Accounting and Management Information Systems
Vol. 23, No. 3, pp. 643-663, 2024
DOI: http://dx.doi.org/10.24818/jamis.2024.03009

The effect of the characteristics of the internal governance mechanisms on the growth opportunities: The Tunisian evidence

Raida Chakroun[1,a]

IHEC Carthage, University of Carthage and LIGUE Laboratory LR99ES24, ISCAE, University of Manouba, Tunisia

Abstract

Research Question: Do the characteristics of the board of directors and the characteristics of audit committee influence Tunisian companies' growth opportunities?

Motivation: Attract the attention of policy makers to design appropriate governance mechanisms for emerging countries in general and specifically for Tunisia. More specifically, we hope to gain a better understanding of the function of audit committees and board of directors in enhancing firm growth opportunities.

Idea: This paper investigated of the impact of the internal governance mechanisms characteristics such as board of directors and audit committee on Tunisian companies' growth opportunities.

Data: We based on a sample of 38 non-financial firms listed on Tunis Stock Exchange observed on the period 2013-2019.

Tools: We used the multivariate regression method on panel data.

Findings: We found that the of board of directors 'size and the frequency of the audit committee meetings impact negatively the firm's growth opportunities.

Contribution: The findings of our study may be useful for the shareholders to make appropriate choices about the composition of the board of directors and the audit committee to enhance growth opportunities. The shareholders should not encourage the institution of larges boards and frequent meetings of the audit committees.

Keywords: Internal Governance Mechanisms, Board of Directors, Audit Committee, Growth opportunities

JEL codes: G3, D1.

[1] *Corresponding author:* Raida Chakroun, IHEC Carthage, Rue Victor Hugo 2016, Carthage-Présidence, Tunisia, Tel: +216 98953605, email address: raida.chakroun@ihec.ucar.tn

1. Introduction

Corporate governance is a very important question debated worldwide. It illustrates an essential element that enhances companies' achievement (Akbar, 2015). Financial scandals (e.g., the breakdown of Archegos in 2021 and of Wirecard in 2019) have shown the crucial nature of corporate governance, which is defined as a complex system of mechanisms of control, intended to optimize the shareholders' interests.

Corruption cases and mismanagement have potentially contributed to the increased importance dedicated to protecting shareholders' concerns through the establishment of powerful corporate governance systems for instance the boards of directors and the audit committees. In this regard, we have noticed that many laws have emerged including the Sarbanes-Oxley Act of 2002 in the United States, which was mainly aiming to strengthen the audit committees' responsibilities and authority and requiring companies to recruit independent directors.

In the Tunisian context some financial scandals have occurred in the recent decades, namely the indisputable case of Batam in 2003. The accentuation of the financial scandals that causes the insecurity and the instability of the financial markets, are partly the consequence of a malfunction of the mechanisms of corporate governance. In addition, these failures have created a need to question the effectiveness of different existing governance mechanisms and the implementation of regulatory reforms. Thus, it will be crucial for companies to have an adequate governance system for a sustainable and efficient growth and for a favourable performance. Consequently, several laws have been promulgated in Tunisia to guarantee more transparency and assign a certain rigor to the functioning of companies, such as the financial security law enacted in 2005. This law aims to enhance the system of corporate governance, enhance audit quality, and minimize sources of the conflicts of interest between the shareholders and the managers.

Previous studies have established that board of directors' characteristics (Nguyen & Huynh, 2023; Hosny & Elgharbawy, 2022; Assenga *et al.*, 2018) and audit committee's characteristics (Abdelrahman *et al.*, 2022; Kasthury & Saratha, 2021; Al-Ahdal & Hashim, 2022; Puasa *et al.*, 2014) have a significant effect on growth opportunities. Thus, the central object of this research is to examine the influence produced by the board of directors' characteristics (board size and board independence), and by the audit committee (namely its meetings, its size, and its independence) on the Tunisian listed firms' growth opportunities. We have chosen to study these corporate governance mechanisms in view of their major role in improving the company's growth opportunities.

For the one hand, some studies found a positive effect of corporate governance mechanisms on companies' growth opportunities (Nguyen & Huynh, 2023;

Bouqalieh, 2023). For the other hand, several studies have reported that there is no significant effect of corporate governance mechanisms on companies' growth opportunities (Al-Ahdal & Hashim, 2022; Carcello *et al.*, 2002). We chose to carry out our research in the Tunisian context since in this country the functioning of the board of directors and the audit committee is subject to strict legal provisions. The research period is between 2013 and 2019 which represents a pre-COVID period. We focus on the pre-health crisis period to ensure that the empirical results were not biased by the pandemic.

We found that large boards and a high number of audit committee meetings do not tend to promote good growth opportunities. Whereas we could not confirm our other hypotheses linked internal governance mechanisms characteristics on growth opportunities. These results could attract the attention of policy makers to design appropriate governance systems for emerging countries in general and specifically for Tunisia.

To provide elements of response for our research question, the literature review and hypotheses are presented first. Secondly, the research methodology is presented. Finally, a discussion on the main findings is conducted.

2. Literature review and hypotheses development

Agency theory provides a suitable theoretical framework for this study linking growth opportunities to corporate governance mechanisms. The corporate governance concentrates on the issue of mitigate the agency problems through the shareholders' interests protecting. According to Beasley (1996), it is a question of knowing how the company can preserve more the shareholders' interests through the establishment of a corporate governance system. Board of directors could be apprehended as a mechanism of control and supervision that aims to match the interests of the managers to those of the shareholders (Hillmanb & Dalziel, 2003). In this regard, the role of the committees attached to the board is crucial to carry out management activities effectively. Thus, the audit committee is an important committee within the board of directors which intervenes in the framework of monitoring and the conduct of the audit.

