Institutional investors’ role in diversifying orientation decision across Tunisian companies

Manel Gharbi* and Anis Jarboui

Abstract: The present work's major objective consists in examining the impact of institutional investors' presence on corporate diversification decision. For this sake, a theoretical framework based on the corporate governance contractual approach has been advanced highlighting the idea that the presence of institutional enjoys a diversification-oriented strategic decision. For this purpose, a model is used and applied to Tunisian firms' sample observed over the period 2011–2013. In fact, the study maintains that the presence of institutional investors helps in directly influencing corporate strategic decisions. The reached results, conducted on a sample of 111 Tunisian commercial companies and service-providing firms, appear to reveal the persistence of a significant impact of the institutional investors on diversification decision.

Subjects: Corporate Finance; Corporate Governance; Financial Management
Keywords: governance; ownership concentration; institutional investors; diversification

1. Introduction
Ever since the mid-1990s, institutional investors have turned out to be major actors in the global economy, and their development has proven to be spectacular given the cruciality of their operations on the financial markets. In fact, through intensifying equity investments, these investors have demonstrated a noticeable control potential, sometimes decisive, even regarding some of the large companies' management activities (Plihon & Jeffers, 2001). Actually, several studies have been conducted to investigate these investors' impact on corporate management. Diverse empirical studies have attempted to analyze such investors' behavior, explaining the reasons for their penetration, to assess their weight on the financial system, and describing their behavior, through highlighting their objectives and stressing their influence on firms' behavior, particularly, on their strategies (Plihon & Ponssard, 2002). In this respect, the present study is designed to examine, through theoretical and empirical arguments, the institutional investors’ role, on the firm's diversifying decision. For this...
reason, a theoretical framework will be developed to establish the research hypotheses as based on a literature review. Then data processing and result presentation will be dealt with on highlighting the relationship binding family structure and diversification strategy via the contractual approach.

1.1. Theoretical framework

In a corporate governance-related analysis, a fundamental variable seems worth imposed, namely, that of shareholding structure. As a continuation of Berle and Means elaborated work, the agency theory has been developed under the assumption of dispersed ownership structure (Jensen & Meckling, 1976). 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 also dominant across continental Europe and Asia sited businesses. Following the rise of institutional investors, shareholders have tended to regain power (promotion of shareholder value). There also exist several large size companies which do not seem to separate company control and property (particularly in developing countries). In fact, the ownership dispersion thesis sounds to overlook the importance of worldwide spread participations among businesses. In this regard, La Porta, Lopez-de-Silanes, and Shleifer (1999) have analyzed some 27 companies’ ownership structure by retracing the ultimate owners since company capital proves to be held by other firms. Their study helps distinguish the different types of ownership structure according to the ultimate owners’ criteria. The attained results have shown that firms with concentrated ownership appear to outnumber those with dispersed ownership, a rather exceptional phenomenon characterizing the Anglo-Saxon countries. In a study conducted by Claessens, Djankov, and Lang (2000), dealing with the Asian countries’ based firms, the thesis advanced by La Porta et al. (1999) has been confirmed with respect to the entirety of studied countries except for Japan, with most companies being characterized with a family-type of control. Several other elaborated works dealing with the strategic management, economics, and finance areas, have attempted to establish a direct link between ownership structure and the option for diversifying activities, with different conclusions being registered (Lacoste, Lavigne, & Rigamonti, 2009).

