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Impact of good governance on the performance of tunisian companies listed on the BVMT

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Abstract

The goal of our research is to see how governance systems affect the performance of Tunisian businesses. Empirical validation of a panel of 100 Tunisian companies over a 10-year period from 2008 to 2018 demonstrates that the board of directors' makeup, compensation system, shareholder rights, and disclosure of financial information are all important factors.

Keywords: Corporate Governance, Performance, Board of directors, BVMT

1. Introduction

For several years, the concept of "corporate governance" has been recognized as a new managerial reality. As a result, the theme's origin is consistent with Berle and Means' theory (1932).The term "system of governance" first occurs in an article by Ronald Coase titled "The Nature of the Firm" in 1937. Other economists attempted to study governance in the 1970s as the execution of mechanisms for carrying out internal coordination in order to lower the market's transaction costs as a result.The governance topic is fairly old, dating back to the 1930s in the United States. It is commonly attributed to Berle and Means' (1932) argument on the repercussions of the separation of ownership and decision-making tasks that characterizes major American organizations, known as "managerial" organizations.Power belonged to those who knew rather than those who owned prior to the emergence of meaningful corporate governance systems.

A rising amount of study is being done on the relationship between a company's governance and its performance. Several writers have linked differences in governance systems to differences in firm performance (Mayer, Sparano, Gray, Makower, Pritchard (2018), Charreaux (1996)).Indeed, various authors emphasize the importance of corporate governance in the development of wealth, whether for the benefit of shareholders or all parties involved in the company.It is in this context that this article aims to assess the relationship between good governance and economic growth. This article is organized as follows: initially, we give an overview of the literature as well as the primary research hypotheses in the first section. After that, a second section is devoted to the presentation of the study's methods. Finally, we present a summary and analysis of the findings.

In this light, we will attempt to answer the following question: "Does corporate governance increase the performance of Tunisian stock exchange-listed companies?"

2. Literature review and formulation of research hypotheses

The literature is replete with studies attempting to determine the impact of governance on performance, and the majority of these studies have found that governance has a considerable impact on business performance and market value across a variety of contexts and performance measures.

Schiehll (2020) links corporate success to four aspects of a company's governance structure: board composition, management involvement, incentive remuneration, and controlling shareholder participation.

Bauer et al. (2019) based their findings on data from Governance Metrics International (GMI). Six governance factors are used to categorize the Japanese companies in the sample. The authors looked at how governance quality affected their performance. They show that companies with stronger governance outperform the others by 15% per year using the entire index.

By developing an index based on the governance review presented by the Korea Stock Exchange, Black, Jang, and Kim (2018) showed that a 10 point increase in the governance index leads to a 65 percent increase in Tobin's Q and a 13 percent increase in the market-to-book ratio in their sample of 526 Korean firms.They also found that any improvement in governance practices leads to a 47% increase in Tobin's Q and a 96% increase in the market to book value.

For their part, Chong and Lopez-de-Silanes (2007) concluded that governance certainly influenced the operational performance of the firms studied, but that this influence was much less significant than that exerted on the market value of those same firms. Finally, Bauer et al. (2003) confirmed that governance was positively correlated with the profitability of the securities and market values of the European companies in their study sample, but that it was negatively correlated with their operating performance.

Furthermore, Gruszczynski (2005) tested the existence of this link in the Polish context. His study found a significant correlation between the calculated governance score and the financial performance of the Polish companies studied. In addition, Bauer et al (2008) studied the association between governance quality and performance in Japanese firms. They constructed a total index of six governance dimensions. The results of this study show that the best-governed firms outperform the others by 15% per year.

Furthermore, Mohamed, Basuony, and Badawi (2013) investigated the effect of corporate governance on the financial and stock market performance of 88 non-financial companies listed on the Egyptian Stock Exchange's EGX100 index.

The ownership structure, the membership of the board of directors, and the quality of the audit are the three governance methods investigated. The size, age, sector, and financial structure of the company were all used as control variables in the analysis. Tobin's Q was used to evaluate financial performance in terms of ROE and ROA, as well as stock market performance.

At the national level, Madhar, S. (2016), studied the relationship between governance and performance by conducting a study of 46 Moroccan issuers between the end of 2012 and the end of 2014. The author developed a grid composed of 31 governance criteria covering mainly board practices and shareholder rights. In order to measure the performance of the companies in her sample, she focused on financial and stock market indicators, notably turnover, EBITDA and net margin.

Based on the results of these studies, our research will first try to study the correlation between a governance index published on the website of the Canadian newspaper "the globe and mail" and performance indicators. The hypothesis that we will test to study this correlation is, therefore, the following:

> **General Hypothesis**: companies with higher governance scores will be characterized by better performance.