2.1 Institutional framework

Several laws and texts have been promulgated over the previous years which aim to guarantee more transparency and assign a certain rigor to the functioning of Tunisian companies to strengthen the rules of good governance especially after the reports from the World Bank which made Tunisia look bad governance and for poor management by attributing (-1.5) growth points per year to it.

2.1.1. Law relating to strengthening the security of financial relations

Law No. 96-2005 of October 18, 2005, relating to the strengthening of the security of financial relations was strongly inspired in Tunisia by the American law, which promulgated a law relating to financial security in 2005. The promulgation of this law was motivated by two essential facts:

- An economic climate deteriorated by cases of corruption and mismanagement including that of Batam and other bad practices which have become common in Tunisia.
- The legislator wants to react in time to financial scandals, hence a strengthening of the constitution and a significant prevention of the occurrence of scandals of the same nature in Tunisia.

The main contributions of Law 96-2005 consisted of reinforcements, particularly in terms of.

- Transparency of financial information.
- The sincerity of company accounts.
- The independence of company auditors.
- The control of company accounts.
- The financial disclosure policy of companies and their good governance.

2.1.2 The guide of best practices of governance of Tunisian business

This guide was developed by the Tunisian Center for Corporate Governance in 2012. It aims to make the Tunisian corporate governance system more transparent and more intelligible. Its objective is to promote the confidence of domestic investors and international organizations, as well as customers, employees and the public in the management and control of companies in Tunisia.

Since the board of directors is a collegial body which must represent the interests of all the shareholders and act in the social interest of the company, this guide has largely discussed the board of directors in proposing a set of rules and recommendations for businesses such as:

- The separation of the function of the president of the board of directors and the one of general director, because it considers that the accumulation of functions is an exceptional decision and that the board must justify this to shareholders.
- The existence of at least one third of the board members who are independent administrators.
- The appointment of external directors is carried out by the constitutive general meeting or by the ordinary general meeting, for a maximum period of three years, renewable for one time.
- The designation and renewal of the mandate of directors must be done according to clear criteria and transparent objectives.
- The guide recommends a relatively small turnover to take advantage of different expertise present, thus, to be more efficient and more responsive in decision-making (the size of the board should be between 7 and 9 members).

- The composition of the board must be balanced; hence it must be composed of men and women with varied skills.
- The arrangement of committees within the board of directors such as the audit committee, strategy and management committee and remuneration committee.

However, Article 256bis of commercial companies' code stipulates that "the permanent audit committee is composed of three members at least, designated as appropriate by the board of directors or the supervisory board among their members". It is recommended that at least one of the members of the audit committee be independent within the meaning of the guide of best practices of governance. If necessary, the presidency of this committee could be entrusted to an independent administrator.

2.2 Hypotheses development

2.2.1 The impact of the board of directors on growth opportunities

In general, through management decisions, the boards of directors have a great impact on the operation of the firm and the business growth opportunities of the firm in general. Hamid & Purbawangsa (2022) argue that an effective board of directors can have a significant positive impact on a company's growth. It can do this by providing strategic advice, overseeing management, providing governance, and facilitating access to capital.

2.2.1.1 Board size

The board of directors' size is measured by the number of directors on the board. In fact, the average number of board of directors' members in the United-Kingdom corporations is eight, whereas United-States companies have shown an average of twelve members. In Tunisia, the number of the members of the board of directors is between three and twelve according to the commercial companies' code.

Several research assert that large boards can drive innovation and identify new growth opportunities by bringing fresh ideas and perspectives. Li *et al.* (2021) found significant positive correlation between firm performance and board size for the startups operating in the information technology industry listed on the Growth Enterprise Market (GEM) in China. Nguyen & Huynh (2023) suggest that the board size has a positive influence on the growth opportunities. Kutum (2015) finds that the board size and company's performance in Palestine are positively linked. Moreover, Bouqalieh (2023) confirm that large boards of directors tend to favor a good growth opportunity for Jordanian family business. In addition, Bansal & Sharma (2016) and Herdjionob & Sari (2017) detect a positive link between the board size and the growth opportunities. From the perspective of the resource dependency theory, it can be claimed that a company with a larger board of directors

executes right because the board size provides a chance for the company to create external environmental links.

However, Jensen (1993) states that smaller boards contribute better to controlling managers due to the easier communication and coordination than larger boards. Besides, Husaini (2017) and Guest (2009) report that the board of directors' size is negatively linked to the company's performance. In fact, a large board brings on poor communication and postponed making (Jensen, 1993) and in large board, intellectual capacity remains generally unused (Lin *et al.*, 2006). Furthermore, in large boards, there are more conflicts between the members than in the small boards and consequently, agency problems will increase as the size of the board of directors increases.

Based on these arguments, it will be assumed that the board of directors' size negatively affects the growth opportunities in the Tunisian context. Hence, we formulate our first hypothesis as follow:
H1: *Board of directors' size impacts negatively the growth opportunities*

2.2.1.2 Board independence
In accordance with the agency theory, the existence of external directors on the board and their controlling functions as non-executive persons produces a reduction in conflicts of interest between managers and shareholders. Li *et al.* (2012) assert that the independence of the board affects positively the growth opportunities. In addition, Bouqalieh (2023) confirm that the independence of the members of the board of directors tend to favor a good growth opportunity for Jordanian family business. Jensen and Meckling (1976) support that external directors take an effective role in oversight of managers and enhancement of corporate performance. Thus, firms with an important proportion of independent directors can decrease agency costs and consequently increase firm performance (Mcknight & Mira, 2003). Abidin *et al.* (2009) point that a higher proportion of independent directors improves the performance of companies because they may have diverse backgrounds, features, attributes, and expertise that can improve the process of management and the decision-making. Similarly, Jermias & Gani (2014) show that when the board is not independent, performance will be affected negatively.

