b>  | Pearson<br>Correlation<br>Significance<br>(bilateral) | -,018<br>,849   | -,122<br>,204   | <b>1</b>        |              |          |
| <b>SIZE</b> | Pearson<br>Correlation<br>Significance<br>(bilateral) | -,299**<br>,001 | -,323**<br>,001 | -,262**<br>,005 | <b>1</b>     |          |
| <b>ROE</b>  | Pearson<br>Correlation<br>Significance<br>(bilateral) | ,146<br>,125    | ,071<br>,461    | -,133<br>,163   | ,009<br>,822 | <b>1</b> |

*Note* : \*Correlation significance at the 0.05 level (bilateral). / \*\*: Correlation significance at the 0.01 level (bilateral).

*Source*: Own study.

Still, the association turns out to be negative between debt (LEV) and company size (SIZE). Similarly, with respect to the variable (BLC), the correlation matrix reveals a positive relationship with performance, while a negative link appears to persist between debt (LEV) and size (LOGCA).

The analysis aims to detect the presence of any multicollinearity problems among the variables and association among variables. According to Tabachnick and Fidell (2007), such a problem exists if the independent variables are highly correlated with each other with correlation values exceeding 90%.

However, none of the variables were found to be more than 0.5. The highest correlation has been discovered to persist between director shareholding (ACTDIRIG) and debt (LEV) with a rate of 0.849, and between size (SIZE) and performance (ROE) with a rate of 0.822 suggesting that multicollinearity does not stand as a serious problem likely to jeopardize the regression results (Tabachnick and Fidell, 2007).

In line with several comparable research studies, mainly conducted by Jarboui (2008) a logistic regression has also been considered. This particular framework has the advantage of accounting for the control variables.

#### 4.3 Multivariate Analysis

Both the explanatory and control variables have been incorporated into the model, and the test results are depicted in Table 6, below. In this way, we can represent the results corresponding to the relationship binding the executive shareholding and diversification decision. The directors' capital level detained has been introduced as

the diversification explanatory variable. The results related to the association between ownership concentration and diversification decision figure are in Table 5.

**Table 5.** *The model's logistic regression results*

| <i>N=111</i><br><i>independent</i><br><i>Variables</i> | <i>Dependent Variable DIV</i>  |                |             |            | <i>R<sup>2</sup></i><br><i>of</i><br><i>Nagelkerke</i> | <i>Test</i><br><i>of</i><br><i>spécification</i> |
|--------------------------------------------------------|--------------------------------|----------------|-------------|------------|--------------------------------------------------------|--------------------------------------------------|
|                                                        | <i>Coefficient</i><br><i>a</i> | <i>Std dev</i> | <i>Wald</i> | <i>Sig</i> |                                                        |                                                  |
| <i>constant</i>                                        | 3,283                          | 1,049          | 9,800       | ,002       |                                                        |                                                  |
| <i>ACTDIRIG</i>                                        | ,007                           | ,007           | ,876        | ,349       |                                                        |                                                  |
| <i>BLC</i>                                             | -,038                          | ,012           | 10,062      | ,002       | <b>0,323</b>                                           | <b>X<sup>2</sup>=30,776</b>                      |
| <i>LEV</i>                                             | -,760                          | ,478           | 2,529       | ,112       |                                                        | <b>p=0,000</b>                                   |
| <i>SIZE</i>                                            | ,721                           | ,490           | 2,161       | ,142       |                                                        |                                                  |
| <i>ROE</i>                                             | -1,533                         | ,469           | 10,680      | ,001       |                                                        |                                                  |

*Source: Own study.*

The logistic regression model results indicate that the  $\chi^2$  model adjustment fit test bears the value 30.776, significant at the threshold of 1% level, as  $p = 0.000$ . The nagelkerke  $R^2$ , equivalent to the determination coefficient in the linear regression, is equal to 32.3%. This suggests that 32.3% of diversification in Tunisia has its explanation in management shareholding, ownership concentration, and control variables. In addition, the "Hosmer and Lemeshow" tests indicate an insignificant  $\chi^2$  of a rate of 9.487 ( $p = 0.303$ ).

An examination of the statistical tests shows that the ACTDIRIG variable appears to have a positive and insignificant effect on the diversification decision. Indeed, the model's specificity test highlights a coefficient relevant to this variable with a positive and insignificant value in respect of the dependent variable ( $a = 0,007$ ; with  $p$  being greater than 10%). Actually, these results turn out to be consistent with the predictions set by the H1 hypothesis, stating that executives' shareholding is negatively associated with the diversification decision.