Since the governance index we use is composed of 4 sub-indices, we will test the effect of each of these sub-indices on performance.

-Composition of the board of directors and performance: The board of directors is considered one of the main instruments for addressing the shortcomings of managers (F. Adjaoud et al (2007)). Hermalin and Weisbach (2000) call it the "heart of governance".

The size of the board is also considered a variable that can have a significant effect on its effectiveness (P. André and E. Schiehll 2004). According to the results of Yermack (1996) and S. Bahagat and Black (2002) this effect is negative to the extent that the board of directors loses effectiveness when its size increases. In contrast to these results, Godard's (2001) results show the absence of the effect of board size on the performance of French firms. And this is true regardless of the performance measures used. Yermak (2017) also showed a negative relationship between the size of the board and the value of the firm, because of the difficulty of communication and the high costs of joint decision-making.

Through these studies we can formulate our first hypothesis as follows :

H1: The higher the governance score for the composition of the board of directors, the higher the company's financial and stock market performance.

-Compensation system and performance: André and Schiehll (2018) suggest that corporate performance will be associated with the relative importance of long-term incentive compensation such as cash bonuses and the granting of stock-options.

Hence our second assumption:

H2: the higher the governance score for the remuneration policy, the higher the company's financial and stock market performance.

-**Shareholder rights and corporate performance**: Gompers, Ischii and Metrick (2009) have shown that companies with the strongest shareholder rights have higher value, higher profits, higher sales growth, and lower capital expenditure. Consequently, the third research hypothesis may be as follows:

H3: the higher the governance score on respect for shareholders' rights, the higher the company's financial and stock market performance.

-**Disclosure and performance**: Increasing disclosure of information reduces agency costs and therefore increases the value of the company (Belfellah & Carassus (2016), Doidge & Kinsman (2019).

We can thus formulate the last hypothesis of our study as follows:

> *H4:*The higher the disclosure governance score, the higher the company's financial and stock market performance.

3.Research methodology

In this framework, we set out the methodological choices made in order to be able to verify the research hypotheses. Firstly, we present our study sample.

Secondly, we develop the variables used in this study.

3.1 Framework of the study

The objective of this study is to assess the impact of good governance on the performance of listed companies. Therefore, it was based on a sample of 130 Tunisian source-listed companies.

The sample covers companies belonging to three different sectors which are: the industrial sector, the commercial sector and the service sector.

As a result of the sample, a greater understanding of the impact of governance on performance can be gained. As a result, the study spans 30 years, from 1990 to 2019. The financial data comes from annual activity reports from banks, annual reports from the APTBEF, BVMT guidelines, and documents from the Financial Market Council (CMF).

3.2. Search variables

The following presents the variables used both to assess the board structure and to measure banking performance.

Performance-dependent variables corporate : Our objective is to study the effects of the variables (exogenous) explanatory variables on the performance that is the variable endogenous or explained.

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a) **Performance dependent variables corporate.**

Our objective is to study the effects of the variables (exogenous) explanatory variables on the performance that is the variable endogenous or explained.

Indeed, we can measure the performance of the company by calculating profitability indicators.

a) Variables dependent on the performance of the enterprise

Our objective is to study the effects of explanatory (exogenous) variables on performance which is the endogenous or explained variable. Performance can be measured either by market indicators that use stock market prices (Market to Book Ratio, Price Earning Ratio, Total Shareholder Return, etc.) or by accounting indicators such as ROE or ROA. In our study, we use the Return on Assets (ROA) and Return on Equity (ROE) ratios.

ROA (Return On Assets): This ratio is also called the return on assets ratio because it expresses the capacity of these assets to create a certain level of operating profits, i.e. comparing the results with the means implemented to achieve them.

$$ROA = capital\ employed = equity\ + \ debt\ at\ LMT$$

ROE (Return On Equity): This ratio is also called the return on equity ratio, it expresses the capacity of the equity invested by shareholders to generate a profit.

$$ROE = \frac{net\ income}{shareholders'\ equity}$$

b) Independent variables

We have tried to identify the most important variables for describing corporate governance. Regarding the characteristics of the board of directors, we selected 4 variables.

- The composition of the board of directors ;

- Shareholding and compensation;

- Shareholders' rights;

- Disclosure of information.

Four characteristics make up the four sub-indexes of our overall governance index

c) Control variables

If we are looking at the impact of governance arrangements on bank performance, there are other variables that need to be taken into account before we can conclude, including :

The size of the firm: the size variable is introduced to achieve economies of scale or diseconomies of scale. Smirlok (1985), Akhavein et al (1997) and Kwan (2003) find a positive and significant relationship between bank size and performance.