However, Grossman & Hart (1983) according with the stewardship theory consider that the market with its own instruments provides a viable key to address the agency's problems and will spontaneously harmonize the interests of shareholders and managers and the presence of external directors is not essential for the board of directors and the market. Furthermore, Haider *et al.* (2017) showed that the presence of external directors on the board have a negative impact on the growth opportunities. In addition, Nguyen & Huynh (2023) found that when the independence of the board of directors increases, the business efficiency decreases. Similarly, the results of the study of Waris *et al.* (2019), based on listed firms in

Pakistan, suggest that the total number of the independent directors in the boards is negatively associated with risk taking which is a factor in promoting the growth of firms.

Based on these arguments, it will be assumed that the board of directors' independence positively affects the growth opportunities in the Tunisian context. Hence, we formulate our second hypothesis as follow:
H2: *Board of directors' independence impacts positively the growth opportunities*

2.2.2 The impact of the audit committee on growth opportunities
According to Rizki *et al.* (2023), the audit committee plays a crucial role in overseeing a company's growth opportunities. By providing effective governance and ensuring financial transparency, the audit committee can help create an environment conducive to taking calculated risks and pursuing new opportunities.

2.2.2.1 Frequency of the audit committee meetings
The frequency of the audit committee meetings importance is supported by numerous previous studies. For instance, Al-Najjar & Belghitar (2011) argue that companies with large audit committees organize regular meetings. Moreover, Stewart & Menro (2007) argue that the regular meetings of the audit committee are associated with a decline in audit risk and with an increase of business performance. Besides, Kasthury & Saratha (2021) suggested that the audit committee meetings had a significantly positive impact on performance measured by the earning per share.

Based on these arguments, the frequency of the audit committee meetings has a positive effect on the level of the growth opportunities of the organization. Hence, we propose to test our third hypothesis:
H3: *The frequency of the audit committee meetings impacts positively the growth opportunities*

2.2.2.2 Audit committee size
Hillman & Dalziel (2003), on accordance with the agency theory, support that the expanded audit committee tend to decrease the oversight process which reduces business performance. In addition, Vafeas (1999) provide evidence that a large audit committee influence negatively firm performance. Conversely, resource dependency theory defenders point out that the optimal size of the audit committee can rarely be determined. In this regard, audit committees should be composed by managers with various skills to ensure audit control functions.

Hsu & Petchsakulwong (2010) and Obiyo & Lenee (2011) measured the size of audit committee by the number of its members. According to Braiotta (2000) and Kalbers & Fogarty (1993), large audit committee led to a greater organizational authority. Pearce & Zahra (1992) assert that an ideal size of the audit committee allows

managers to use their experience and skills to meet the shareholders' interests. Husaini (2017) reveal that the audit committee size influences positively business performance. However, Bozec (2015) found a negative relation between audit committee size and business performance.

Based on these arguments, it will be assumed that the audit committee size has a positive impact on growth opportunities. Hence, we formulate our fourth hypothesis as follows:
H4: *Audit committee size impacts positively the growth opportunities*

2.2.2.3 Audit committee independence
Swamy (2011) supports that audit committee independence usually play a central role to guarantee best governance practices in the audit process of the firm. In this regard, Mohd *et al.* (2009) state that an audit committee team that includes external directors reflects more independency in its functioning. Moreover, Erickson *et al.* (2005) argue that the presence of independent directors tends to reduce agency problems. In accordance with resource dependency theory and agency theory, independence can facilitate the decisions making in the audit committee. According to Al-Jalahma (2022), the independence of the audit committee is essential to ensure its effectiveness. An independent audit committee is better able to question management decisions and ensure that shareholders' interests are protected. This can lead to more prudent decision-making and better resource allocation, which can promote growth opportunities. In addition, Abdullah *et al.* (2008) show that large number of internal directors in the audit committee may be a cause of financial frauds. In fact, the presence of non-executive directors in the audit committee is positively correlated with a high quality of financial disclosure.

Carcello *et al.* (2002) assert that the independence of the audit committee chair may not to increase the committee's effectiveness in overseeing management activities because he is involved in choosing directors. Al-Ahdal & Hashim (2022) show that there is a lack of evidence that audit committee characteristics improve the performance of top Indian non-financial listed firms. Besides, Al-Matari *et al.* (2012) and Palaniappan (2017) claim that audit committee independence is negatively associated with firm growth opportunities.

However, according to Yeh *et al.* (2011), the independence enhances the audit committee authority, reduces agency problems and the risk of expropriation by insiders. Kasthury & Saratha (2021) found that audit committee independence impact positively the earnings per share. In addition, Abdullah *et al.* (2008); Robert *et al.* (2016) and Nuryanah & Islam (2011) provide evidence that the audit committee independence is positively linked with performance.

Based on these arguments, it will be assumed that the audit committee independence has a positive impact on the growth opportunities. Hence, we formulate of the fifth hypothesis as follows:
H5: *Audit committee independence impacts positively growth opportunities*

3. Research methodology

3.1 Sample and data collection

Our initial sample is composed by the 81 companies listed on the Tunis Stock Exchange. We excluded firms of financial sector (e.i. the banks and the insurance companies) because of their specificity in terms of presentation of their financial statements and in terms of regulation of governance. Thus, we obtain a final sample composed by 38 companies observed over a period of 7 years (from 2013 to 2019). We stopped data collection in the pre-covid period to have not biased results due to the health crisis caused by the Covid pandemic. Finally, we obtain 266 observations organised on the form of panel data.

Governance data relating to the boards of directors and the audit committees; and the accounting and financial data were collected from the annual management reports and the companies' financial statements. These documents are available on the website of the Tunis Stock Exchange and the website of the Financial Market Council.