This finding has its justification in the divergence of interests persistent between management and shareholders, which is, in turn, explained by the risk aversion context, characteristic of directors. Indeed, executives who hold an increasing share of capital, remain sensitive, in the negative sense, to any strategic decision. However, directors usually seek to stabilize their financial situations rather than get involved in dubious investments.

This result corroborates the findings published by Godard (2005), emphasizing that the inner strategy to a decision does not prove to be significantly correlated with the executive's detained capital share.

However, the BLC variable relevant regression coefficient seems to exhibit a negative and significant value at the threshold of 10% as compared to the dependent variable ( $a = -038$ ;  $p = 0.002$  lower than 10%). It seems that the diversification

strategy-oriented tendency proves to be a decreasing function of the capital proportion held by the major controlling shareholders.

Such an effect can have its explanation in the control exerted over managers, as the majority shareholders are able to curb managerial discretion at the diversification level. In fact, such a result does not seem to confirm the findings released by Lacoste, Favoreu, Lavigne, and Rigamonti, published on 13-16 June 2006 stating that "the influential power of the different types of shareholders does not prove to have a significant impact on corporate diversification choice".

Finally, the introduction of the control variables standing for company size, debt, and performance, helps kindle several comments. Firstly, contrary to several previously elaborated studies, company size, and debt do not appear to influence the diversification level. Regarding the Model 2 attained results, a summary of the expected, as well as obtained results regarding the relationship trend binding diversification and the explanatory variables, are depicted in the following Table 6.

**Table 6.** *The synthetic regression results*

| Independent variables   | <i>Diversification</i> |                 |
|-------------------------|------------------------|-----------------|
|                         | <i>expected</i>        | <i>obtained</i> |
| Executive Shareholding  | -                      | -               |
| Ownership Concentration | +                      | +               |

**Source:** *Own study.*

N.B: regarding the expected trends: + denotes a positive relationship; - denotes a Negative relationship; which Means can't be expected. With respect to the obtained trends: + signifies that the coefficient is positive and statistically significant; - signifies that The coefficient is negative and statistically significant ; 0 signifies the coefficient is statistically insignificant.

The model's logistic regression results, demonstrate that the  $\chi^2$  test, relevant to the adjustment, is discovered to have a value of 30.025 and to be significant at the threshold of 1% with  $p = 0.000$ . The Nagelkerke  $R^2$ , which corresponds to the  $R^2$  determining coefficient in the linear regression, is equal to 31.6%.

This figure denotes that diversification in Tunisia is at 31.6% explained by the presence of outside directors, and ownership concentration along the control variables. In addition, the "Hosmer and Lemeshow" test indicates an insignificant  $\chi^2$  of 19,410 ( $p = 0.013$ ).

## 5. Conclusion

The aim of this paper is to investigate whether corporate governance is related to firm diversification. We used a sample of 111 firms listed on the Tunisian stock

exchange from 2011 to 2013. Based on regression models, we find a positive association between ownership concentration and managerial diversification.

Thus, the assumption stipulating that the directors' shareholding is negatively associated with diversification seems verified. Still, the results attained prove to demonstrate that family structure is negatively related to diversification policy. In addition, company size and leverage appear to have no effect on diversification decisions. Yet, performance turns out to have a positive and significant relationship with such a decision.

This study has relevant theoretical and practical implications. We expect to make several contributions to the existing literature. To our knowledge, this is the first study in Tunisia that examines the relationship between corporate governance and management decisions. Until now, empirical studies have been carried out for the most part in the Anglo-Saxon countries following the availability of the data.

Therefore, it would be worthwhile to examine this issue in an emerging market, namely Tunisia, and gain hence additional evidence on such phenomena. Besides, this work also provides practical implications.

Our findings have practical implications that may be useful to different stakeholders, policymakers, and strategic management. Also, this research could encourage setters to introduce new legislation that strengthens good governance in Tunisia and reduces opportunist manager's behavior.

Despite these contributions, this study has some limitations that could be addressed in future research studies. Firstly, this study is based on a small sample of firms. Thus, caution must be applied, as the findings might not be transferable to all Tunisian companies. A second limit concerns the external validity of the research. Our findings are specific to Tunisian companies and have no general explanatory scope.