1.2. Research hypotheses

1.2.1. Presence of institutional investor control blocks

The importance of control exercised by institutional investors and its impact on strategic decisions has made a subject of study for several research works. Such an impact has certainly been characterized by a certain ambiguity. Some studies have tended to consider that the presence of institutional investors helps indirectly influence corporate strategic decisions (Lacoste et al., 2009). Indeed, Charreaux and Desbrières (2001) maintain that institutional investors display a governance model that is exclusively focused on the shareholders’ interests. As for Batsch (2002), however, institutional investors appear to have a direct influence on corporate strategic decisions. Within the agency context model, the institutional investors and managers tend to display a conflictual relationship. Most often, the institutional investors attempt to implement the incentive and control systems in a bid to achieve an alignment of interests with directors. Yet, executives usually seek to escape the owners’ exercised control through adoption of statutory measures. In this regard, Amihud and Lev (1999), document that for agency costs emanating from separating ownership and control, institutional investors need to be introduced to the directors’ board composition. According to the same theory, and for opportunistic purposes, executives usually seek to pursue diversification strategies given mainly to the fact that it helps provide diverse advantages. Firstly, it serves to reduce personal risk as well as their employment risk (Amihud & Lev, 1981). Secondly, it helps increase their prestige and power (Jensen, 1986; Stulz, 1990). Besides, it acts positively on company size, which would have a direct impact on their remuneration (Jensen & Murphy, 1990). Finally, it allows them to become responsible and indispensable in the organization (Shleifer & Vishny, 1989). Actually, the diversification effect on risk reduction has recently made subject of an extensive literature (Amihud & Lev, 1981). On referring to the pioneering works conducted by Amihud and Lev (1981), diversification activity turns out to stand as the best means whereby company risk can be reduced. This can be
mainly achieved through company earnings stability, and reduction in stock price fluctuations (Amihud & Lev, 1981). Hence, the more independent from each other the activities are, the more reduced the company profits’ volatility will be, and the further restricted bankruptcy risk will appear to be. With respect to leverage, the diversification-associated benefits might well lead to overinvestment, prompted mainly by debt facilities. According to Jensen (1986) and (1990), such a situation may likely stand as a major reason of impairment notably regarding massive over-indebtedness or leverage level. In such a case, an investment procedure would seem imposed so that funds and liquidity cash could be raised for deleveraging proposes. In sum, diversification can be considered to be the outcome of the executives’ excessive power, who seeks to satisfy their pooper needs to the detriment of the whole group, and they would engage in some disconnected diversification strategies, still less controlled by shareholder blocks. As a result, several studies have tended to validate this theory and, subsequently, establish an adverse relationship between the shareholders control level performed by shareholder executives firms’ strategic diversification level. Concerning the ownership structure, remarkable impact on the reform of corporate governance and its subsequent performance (Tuschke & Sanders, 2003), the foreign investors’ practices and effects on corporate governance have been thoroughly studied in different contexts (e.g. Choi, Sun, Zhang & Grandjean, 2012; Dahlquist & Robertson, 2001; Kang & Stulz, 1997). Concerning the micro and macro level changes, Ahmadjian and Robbins have argued that, in the 1990s, foreign institutional investors led Japanese companies to adopt massive restructuring, and even started to jeopardize a firmly established tradition undertaken by stakeholding parties, capitalism in the country (Lee & Roberts, 2015).

All this leads to formulate the following hypothesis:

**H1**: The institutional investors’ control exercised on executives helps favorably influence the decision to diversify their activities.

1.2.2. **Majority control in family business**

The family shareholders could diversify the company’s activities, mainly to serve their proper interests to the detriment of minority shareholders’ benefits (Masulis, Pham, & Zein, 2011). In this respect, Caprio, Croci, and Del Giudice (2011) have conducted a study intended to test the extent to which family ownership and control help influence the decision to take part in mergers and acquisitions as an acquirer or acquired, within a sample of 777 large Continental European enterprises, over the period 1998–2008. The authors have discovered that property and ownership structure turn out to be negatively correlated with the bid launching probability, and family businesses seem to be less likely to undertake acquisitions, particularly when the family-held participation does not prove to be significant enough to ensure persistent family control. As for the passive side of mergers and acquisitions, the effect of large shareholders’ ownership on the acceptance decision of a proposed acquisition seems to depend highly on the voting rights they hold, while family control appears to reduce the probability to be acquired by a non-involved party. The authors have found no evidence affirming that family-controlled firms tend to jeopardize wealth on acquiring other companies. Finally, they have documented that while negatively correlated with the merger–acquisition activity, family ownership and control do not prove to be negatively associated with company size growth. As suggested by Amit and Villalonga (2006), family businesses are companies with concentrated ownership held by individuals. As a matter of fact, the latter seem to have a greater incentive than minority shareholders to monitor managers, who usually assume that they have fewer managers to deal with agency issues on behalf of shareholders than other companies. Yet, family businesses have stiffer control owing to minority shareholders emanating agency problems and could, thus more easily draw private benefits than other companies do. The net effect of family ownership on corporate behavior and performance could well depend on the context. Still, the performance impact might well vary according to the status of the Chief Executive Officer. The directors, who are members of the family (either as founders or descendants) are associated with higher profitability. In this regard, Amit and Villalonga (2006) have noted that most often descendant directors appear to jeopardize shareholder value. Concerning the context of some East Asian countries, several authors have suggested that the unsatisfactory control is often related to minority shareholders, who are closely linked with the family proprietorship and help better screen the problem of reducing managerial
incentives. In addition, Sanchez-Bueno and Usero (2014) have elaborated a study aimed to analyze how the family business nature could help explain decisions concerning international diversification. The study explores the fact that the ownership structure of family businesses provides the latter with a distinctive character in terms of international diversification. The authors have maintained that the family businesses’ heterogeneity could well lead to variations in the degree of international diversification among these businesses. They have actually examined three ownership structure-related factors, namely the family appropriation degree, the second major shareholder’s ownership type and degree (another family or funding firm). The empirical evidence has been provided through a sample of European and Asian family businesses (observed over the period 2004–2008). Their achieved results have indicated that the degree of family ownership appears to have a negative impact on the international diversification level. Hence, the following assumption could be formulated with regard to the majority control family enterprises’ effect on the diversification strategy:

H2: A negative relationship persists between family ownership and the diversification decision

2. Methodological aspects
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:

<table>
<thead>
<tr>
<th>Hypothesis (H1)</th>
<th>H1: The institutional investors’ control exercised on executives helps favorably influence the decision to diversify their activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis (H2)</td>
<td>24: A negative relationship persists between family ownership and the diversification decision</td>
</tr>
</tbody>
</table>

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

2.1.1. 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.

2.1.2. The explanatory and exogenous variables
- Family shareholder: as measured by a dichotomous variable indicating either the presence of a family business or not (respectively, 1 and 0).
- Institutional investors: a variable measured by the proportion of shares held by institutional investors.

2.1.3. 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. In fact, 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.

2.1.3.1. 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). As a matter of fact, the level helps greatly control a number of factors. In a 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 of the interests 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 Nejla, 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 total debt to total assets ratio.

\[
\text{LEV} = \frac{\text{Total debt}}{\text{Total assets}}
\]

2.1.3.2. 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 & 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:

\[
\text{Size} = \log_{10}(CA)
\]

2.1.3.3. Performance. This variable is measured by the net profit to equity ratio. \( \text{ROE} = \frac{\text{Net profit}}{\text{Equity}} \)

The following model is used to test the hypothesis:

\[
\text{DIV} = a_0 + a_1 \text{INSTI} + a_2 \text{FAM} + a_3 \text{ENDET} + a_4 \log_{10}(CA) + a_5 \text{ROE} + \epsilon
\]

As a recapitulation, Table 1 depicts the different variables’ relevant definition and measurement, along with their corresponding descriptions.

2.2. Sample selection and data collection

2.2.1. Research instrument

Following the qualitative research methodology, the choice of sample size appears to be equally important with respect to 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 advanced hypotheses. On 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, a particular attention has been made to develop a coherently structured questionnaire.

2.2.2. Study sample description

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 (see Table 2).

2.2.3. Data sources
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. Results and discussion

3.1. Descriptive analysis
The following table presents the descriptive statistics relevant to the dependent variable “Diversification.” The diversification mean and median levels scored during the year 2013 are, respectively, 57.66 and 100%. The average size of our sample companies is 6.66339%. More specifically, 57.7% of our sample companies appear to implement a diversification policy. Besides, only a few of the sample companies (7.98%) are discovered to be under family control (FAM). The companies with an institutional property (INSTI) prove to score an average of 18.28%. The sample firms' major characteristics are depicted in Table 3:

Table 1. Variables' identification and measurements

<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptions</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endogenous variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIV</td>
<td>Diversification strategy</td>
<td>It consists in a binary variable that takes the value 1 if diversification proves to be high, and 0 if it is low</td>
</tr>
<tr>
<td>Exogenous variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAM</td>
<td>Family shareholder</td>
<td>This variable is measured by a dichotomous variable indicating either the presence of a family business, or not (respectively, 1 and 0)</td>
</tr>
<tr>
<td>INSTI</td>
<td>Institutional investors</td>
<td>This variable is measured by the proportion of shares held by institutional investors</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>Leverage</td>
<td>This variable is measured through total debt to total assets ratio</td>
</tr>
<tr>
<td>SIZE</td>
<td>Company size</td>
<td>This variable is measured via the decimal logarithm of turnover</td>
</tr>
<tr>
<td>ROE</td>
<td>Performance</td>
<td>This variable is measured through net profit to equity ratio</td>
</tr>
</tbody>
</table>

Table 2. The applied sample analysis

| Description | |
| Initial BVMT sample for 2011 | 55 |
| Financial firms excluded | −23 |
| Other non-financial firms | 113 |
| Insufficient data to psychological characteristics | −27 |
| Insufficient data to assets revaluation | −7 |
| Final sample | 111 |
3.2. Correlation analysis

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

The aim of the analysis is 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 found to be more than 0.5, 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 & Fidell, 2007).

In line with several comparable research studies, mainly those conducted by Jarboui (2008) and Godard (2005), a logistic regression has also been considered. Actually, this particular framework has the advantage of accounting for the control variables (Table 4).

3.3. Multivared analysis

Both of the explanatory and control variables have been incorporated into the model, and the test results are depicted in Table 5. In this way, we are able to 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 shown in Table 5.