Table 1. Description of the sample

	Number of companies	Number of observations
Industry	16	112
Information and telecommunications technology	7	49
Real Estate Service	4	28
Wholesale trading	3	21
Other sectors	8	56
Total	38	266

3.2 Empirical model

To investigate the impact of the board of directors' characteristics and the audit committee characteristics on the growth opportunities, we estimated the following empirical model:

$$\mathbf{GROW_{it} = \beta_0 + \beta_1\, BSIZE_{it} + \beta_2\, BIND_{it} + \beta_3\, AUDMEET_{it} + \beta_4\, AUDSIZE_{it} + \beta_5\, AUDIND_{it} + \beta_6\, FSIZE_{it} + \beta_7\, INDEBT_{it} + \beta_8\, LEV_{it} + \varepsilon_{it}}$$

GROW: firm's growth opportunities
BSIZE: board of directors' size

BIND: board of directors' independence
AUDMEET: audit committee meetings
AUDSIZE: audit committee size
AUDIND: audit committee independence
FSIZE: firm size
INDEBT: the level of indebtedness
LEV: leverage

We use the firm size, the level of indebtedness and the leverage as control variables. We use these variables because they are related to internal governance characteristics and have an impact on growth opportunities (Al-Matari *et al.*, 2012; Kipkoech & Rono, 2016).

3.3 Definition and measurement of variables

According to Bhagat & Black (1999) we use the Tobin's Q to measure the growth opportunities. This ratio is measured by the formula: Market capitalization / Total assets. We use five governance variables: Two variables corresponding to the characteristics of the board of directors and three variables corresponding to the audit committee. BSIZE is the board size is measured by the number of directors in the board. This measure was also used by Bansal & Sharma (2016). BIND is the board members' independence. This ratio is the number of the external directors divided by the entire number of the board members. AUDMEET is the number of audit committee annual meetings, and it is measured by the number of meetings held by the audit committee over the calendar year. AUDSIZE is the size of the audit committee. It is measured by the number of directors that compose the audit committee (Hsu & Petchsakulwong, 2010). Finally, AUDIND is the audit committee independence, and it is measured by the proportion of the external directors sitting on it. This ratio is the number of the external directors in the audit committee divided by the entire number of the audit committee members.

The firm size, the level of indebtedness and the leverage are our control variables. The firm size FSIZE is measured by the logarithm of total assets (Cornett *et al.*, 2007). The level of debt INDEBT is measured by the ratio of total long- and medium-term debts divided by total assets (Dechow *et al.*, 1995). Finally, the leverage LEV is measured by the ratio of total debts divided by total assets (Jiang & Kim, 2015).

4. Interpretation and discussion of results

4.1 Analysis of descriptive statistics

Table 2 summarizes the descriptive statistics of all variables included in our regression model. Table 2 shows that the mean of the Tobin's Q is 0.8877, the

standard deviation is 0.9495 with a minimum of 0.0274 and a maximum of 5.3656. These results could confirm that the growth opportunities vary considerably between the firms of our sample. The median which is the central trend indicator has a value of 0.6473.

We find that on average the board of directors is composed by 8 directors. The lowest size is 3 directors while the highest size is 12 directors. We can conclude that companies tend to set up large boards. The standard deviation of this variable is equal to 2.5543 while the median is 8. The average of the variable board of directors' independence is 0.3933, the median is 0.33, the standard deviation is 0.233 and its values varies between 0 and 0.92. These results show that the companies of our sample incorporate a reduced number of independent directors in their boards which can be explained by the high concentration of the family companies in Tunisia.
We find that the average of audit committee annual meetings is 6.7, the standard deviation of this variable is 1.6293, the median of this variable is equal to 6 and the number of meetings during the year varies between 4 and 11. The audit committee size varies between 2 and 5 directors, the standard deviation of this variable is 0.4935. On average the audit committee size is composed by 3 directors. The minimum of independent audit committee members is 0 while the maximum is 0.75. The median of this variable is 0.33 and its mean is 0.4059. This result means that there are companies that did not include independent directors in their audit committee.

The mean of the variable firm size is 18.27, its median is equal to 18.25, its standard deviation is 1.05, and it varies between 15.35 and 20.65. These results show that the sample is mainly composed by large companies. For the level of debt variable, the mean takes the value of 0.14, the standard deviation is equal to 0.15, the median is 0.1, and it varies from a minimum of 0 to a maximum of 0.75. Finally, the mean of leverage is 0.63, its median is 0.52, and the standard deviation is 0.64. This variable has a minimum of 0.01 and a maximum of 4.34.

Table 2. Descriptive analysis

Variables	Mean	Median	Standard deviation	Min	Max
Tobin's Q	0.8877	0.6473	0.9495	0.0274	5.3656
BSIZE	7.9962	8.0000	2.5543	3.0000	12.0000
BIND	0.3933	0.3300	0.2330	0.0000	0.9200
AUDMEET	6.7030	6.0000	1.6293	4.0000	11.0000
AUDTAILLE	3.3270	3.0000	0.4935	2.0000	5.0000
AUDIND	0.4059	0.3300	0.2251	0.0000	0.7500
FSIZE	18.2766	18.2518	1.0530	15.3594	20.6561

Variables	Mean	Median	Standard deviation	Min	Max
INDEBT	0.1425	0.1017	0.1515	0.0005	0.7552
LEV	0.6352	0.5207	0.6423	0.0181	4.3404

Tobin's Q: Market capitalization / Total assets. **BSIZE:** board of directors size measured by the number of directors on the board**, BIND:** board of directors independence measured by the proportion of external directors on the board**, AUDMEET:** number of audit committee annual meetings measured by the number of meetings held by the audit committee over the calendar year, **AUDSIZE:** size of audit committee measured by the number of directors that compose the audit committee, **AUDIND**: audit committee independence measured by the proportion of the external directors sitting on it, **FSIZE:** firm size measured by the logarithm of total assets**, INDEBT:** the level of debt measured by the ratio of total long- and medium-term debts divided by total assets**, LEV:** the leverage measured by the ratio of total debts divided by total assets.