Therefore, our results are not transferable to other contexts and cultures marked by different legislation. Future research can expand the population of this study and test our evidence with non-listed and non-financial firms. Future research can also examine the relationship between corporate governance mechanisms and managerial decisions.

## **References:**

- Alamolhodaie, M., Ardakani, F.M. 2015. Investigating the Effective Factors on Entering into International Markets by Presenting the Local Islamic Model. *Academic Journal of Economic Studies*, 1(1), 22-34.
- AlKarim, S., Pab, S. 2013. When leaders victimize: The role of charismatic leaders in facilitating group pressures. *The Leadership Quarterly*, 24, 189-202.

- Amihud, Y., Lev, B. 1981. Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Bell Journal of Economics*, 12, 605-617.
- Azhar, A., Nasir, A. 2019. The Impact of Ownership Structure and Corporate Governance on Investment Efficiency: An Empirical Study from Pakistan Stock Exchange (PSX). *Pakistan Administrative Review*, 3(2), 84-98.
- Azouzi, M.A., Jarboui, A. 2013. CEO emotional intelligence and board of directors' efficiency. *Corporate Governance. The international journal of business in society*, 13(4), 365-383.
- Belanes, A., Hachana, R. 2010. Biais Cognitifs et Prise de Risque Managériale : Validation Empirique dans le Contexte Tunisien. *Management International / International Management / Gestión Internacional*, 14(2), 105-119.
- Berle, A., Means, G. 1932. *The Modern Corporation and Private Property*. New York, MacMillan.
- Bessière, V. 2007. Excès de confiance des dirigeants et décisions financières: une synthèse. *Finance Contrôle Stratégie*, 10(1), 39-66.
- Boateng, R.N., Tawiah, V., Tackie, G. 2022. Corporate governance and voluntary disclosures in annual reports: A post-International Financial Reporting Standard adoption evidence from an emerging capital market. *International Journal of Accounting and Information Management*, 30(2), 252-276.
- Boutang, Y. 2007. *Le Capitalisme Cognitif: La Nouvelle Grande Transformation, Multitude/Idées*. Editions Amsterdam, 23-33.
- Caputo, A. 2013. A literature review of cognitive biases in negotiation processes. *International Journal of Conflict Management*, 24(4), 374-398.
- Carmeli, A., Gelbard, R., Goldrieck, R. 2011. Linking perceived external prestige and collective identification to collaborative behaviors in RandD teams. *Expert Systems with Applications*, 38, 8199-8207.
- Chandra, A., Sharma, D. 2010. Investment Management by Individual Investors: A Behavioral Approach. *The IUP Journal of Behavioral Finance*, 6(1-2), 7-18.
- Ciampi, F. 2014. Corporate governance characteristics and default prediction modeling for small enterprises. An empirical analysis of Italian firms. *Journal of Business Research*, 68(5), 1012-1025.
- Crusius, J., Van Horen, F., Mussweiler, T. 2012. Why process matters: A social cognition perspective on economic behavior. *Journal of Economic Psychology*, 33, 677-685.
- Damien, T. 2010. La dimension politique dans l'approche de la proximité. *Géographie, Économie, Société*, 12, 125-144.
- David, F., Benson, J. 2015. Strategically camouflaged corporate governance in IPOs: Entrepreneurial masking and impression management. *Journal of Business Venturing*, 30(6), 839-864.
- DeSteuer, H., Vanhonacker, F., Feng, S., Shi, X., Verbeke, W., Gellynck, X. 2014. Cognitive biases and design effects in experimental auctions: An application to GM rice with health benefits. *China Agricultural Economic Review*, 6(3), 413-432.
- Denis, L., Stéphanie, L., Éric, R. 2009. Les investisseurs institutionnels influencent-ils les stratégies ? *Revue française de gestion*, 7(197), 35-48.
- DiVito, J. 2011. Concentration de propriété et investissements en RandD: une perspective d'agence. *Finance Contrôle Stratégie*, 14(2), 67-100.
- Fama, E. 1980. Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288-307.