Age of Firm (AGE): The age of the firm was often considered a variable that could have a very significant effect on performance. In general, the firm's age variable is expressed as the logarithm of the number of years in office (Brown and Caylor(2006), Ben Cheikh and Zarai(2008)).

Therefore, we have one independent variable, two dependent variables and one control variable. And as a result, we have two models:

Model 1 : $ROA_{it} = \beta_0 + + \beta_1 GOVit + \beta_2 AGEit + \beta_3 Tit + \varepsilon_{it}$

Model 2 : $ROE_{it} = \beta_0 + + \beta_1 CORPit + \beta_2 AGEit + \beta_3 Tit + \varepsilon_{it}$

With :

CORP: The Governance Index,

T: The size of the company,

AGE: The age of the company

DT: The company's debt,

β_0: The constant

ε : The term error

Table 1: Choice of variables

Variable	Meaning	Measure
ROA	Return On Assets	Net income/total assets

ROE	Return On Equity	Net income/equity
CORP	Corporate Governance	This index focuses on four important characteristics of the board of directors, namely: - The composition of the Board of Directors - Shareholding and compensation - Shareholder rights - Disclosure of information.
AGE	Age of the company	Log (number of years)
T	Size of the company	Log (book value of total assets)

In what follows, we will move on to an econometric study through which we will try to test the presence of a link between the performance indicators (ROE and ROA) and the governance of Tunisian companies listed on the stock exchange. We will try to test the hypothesis of a positive effect of corporate governance on financial and stock market performance and to see under what conditions this effect can take place.

.4. Discussion and interpretation of results

4.1. Descriptive statistics

The means, standard deviations, and means between the variables in our investigation are shown in Table 2. On a scale of 100 enterprises, this table reveals that the average number of years is ten, whereas Shareholder Rights has an average of 1.35. The average of this variable is 8.4 in the case of IVD. As a result, the ROA and ROE averages are 0.90 and 10.6, respectively.

Table 2: Descriptive statistics

	Average	*Median*	*MIN*	*MAX*	*St-Dev*
ROA	0.90	0.82	0.20	1.55	0.35
ROE	10.62	10.88	1.95	17.50	3.84
SC	11.57	11.25	8.10	15.30	1.70
SR	4.50	2.14	1.49	5.61	1.12
IVD	8.48	8.10	3.35	12.22	1.08
SC	2.85	2.90	0.7	5.42	1.66
T	8.40	8.05	5.51	12.60	1.85
Age	10.40	10.13	3.50	20.50	3.15

4.2 Study of the effect of performance on governance using the global governance index

It is important to note that the low value of in R ^{2}Table 3 shows that the explanatory power of our model is medium.

Next, we notice that governance has an impact on financial and economic performance, according to various assessments. In the first two models, the CORP variable is substantial. As a result, our broad hypothesis has been confirmed. This finding is consistent with Gruszczynski's (2005) findings, which show a positive correlation between the governance index and performance in the Polish setting.

The total assets variable (T), is positive and significant in both equations using ROE (6.054***) and ROA (3.128**). This is consistent with our assumption that size has a positive effect on financial performance. Several authors have found similar results such as Durnev and Kim (2003), Bohren and Odegaard (2001) and F. Adjaoud, D. Zeghal, and S. Andaleeb (2007) who find, in different contexts, a positive association between size and performance.

The figures in the table show that the variable AGE is not significant for either financial performance measures (0.004 for ROE and 0.008 for ROA). This result is not in line with our expectations and with results found by other authors and in other contexts. Ben Cheikh and Zarai (2008), for example, find that, for the Tunisian context, the age variable significantly (at the 1% threshold) and positively influences the stock market performance (MTB) and

accounting performance (ROA) of companies. Their results were also consistent with those of Cameron and Whetten (1981).

In conclusion, we can confirm our general hypothesis about the effect of governance on performance by using the complete sample and the overall governance index. As a result of the governance index's decomposition, we'll be able to assess the impact of each governance sub-index on the two performance indicators individually.

Table 3: Study of the effect of performance on governance (overall index)

Variable	ROE	ROA
Constante	8.356*** (4.452)	7.569*** (2.851=
Age	0.008 (0.036)	0.007 (0.019)
T	6.054*** (1.548)	3.128** (1.323)
CORP	0.325	0.435

	(0.245)	(0.685)
R²	0.502	0.523
Number of observations	100	100

Values in brackets represent standard errors *significant at the 10% threshold, **significant at the 5% threshold, ***significant at the 1% threshold.