4.2 Results and interpretations

The estimation of our empirical model requires the verification of the multicollinearity between the explanatory variables. A reading of Pearson's correlation matrix (Table 3) shows that there is no serious problem of multicollinearity. The estimation of our model on panel data is carried out using the STATA 14 software.

We carry out the Hausman test, we found Prob>chi2 = 0.2191. Since the probability is greater than 5% (0.2191 > 5%), we opt for the random effect estimation. Two main econometric tests were previously implemented to verify the presence or the absence of heteroscedasticity and autocorrelations problems. In fact, we tested, on the one hand, the null hypothesis of homoscedasticity. On STATA, the appropriate test, in this case, is the Breusch-Pagan test which can detect the presence or the absence of a heteroscedasticity problem. The result of this test is a Fisher statistic F which is significant at the 1% level (Prob>F=0.0000); which confirms the presence of the heteroscedasticity problem. We verified, on the other hand, the autocorrelation of errors by using the autocorrelation intra-individuals test of Wooldrigde (2002). By performing this test, the results are significant at the level of 1% (Prob>F=0.0000) which allows us to confirm the presence of the autocorrelation problem of 1 order.

The presence of the problems of heteroscedasticity and autocorrelation impose the estimation of our model by the generalized least squares method called (Feasible Generalized Least Square) or FGLS to obtain robust results. Table 4 summarizes the results of the estimation of our regression model. It shows that the (Wald of Chi2) test used to verify the overall significance of the model is significant at the 1% level (Prob>Chi2 = 0.000). This will therefore imply that the model measures data variability satisfactorily.

Table 3. Pearson correlation matrix

	Tobin's Q	BSIZE	BIND	AUDMEET	AUDSIZE	AUDIND	FSIZE	INDEBT	LEV
Tobin's Q	1								
BSIZE	-0.2922***	1							
BIND	-0.1292**	0.4851***	1						
AUDMEET	0.0377	0.1511**	0.1011*	1					
AUDSIZE	-0.1128*	0.0459	-0.0139	0.0790	1				
AUDIND	0.1159*	-0.0253	0.1599***	0.0157	-0.1508**	1			
FSIZE	-0.3880***	0.4096***	0.0997	-0.1652***	0.1607***	-0.0249	1		
INDEBT	-0.0898	0.0722	0.1135*	0.0402	0.1084	-0.0377	0.2477***	1	
LEV	0.0816	0.0215	0.0117	0.2255***	0.0323	-0.0146	-0.1283**	0.5733***	1

Tobin's Q: Market capitalization / Total assets. **BSIZE**: board of directors size measured by the number of directors on the board, **BIND**: board of directors independence measured by the proportion of external directors on the board, **AUDMEET**: number of audit committee annual meetings measured by the number of meetings held by the audit committee over the calendar year, **AUDSIZE**: size of audit committee measured by the number of directors that compose the audit committee, **AUDIND**: audit committee independence measured by the proportion of the external directors sitting on it, **FSIZE**: firm size measured by the logarithm of total assets, **INDEBT**: the level of debt measured by the ratio of total long- and medium-term debts divided by total assets, **LEV**: the leverage measured by the ratio of total debts divided by total assets.
***Significant at the level of 1%, **Significant at the level of 5%, *Significant at the level of 10%

Table 4. Regression results

Tobin's Q	Coef (statistic z)
BSIZE	-0.071*
	(0.059)
BIND	-0.179
	(0.581)
AUDMEET	-0.006*
	(0.084)
AUDSIZE	0.007
	(0.551)
AUDIND	0.010
	(0.796)
FSIZE	-0.152***
	(0.000)
INDEBT	0.202***
	(0.000)
LEV	0.097***
	(0.000)
CONST	0.304***
	0.000)
Wald chi2	289.3
Prob>chi2	0.000

Tobin's Q: Market capitalization / Total assets**. BSIZE:** board of directors size measured by the number of directors on the board**, BIND:** board of directors independence measured by the proportion of external directors on the board**, AUDMEET:** number of audit committee annual meetings measured by the number of meetings held by the audit committee over the calendar year, **AUDSIZE:** size of audit committee measured by the number of directors that compose the audit committee, **AUDIND**: audit committee independence measured by the proportion of the external directors sitting on it, **FSIZE:** firm size measured by the logarithm of total assets**, INDEBT:** the level of debt measured by the ratio of total long- and medium-term debts divided by total assets**, LEV:** the leverage measured by the ratio of total debts divided by total assets.
*****Significant at the level of 1%, **Significant at the level of 5%, *Significant at the level of 10%**

The multivariate analysis results show that the board of director's' size impact negatively and significantly (at the level of 10%) the growth opportunities. This is seen through a negative coefficient of (-0.071) and a P-value equal to (0.059). This result leads us to confirm H1 and assert that the companies with big sized board tend to have a low level of growth opportunities. This result could be interpreted by the fact that big sized board could be less effective in making managerial decisions that enhance growth opportunities. Our result is similar to the result found by Basalat *et al.* (2023) who are based on a sample of companies listed in Amman and Palestine stock exchanges. These authors assert that large board have a problem of coordination between the directors, and they recommend continuous review of the codes of corporate governance. In this regard, Lipton & Lorsch (1992) specified that the board of directors' size should not exceed 8 or a maximum of 9 members to ensure effective oversight and better performance. In addition, Jensen (1993) noted that larger boards create more coordination problems than smaller board, what can

influence its functioning. However, some researchers (Fauzi & Locke, 2012; Saibaba & Ansari, 2012; Ujunwa, 2012) consider that large boards of directors' impact positively the growth opportunities of the companies due to the diversity of skills, experience, and knowledge of the directors.