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 1% with $p = 0.000$. The Nagelkerke R2, which corresponds to the R2 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, ownership concentration along with the control variables. In addition, the “Hosmer and Lemeshow” test indicates an insignificant $\chi^2$ of 19.410 ($p = 0.013$).
An examination of the statistical tests reveals that the INSTI variable proves to have a positive and significant effect on diversification decision. Indeed, the variable’s regression coefficient has a positive and significant value at the 10% level as compared with the dependent variable (\(a = 0.056\) and \(p\) is lower than 10%). These results appear to be consistent with the hypothesis H2 predictions, stipulating that institutional investors are positively associated with the diversification decision. It seems that a shift towards a diversification strategy sounds to be an increasing function of the institutional investors’ capital. This might well have its justification in the power exerted by institutional investors on executives, which enables them to restrain managerial discretion in terms of diversification. Such a finding allows deducing that if institutional investors make an attempt to assess the director in terms of strategic control, this procedure would motivate them to increasingly venture to support even more questionable situations. This result turns out to be consistent with those documented by the studies elaborated by Lee and Roberts (2015) and Lacoste et al. (2009). According to Table 5, the FAM variable regression coefficient sounds to have a negative and insignificant value at the threshold of 10% compared with the dependent variable (\(a = −0.003\) and \(p\) is greater than 10%). Such results seem to be consistent with the predictions of hypothesis H4, that family structure is negatively related to the diversification decision. This result is explained by the fact that conflicting cases would be more likely to occur in so far as the family-owned capital share proves to grow increasingly. In effect, it sounds plausible that the divergence of personal objectives and values would sound more intense as the family continues to grow and be enriched with external members, which makes it increasingly difficult to reach a general commitment as to decision-making (Ward & Aronoff, 1996). This finding seems consistent with that released by Sanchez-Bueno and Usero (2014) along with Caprio et al. (2011). A view of the statistical tests underlines that the SIZE variable turns out to have a negative and non-significant effect on diversification decision. This fact sounds quite consistent with the findings of reached following the studies conducted by Colombo, Piva, and Rossi-Lamastra (2013), highlighting that econometric data concerning 100 European SMEs OSS indicate that firm size is negatively associated with diversification within the industry.

4. Conclusion
The present study has been proposed to examine the institutional investors’ role to implementing diversification strategies. The research advanced theoretical framework is predominantly based on the corporate governance contractual theory. For a thorough analysis of the contractual contribution likely to be brought about by shareholding, a special examination of the capital share detaining executive, along with the institutional investors’ undeniable role is imposed. More particularly, the logistic regression’s results have shown that the orientation towards undertaking a diversification strategy turns out to be an increasing function of the capital percentage held by institutional investors. Still the results attained prove to demonstrate that family structure is negatively related with diversification policy. In addition, company size and leverage appear to have no effect on diversification decision. Yet, performance turns out to have a positive and significant relationship with such a decision. Nevertheless, it’s worth highlighting that the study involves certain limitations. In theoretical terms, the number of variables tested in this work seems to be relatively reduced in respect of the

<table>
<thead>
<tr>
<th>Table 5. The model’s logistic regression results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variables</strong></td>
</tr>
</tbody>
</table>
| Constant | 0.550 | 0.501 | 1.206 | 0.272 | 0.316 | \(\chi^2 = 30.025\)  
| | | | | | | \(p = 0.000\) |
| INSTI | 0.056 | 0.018 | 9.212 | 0.002 | | |
| FAM | −0.003 | 0.013 | 0.059 | 0.808 | | |
| LEV | −0.950 | 0.491 | 3.740 | 0.053 | | |
| SIZE | −0.417 | 0.664 | 0.395 | 0.530 | | |
| ROE | −1.368 | 0.454 | 9.074 | 0.003 | | |
number of governance variables likely to intervene in explaining the relationship with diversification. In terms of methodology, the study has been conducted to investigate the review period 2011, 2012, and 2013, a post-revolutionary period that witnessed a disruption of financial data, which hinders generalizations from being considered. Finally, this work proposes a first step in a set of responses regarding the relationship between executive shareholding and diversification decision. In other words, this research is intended to provide some kind of insight to executives to identify the appropriate governance mechanisms likely to intervene and influence the diversification strategy.

**Funding**
The authors received no direct funding for this research.

**Author details**
Manel Gharbi1
E-mail: gharbimanel81@gmail.com
Anis Jarboui1
E-mail: anisjarboui@yahoo.fr

1 Finance and Accounting Methods, University of Sfax, Sfax, Tunisia.

**References**
Pilhon, D., & Ponsnard, J. P. (2002). La montée en puissance des fonds d’investissement. Quels enjeux pour les entreprises [The rise of investment funds. What are the stakes for companies?]. La Documentation Française [The French Documentation].