4.3 Study of the effect of performance on governance using the sub-indices composing the overall governance index

The decomposition of the Governance Index consists of replacing this index with its four sub-indices (BD, SC, SR, IVD) in the three performance equations. The models estimated in this step are as follows:

$Model : ROE = cte + \alpha 1\ BD + \alpha 2\ SC + \alpha 3\ SR + \alpha 4\ IVD + \beta 1\ T + \beta 2\ AGE + \varepsilon i$

$Model : ROA = cte + \alpha 1\ BD + \alpha 2\ SC + \alpha 3\ SR + \alpha 4\ IVD + \beta 1\ T + \beta 2\ AGE + \varepsilon i$

Where $i = 1 ... ...\ 100$ denotes businesses ;

BD : The composition of the Board of Directors ;

SC: Shareholding and compensation ;

SR: Shareholder rights ;

IVD: Disclosure of Information

T: The size of the company ;

AGE: Age of the company;

C: The constant;

Ɛ: The term error

The various estimates show that the sub-indices have significant effects on financial performance. Thus, our assumptions are verified for models 3 and 4

Table 4: Study of the effect of performance on governance through a decomposition of the governance index

Variable	ROE	ROA
Constante	6.324**	7.133**
	(3.511)	(3.220)
BD	0.125*	0.425

	(0.052)	(0.085)
SC	0.241*	0.324*
	(0.068)	(0.088)
SR	0.189*	0.225*
	(0.034)	(0.043)
IVD	0.518	0.125*
	(1.021)	(0.214)
AGE	0.005	0.0065
	(0.0326)	(0.214)
T	5.522***	4.225**
	(1.254)	(1.113)
R^2	0.48	0.502
Number of observations	100	100

Values in brackets represent standard errors *significant at the 10% threshold, **significant at the 5% threshold, ***significant at the 1% threshold.

It is important to note that the low value of R 2 in Table 4 shows that the explanatory power of our model is medium.

The estimated coefficient on the board composition variable is positive and significant in both models. This result of our study is consistent with the literature review we developed, Board size is also considered a variable that can have a significant effect on its effectiveness (P. André and E. Schiehll 2004).

As for the "Shareholding and compensation" variable, the results show a positive and significant impact on the economic performance of Tunisian companies. This result is consistent with the results observed by Hergli et al (2007), who consider that moderate executive compensation linked to the performance (accounting or market value) of the firm is a factor that positively influences the value of the firm.

As for the "shareholders' rights" variable, the results show a positive and significant impact on the economic performance of Tunisian companies. This result is consistent with the results found by Gompers, Ischii and Metrick (2003), which showed that companies with the strongest shareholder rights have greater value, higher profits, and stronger sales growth.

As for the effect of the variable "Disclosure of information" on corporate performance, the results show a positive and significant impact on the economic performance of Tunisian companies, which is consistent with the results observed by R. Bauer et al (2008), in the

Japanese context, who found that disclosure of information is one of the most important determinants of corporate performance.

The total assets variable (T), is positive and significant in both equations using ROE (5.522***) and ROA (4.225**). This is consistent with our assumption that size has a positive effect on financial performance.

The variable AGE is not significant for either of the financial performance measures (0.005 for ROE and 0.0065 for ROA).

Table 5: hypotheses and results

Hypotheses	Results
H1: The higher the governance score for the composition of the board of directors, the higher the company's financial and stock market performance.	**Supported**
H2: the higher the governance score for the remuneration policy, the higher the company's financial and stock market performance.	**Supported**
H3: the higher the governance score on respect for shareholders' rights, the higher the company's financial and stock market performance.	**Supported**
H4: The higher the disclosure governance score, the higher the company's financial and stock market performance.	**Supported**

Conclusion

The objective of this research is to examine the relationship between governance and the performance of Tunisian companies. More specifically, we examined the effect of board composition, shareholding and composition, shareholder rights and disclosure of ownership structure information on economic and financial performance, as measured by return on assets (ROA) and return on equity (ROE) on 100 Tunisian banks listed on the Tunisian Stock Exchange during the period 2008- 2018.

After presenting the conceptual framework related to corporate governance, firm performance and the theoretical effect of governance on performance, this study has set out the general research hypothesis that governance influences the economic and financial performance of firms.

This study contributes modestly to the field of empirical research on the mechanisms of governance of Tunisian firms. Indeed, the results of econometric tests confirm the theories.

Our study suffers from some limitations. The size of our sample is relatively reliable. Other characteristics related to the board of directors such as the independence of board members, the remuneration systems of its members and the composition of committees will have to be integrated in a future research. In addition, it would be desirable for future studies to examine the relationship between the governance system and the performance of MENA banks.

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