The results show that the board of directors' independence impact negatively but not significantly the growth opportunities. Thus, we reject H2 which indicates that board independence impact positively growth opportunities. This result is consistent with the theory of resource dependence because external directors are considered as "outsiders" who are not informed enough about the operational activities of the company. Similarly, Abdullah (2004), Bansal & Sharma (2016) and Kutum (2015) found an insignificant relation between the board of directors'' independence and the corporate performance. In addition, Bhagat & Black (1999) state that less profitable companies are inclined to strengthen their board independence, but companies with more independent boards do not perform better than other ones. Conversely, Robert *et al.* (2016) state that board independence could be a factor of minimization of the agency problems between shareholders. Besides, Shleifer & Vishny (1992) confirm that the board of directors' independence ensures minority shareholders' interests.

The regression results indicate that the number of meetings held by the audit committee over the calendar year impacts negatively and significantly (at the 10% level) the growth opportunities. Thus, we could not confirm H3. Indeed, according to our results, when the annual audit committee meetings increase by 1%, growth opportunities decrease by 0.006. However, Al-Jalahma (2022) argue that the number of audit committee meetings does not affect company performance in Bahrain.

The regression results show that the size of audit committee has a positive and non-significant impact on growth opportunities. This finding leads us to the rejection of H4, which indicates that the audit committee size impact positively the growth opportunities. In this regard, Husaini (2017) and Swamy (2011) have shown that the audit committee size is positively correlated with the company performance. In addition, Asaolu *et al.* (2022) focused on a sample of non-financial quoted companies in Nigeria and showed that audit committee size is positively and significantly associated with sustainable growth rate. Conversely, Al-Jalahma (2022) confirm that companies in Bahrain with big audit committees in terms of size are performing poorly.

The results prove that audit committee independence impacts positively and not significantly firm performance. This finding leads to reject H5. Conversely, Chen *et al.* (2002) noted that the independence of the audit committee improves its effectiveness and leads to better performance of the company. Moreover, Asaolu *et al.* (2022) focused on a sample of non-financial quoted companies in Nigeria and showed that audit committee independence is positively and significantly associated

with sustainable growth rate. However, Al-Jalahma (2022) assert that companies in Bahrain with independent audit committees are performing poorly.

For the control variables, the results show that the firm size impact negatively and significantly (at the 1% level) the growth opportunities. This finding is consistent with Adams & Santos (2006) who indicated that firm size has a significant effect on firm performance. However, this result contradicts the findings of Dhliwayo & Radipere (2014) who concluded that there is no significant relation between firm size and performance.

For the variable company's level of indebtedness, the results suggest that the link between INDEBT, and growth opportunities is positive and significant (at the 1% level). This result is at odds with the findings of Akintoye (2008) who mentioned the existence of a negative relation between the company's debt and its performance. Indeed, these authors have stated that indebtedness leads to the weakening of the firm performance.

For financial leverage, we find that it impacts positively and significantly (at the 1% level) the growth opportunities. This is noticed from the positive coefficient which is equal to 0.097 and the P-value of 0.000. This means that when leverage increases by 1%, growth opportunities will increase by 0.097.

5. Conclusion

Our study empirically tested the impact of some characteristics of internal governance mechanisms related to the board of directors and to the audit committee on growth opportunities, for a sample of Tunisian companies observed over the period 2013-2019. Growth opportunities was measured by Tobin's Q. Our variables of interest are the board of directors' size and its independence, the annual meetings of the audit committee, its size, and its independence. Our control variables are the firm's size, the level of indebtedness and the leverage.

The results reveal that the board of directors' size negatively affects the growth opportunities while the independence of the board has no influence on the growth opportunities. In addition, we find that the number of meetings held by the audit committee over the calendar year negatively impacts the growth opportunities; while neither the independence of the audit committee, neither its size, influence the growth opportunities. Our study allowed us to highlight that some internal corporate governance mechanisms tend to reduce the growth opportunities of the firms.

Between the limitation of this study, we could cite that our sample is limited to the listed non-financial companies without considering the listed financial institutions and not listed companies. Furthermore, we used only two mechanisms of internal

governance, namely the board of directors and the audit committee, without consideration of the ownership structure. Finally, we encourage researchers to investigate the role of internal governance mechanism's in improving the performance of companies for the post-COVID period in the MENA region.

References

Al-Jalahma A (2022) "Impact of audit committee characteristics on firm performance: Evidence from Bahrain", *Problems and Perspectives in Management*, vol. 20, no. 1: 247-261. doi:10.21511/ppm.20(1)2022.21

Abdelrahman Al Ali, S.A.A., El Mokdad, S.S., & Hayek, A.F. (2022) "The effect of audit committee characteristics on the financial performance in the UAE", *Journal of Entrepreneurship Education,* vol. 25, no. 2: 1-19

Adams R.B., & Santos J.A.C. (2006) "Identifying the effect of managerial control on firm performance", *Journal of Accounting and Economics*, vol. 41, no. 2: 55-85

Abdullah, S.N. (2004) "Board composition, CEO duality, and performance among Malaysian listed companies", *Corporate Governance*, vol. 4: 47-61

Abdullah, M.S., Shah, S.Z.A., & Hassan, A. (2008) "Impact of corporate governance on the financial performance of firms: evidence from Pakistan", *The Business Review*, vol. 11: 282-290

Abidin, Z., Kamal, M., & Jusoff, K. (2009) "Board structure and corporate performance in Malaysia", *International Journal of Economics and Finance*, vol. 1, no. 1: 150-164

Akintoye, I.R. (2008) "Reducing unemployment through the informal sector: a case study of Nigeria", *European Journal of Economic and Administrative Sciences*, vol. 11: 97-106