- Fang, Y., Wade, M., Delios, A., Beamish, P. 2007. International Diversification, Subsidiary Performance, and the Mobility of Knowledge Resources. *Strategic Management Journal*, 28(10), 1053-1064.
- George, R., Rezaul, K. 2012. Heterogeneity in business groups and the corporate diversification firm performance relationship. *Journal of Business Research*, 65, 412-420.
- Gharbi, M., Jarboui, A. 2017. Institutional investor's role in diversifying orientation decisions across Tunisian companies. *Cogent Economics and Finance*, 5(1), 1-10.
- Ghazali, N.A. 2010. Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce and Management*, 20(2), 109-119.
- Ghazali, N.A., Esa, E. 2012. Corporate social responsibility and corporate governance in Malaysian government-linked companies. *Corporate Governance: The international journal of business in society*, 12(3), 292-305.
- Haigh, R., Kushan, K., Kulatunga, U., Amaratunga, D. 2011. Client's championing characteristics that promote construction innovation. *Construction Innovation, Information, Process, Management*, 11(4), 380-398.
- Hailan, Y., Stephen, L.M. 2011. Business strategy and corporate governance: theoretical and empirical perspectives. *Business Strategy and Corporate Governance in the Chinese Consumer Electronics Sector*, Book, 23-46.
- Haim, P. 2013. Le système décisionnel intelligent de la PME, une dualité subjective dirigeant/salariés ? Cas d'une PME du secteur des Call Centers. *Question(s) de Management*, 3(4), 9-17.
- Handley, K., Molloy, C. 2022. Corporate governance: A literature review of informal mechanisms for governance. *Meditari Accountancy Research*, 30(7), 310-333.
- Hussain, S. 2022. Downside systematic risk in Pakistani stock market: role of corporate governance, financial liberalization, and investor sentiment. *Journal of Asia Business Studies*, 15(4), 37-160.
- Jarboui, A. 2008. Impact des mécanismes de gouvernance sur la stratégie de diversification des groupes Tunisiens. *Management and Avenir*, 3(17), 83-104.
- Jensen, M., Meckling, W. 1976. Theory of the Firm: Managerial Behavior, Agency Costs, Ownership Structure. *Journal of Financial Economics*, 3, 305-361.
- Jensen, M. 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*, 76(2), 323-329.
- Jih, L. 2015. International returnees as outside directors: A catalyst for strategic adaptation under institutional pressure. *International Business Review*, 24, 594-604.
- Jinsoo, H. 2014. Examining strategies for maximizing and utilizing brand prestige in the luxury cruise industry. *Tourism Management*, 40, 244-259.
- John, J. 2011. Effects of moral reasoning and management level on ratings of charismatic leadership, in-role and extra-role performance of managers: A multi-source examination. *The Leadership Quarterly*, 22, 434-450.
- Kahloul, I., Hallara, S. 2010. The Impact of Diversification on Firm Performance and Risk: An Empirical Evidence. *International Research Journal of Finance and Economics*, 35, 150-162.
- Kamprath, M., Mietzner, D. 2015. The impact of sectoral changes on individual competencies: A reflective scenario-based approach in the creative industries. *Technological Forecasting and Social Change*, 95(2015), 252-275.
- Lagarde, V. 2006. Le profil du dirigeant comme variable explicative des choix de diversification en agriculture. *La Revue des Sciences de Gestion*, 4, 31-41.