Akbar, A. (2015) "The role of corporate governance mechanism in optimizing firm performance, a conceptual model for the corporate sector of Pakistan", *Asian Economic and Social Society*, vol. 5: 109-115

Al-Ahdal, W.M., & Hashim, H.A. (2022) "Impact of audit committee characteristics and external audit quality on firm performance: evidence from India", *Corporate Governance*, vol. 22, no. 2: 424-445. https://doi.org/10.1108/CG-09-2020-0420

Al-Najjar, B., & Belghitar, Y. (2011) "Corporate cash holdings and dividend payments: evidence from simultaneous analysis", *Managerial and Decision Economics*, vol. 32: 231-241.https://doi.org/10.1002/mde.1529

Al-Matari, Y.A., Al-Swidi, A.K., Bt Fadzil, F.H., & Al-Matari, E.M. (2012) "Board of directors, audit committee characteristics and performance of Saudi Arabia listed companies", *International Review of Management and Marketing,* vol. 2, no. 4: 241-251

Assenga, M.P., Aly, D., & Hussainey, K. (2018) “The impact of board characteristics on the financial performance of Tanzanian firms”, *Corporate Governance*, vol. 18, no. 6: 1089-1106

Asaolu, T., Olowookere, J., Adebayo, A., & Kareem, T. (2022) “Audit committee characteristics and sustainable growth among selected listed no.n-financial firms in Nigeria”, *Iranian Journal of Accounting, Auditing and Finance*, vol. 3:1-13. doi: 10.22067/ijaaf.2022.42276

Bansal, N., & Sharma, A.K. (2016) “Audit committee, corporate governance, and firm performance: empirical evidence from India”, *International Journal of Economics and Finance*, vol. 8, no. 3: 1916-1971

Basalat H. A, Al Koni S., & No.ur A. N. I. (2023) “The impact of governance on the financial performance of companies listed in Amman and Palestine Stock Exchanges for the period 2013-2019”, *Jordan Journal of Business Administration*. vol. 19, no. 3: 413-437

Beasley, M.S. (1996) “An empirical analysis of the relationship between the board of directors’ composition and financial statement fraud”, *The Accounting Review*, vol. 71, no. 4: 443-465

Bhagat, S., & Black, B. (1999) “The uncertain relationship between board composition and firm performance”, *Business Lawyer*, vol. 54, no. 3: 921-963

Bozec, R. (2005) “Boards of directors, market discipline and firm performance”, *Journal of Business Finance and Accounting*, vol. 32, no. 10: 1921-1960

Bouqalieh, B. K. (2023) “The impact of corporate governance principles on financial performance in Jordanian family companies”, *Jordan Journal of Business Administration*, vol. 19, no. 1: 23-45

Braiotta, L. (2000) *The Audit Committee Handbook*, 3rd ed., John Wiley and Sons, New York.

Carcello, J.V., Hermanson, D.R., & Neal, T.L. (2002) “Board Characteristics and Audit Fees”, *Contemporary Accounting Research*, vol. 19: 365-384

Cornett M M, Marcus A, Saunders A., & Tehranian A. (2007) “The impact of institutional ownership on corporate operating performance”, *Journal of Banking & Finance*, vol. 3, no. 6: 1771-1794

Dechow, P., Sloan, R., & Sweeney, A. (1995) “Detecting earnings management”, *The Accounting Review*, vol. 70, no. 2: 193-225

Dhliwayo, S., & Radipere, S. (2014) “The Role of Gender and Education on Small Business Performance in the South African Small Enterprise Sector”, *Mediterranean Journal of Social Sciences*, vol. 5: 104-110

Erickson, J., Park, Y., Reising, J., & Shin, H. (2005) “Board composition and firm value under concentrated ownership: The Canadian evidence”, *Pacific-Basin Finance Journal*, vol. 13, no. 4: 387-410

Fauzi, F., & Locke, S. (2012) “Board Structure, Ownership Structure and Firm Performance: A Study of New Zealand Listed-Firms”, *Asian Academy of Management Journal of Accounting of Finance*, vol. 8: 43-67

Grossman S. J., & O D. Hart. (1983) “An Analysis of the Principal-Agent Problem”, *The Econometric Society*, vol. 51, no. 1: 7-45

Guest, P.M. (2009) "The impact of board size on firm performance: evidence from the UK", *The European Journal of Finance*, vol. 15, no. 4: 385-404

Hamid, N., & Purbawangsa I. B. A. (2022), "Impact of the board of directors on financial performance and company capital: Risk management as an intervening variable", *Journal of Co-operative Organization and Management*, vol. 10, no. 2; 1-22

Haider, Z.A., Liu, M., Wang, Y., & Zhang, Y. (2017) "Government ownership, financial constraint, corruption, and corporate performance: international evidence", *Journal of International Financial Markets, Institutions and Mone*y, vol. 53: 76-93

Herdjiono. I., & Sari, I.M. (2017) "The effect of corporate governance on the performance of a company: some empirical findings from Indonesia", *Journal of Management and Business Administration. Central Europe*, vol. 25, no. 1: 33-52

Hillmanb A. J., & Dalziel T. (2003) "Boards of directors and firm performance: integrating agency and resource dependence perspectives", *Academy of Management*, vol. 28, no. 3: 383-396

Hosny, K., & Elgharbawy, A. (2022) "Board diversity and financial performance: empirical evidence from the United Kingdom", *Accounting Research Journal*, vol. 35, no. 4: 561-580

Hsu, W., & Petchsakulwong, P. (2010) "The impact of corporate governance on the efficiency performance of the Thai non-life insurance industry", *The Geneva Papers on Risk and Insurance Issues and Practice*, vol. 35, no. 1: 28-49

Husaini, S. (2017) "Enterprise risk management, corporate governance, and firm value: empirical evidence from Indonesian public listed companies", *International Journal of Advances in Management and Economics*, vol. 6, no. 6: 16-23

Jensen, M.C., & Meckling, W.H. (1976) "Theory of the firm: managerial behavior, agency costs and capital structure", *Journal of Financial Economics*, vol. 3, no. 4: 305-360

Jensen, M.C. (1993) "The modern industrial revolution, exit and the failure of internal control systems", *The Journal of Finance*, vol. 48, no. 3: 831-880.

Jermias J., & Gani L, (2014), "The impact of board capital and board characteristics on firm performance", *The British Accounting Review*, vol. 46, no. 2: 135-153

Jiang, F., & K.A. Kim. (2015) "Corporate Governance in China: A Modern Perspective", *Journal of Corporate Finance,* vol. 32:190–216

Kalbers, L.P., & Fogarty, T.J. (1993) "Audit committee effectiveness: an empirical investigation of the contribution of power", *Auditing: A Journal of Practice and Theory*, vol. 12: 24-49

Kasthury, S., & A Saratha. (2021) "Impact of audit committee characteristics on financial performance of companies listed under materials sector in CSE", *Working paper*, Proceedings of the International Conference on Business & Information (ICBI)

Kipkoech, S.R., & Rono., L. (2016) "Audit committee size, experience, and firm financial performance: evidence Nairobi securities exchange Kenya", *Research Journal of Finance and Accounting*, vol. 7, no. 15: 87-95

Kutum, I. (2015) "Board characteristics and firm performance: evidence from Palestine", *European Journal of Accounting Auditing and Finance Research*, vol. 3, no. 3: 32-47

Li, J., Mangena, M., & Pike, R. (2012) "The effect of audit committee characteristics on intellectual capital disclosure", *The British Accounting Review*, vol. 44, no. 2: 98-110

Lipton, M., & Lorsch, J.W. (1992) "A modest proposal for improved corporate governance", *Business Lawyer*, vol. 48, no. 1: 59-77

Lin, J.W., Li, J.F., & Yang, J.S. (2006) "The effect of audit committee performance on earnings quality", *Managerial Auditing Journal*, vol. 21, no. 9: 921-933

McKnight, P.J., & Mira, S. (2003) "Corporate governance mechanisms, agency costs and firm performance in UK firms", *Working paper*, Cardiff University, UK

Nguyen, V.C., & Huynh, T.N.T. (2023) "Characteristics of the board of directors and corporate financial performance—empirical evidence", *Economies*, vol. 11, vol. 2: 53. https://doi.org/10.3390/econo.mies11020053

Nuryanah, S., & Islam, S.M.N. (2011) "Corporate governance and performance: evidence from an emerging market", *Malaysian Accounting Review*, vol. 10, no. 1: 17-42

Obiyo, O.C., & Lenee, L.T. (2011) "Corporate governance and firm performance in Nigeria", *International Journal of Exclusive Management Research*, vol. 1, no. 4: 1-12

Palaniappan, G. (2017) "Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry: an empirical study", *European Journal of Management and Business Economics*, vol. 26, no. 1: 67-85

Pearce, J.H., & Zahra, S.A. (1992) "Board composition from a strategic contingency perspective", *Journal of Management Studies*, vol. 29, no. 4: 411-438

Puasa, S., Salleh, M.F., & Ahmad, A. (2014) "Audit committee and timeliness of financial reporting: Malaysian public listed companies", *Middle East Journal of Scientific Research*, vol. 22, no. 2: 162-175

Robert, W.R., Khondkar, E.K., & Siyu, L. (2016) "The effects of board independence and CEO duality on firm performance: evidence from the NASDAQ-100 index with controls for endogeneity", *Journal of Applied Business and Economics*, vol. 18, no. 2: 49-71

Rizki, A. A. A. A., Cahyaningyas, S. R., & Lenap, I. P. (2023) "The effect of growth opportunity and good corporate governance of accounting prudence in state-owned companies", *Alexandria (Journal of Economics, Business, & Entrepreneurship)*, vol. 4, no. 2: 76-81. https://doi.org/10.29303/alexandria.v4i2.461

Stewart, J., & Menro, L. (2007) "The impact of audit committee existence and audit committee meeting frequency on the external audit: perceptions of Australian auditors", *International Journal of Auditing*, vol. 11, no. 1: 51-69

Saibaba, M. D., & Ansari, V. A. (2012) "Impact of board size: an empirical study of companies listed in BSE 100 Index", *Indian Journal of Corporate Governance*, vol. 5, no. 2: 108-119

Shleifer, A., & Vishny, R. (1992) "Liquidation values and debt capacity: A market equilibrium approach", *Journal of Finance,* vol. 47:1343– 1366.

Swamy, V. (2011) "Corporate governance and firm performance in an unlisted family-owned firm", *International Journal of Business Insights and Transformation*, vol. 4, no. 2: 37-52

Vafeas, N. (1999) "Board meeting frequency and firm performance", *Journal of Financial Economics*, vol. 53: 113-142

Ujunwa, A. (2012) "Board characteristics and the financial performance of Nigerian quoted firms", *Corporate Governance: The International Journal of Business in Society*, vol. 12: 656-674

Waris, M., Irfan, M., Shahid, S., Khan, A., & Kamran, M., (2019) "Impact of board characteristics, ownership structure and growth opportunity on corporate risk taking. Evidence from Pakistan listed firms", *IOSR Journal of Economics and Finance (IOSR-JEF)*, vol. 10, no. 6: 29-38

Yeh, Y.-H., Chung, H., & Liu, C.-L. (2011) "Committee independence and financial institution performance during the 2007-2008 credit crunch: evidence from a multi-country study", *Corporate Governance: An International Review of Business in Society,* vol. 19, no. 5: 437-458