- Laroche, H., Nioche, J.P. 2006. L'approche cognitive de la stratégie d'entreprise. *Revue française de gestion*, 1(160), 81-105.
- Lee, J.T. 2007. Déterminants des stratégies de diversification des groupes industriels coréens. *Revue d'économie industrielle*, 1(117), 51-74.
- Lorenzo, C., Ettore, C., Alfonso, G. 2011. Ownership Structure, Family Control, and Acquisition Decisions. *Journal of Corporate Finance*, 17(5), 1636-1657.
- Massimo, G., Colombo, E. 2013. Open innovation and within-industry diversification in small and medium enterprises: The case of open source software firms. *Research Policy*, 43(5), 891-902.
- Masulis, R.W., Pham, P.K., Zein, J. 2011. Family Business Groups around the World: Financing Advantages, Control Motivations, and Organizational Choices. *Review of Financial Studies*, 24(11), 3556-3600.
- Miladi, A.I. 2014. Governance for SMEs: Influence of leader on organizational culture. *International Strategic Management Review*, 2(1), 21-30.
- Mittal, M. 2011. Study of Differences in Behavioral Biases in Investment Decision-Making Between the Salaried and Business Class Investors. *The IUP Journal of Behavioral Finance*, 7(4), 20-34.
- Moris, K. 2014. Le rôle de la gouvernance d'entreprise dans les stratégies de diversification des entreprises: revues de la littérature et perspectives. *Finance Contrôle Stratégie*, 17(4).
- Neerpal, R., Kidong, L. 2015. Retaining talent by enhancing organizational prestige: An HRM strategy for employees working in the retail sector. *Personnel Review*, 44(4), 454-469.
- Norena-Chavez, D., Thalassinou, I.E. 2021. The mediation effect of entrepreneurial self-efficacy in the relationship between entrepreneurial passion and leadership styles. *Academy of Strategic Management Journal*, 20(2), 99-125.
- Norena-Chavez, D., Thalassinou, I.E. 2022b. Transactional Leadership and Innovative Behavior as Factors Explaining Emotional Intelligence: A Mediating Effect. *Journal of Risk and Financial Management*, 15(12), 545.
- Norena-Chavez, D., Thalassinou, I.E. 2023. Impact of big data analytics in project success: Mediating role of intellectual capital and knowledge sharing. *Journal of Infrastructure Policy and Development*, 7(3).
- Noorlailie, S., Mayang, M. 2018. The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as a mediating variable. *Asian Journal of Accounting Research*, 3(1), 41-60.
- Orbe, S., Hess, D. 2013. Irrationality or Efficiency of Macroeconomic Survey Forecasts? Implications from the Anchoring Bias Test. *Review of Finance*, 17(6), 2097-2131.
- Ould, N. 2007. La propriété managériale, les caractéristiques du conseil d'administration et la richesse des actionnaires. *La Revue des Sciences de Gestion*, 2-3(224-225), 143-154.
- Özbilgin, M., Tatlid, A., Sameere, M., Ipek, G. 2015. Four approaches to accounting for diversity in global organizations. *Critical Perspectives on Accounting*, 35(7), 88-99.
- Patrick, N.F., Florence, A.P. 2014. L'impact de la diversification sur la valeur de la firme. *Revue française de gestion*, 40(241), 107-120.
- Phan, C.K., Zhou, J. 2014. Vietnamese individual investors' behavior in the stock market: An exploratory study. *Research Journal of Social Science and Management*, 3(12), 46-54.
- Phan, K.C., Zhou, J. 2014. Factors Influencing Individual Investor Behavior: An Empirical Study of the Vietnamese Stock Market. *American Journal of Business and Management*, 3(2), 77-94.

- Sanchez, M.J., Usero, B. 2014. How may the nature of family firms explain the decisions concerning international diversification? *Journal of Business Research*, 67(7), 1311-1320.
- Schumpeter, J.A. 1928. *Unternehmer*. *Handwörterbuch der Staatswissenschaften*, 8, 476-487.
- Singh, K., Pillai, D. 2022. Corporate governance in small and medium enterprises: A review. *Corporate Governance*, 22(1), 23-41.
- Soelton, M., Yanto, R. 2020. Implementing Good Corporate Governance to Engage Corporate Social Responsibility in Financial Performance. *European Research Studies Journal*, 23(1), 239-258.
- Stevenot, A., Guery, L. 2010. Le rôle d'entrepreneur institutionnel des capital-investisseurs auprès des entreprises : des influences coercitives et cognitives liées à l'importance relative des ressources. *Finance Contrôle Stratégie*, 13(2), 107-144.
- Tabachnick, B., Fidell, L. 2007. *Using multivariate statistics* (5th ed) Boston, MA: Pearson/Allyn Bacon, 45-48.
- Verstraete, T., Saporta, B. 2006. *Création d'entreprise et entrepreneuriat*. Editions de l'ARDEG, 518.
- Victoria, R.G., José, L. 2008. Do the aged and knowledgeable men enjoy more prestige? A test of predictions from the prestige-bias model of cultural transmission. *Evolution and Human Behavior*, 29(4), 275-281.
- Waheed, A. 2019. Board characteristics, ownership concentration, and firms' performance. *South Asian Journal of Business Studies*, 8(2), 146-165.
- Wirtz, P. 2011. The cognitive dimension of corporate governance in fast-growing entrepreneurial firms. *European Management Journal*, 29(6), 431-447.
- Yuandi, W., Lutao, N. 2013. Product diversification through licensing: Empirical evidence from Chinese firms. *European Management Journal*, Elsevier, 32(4), 577-586.