

The impact of board of director characteristics on bank financial performance: The case of Tunisian banks

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Abstract

The purpose of this research is to investigate the impact of board director characteristics on banking financial performance in Tunisia from 2005 to 2015.

We used four independent variables related to the board of directors (board size, independence, duality, and the percentage of directors representing the state), as well as a macroeconomic variable (inflation), and a control variable (the size of the bank).

We used two dependent variables to assess financial performance: return on assets (ROA) and return on equity (ROE).

The main empirical findings show that board size and inflation variables have a negative impact on banking performance. The variables percentage of directors representing the state and bank size, on the other hand, have a positive impact on banking performance.

Keywords: Board of directors, financial performance, inflation, commercial banks, ROA, ROE.

1. Introduction

The financial crisis is a new global fact that has provoked, on an international scale, surprises and upheavals in the way companies are managed. This notion of crisis has been accompanied by waves of failure, losses, bankruptcies, fraud, money laundering, embezzlement ... of the banking systems of countries as powerful as the United States or also European countries, to conclude that the interbank market has also suffered serious disruptions.

The emergence of these problems requires the existence of a corporate governance system, in particular the board of directors, which, by virtue of its universal principles, while adapting them to the reality of each entity, can put an end to the various conflicts of interest or at least reduce them as much as possible.

In a constantly changing environment, and with all the financial scandals that have marked the world economy, particular importance has been placed on corporate governance in many developed and emerging economies, such as Tunisia.

Like any other business, the bank aims to seek good governance to improve its performance (Hossain et al.(2022)). In order to achieve its fundamental objectives, the bank can only find solutions if the environment in which it operates is in itself secure.

The relationship between internal governance mechanisms, namely the board of directors, and banking performance has been the subject of much ink and attracts the attention of several researchers and users such as companies, organizations and financial institutions and not financial (Wong et al. 2018). The objective of this work is

to study the impact of the board of directors on banking financial performance in Tunisia.

In the same fashion, the paper studies the impact of the characteristics of the board of directors, namely, the independence of the board, the duality of functions, gender diversity, the presence of the nomination committee within the board of directors, the presence of the remuneration committee, the number of board meetings (Dwekat et al. 2020).

This article is intended to be an empirical contribution to this issue, from the perspective of governance mechanisms, in particular those related to the board of directors. More precisely, an empirical regression is carried out in order to test the impact of various governance mechanisms linked to the board of directors on the bank performance.

The outline of the paper respects the following sections. We present in the first section the literature review and our research hypotheses. After that, the methodological aspects will be studied in the second section. In the third section, we try to analysis and discuss our results. Finally, we would sump up the most important results, speak about the limits and the openings of this research.

2. Theoretical framework and hypotheses development

Several researchers have studied the impact of governance mechanisms on banking performance. These governance mechanisms include internal mechanisms such as the board of directors, the ownership structure, the audit committee,...(Charreaux, 1987 and 1997), and internal mechanisms such as the market for managers, the market for manager goods and services and the financial market (Fama, 1980).

In our work we will be interested in the impact of internal governance mechanisms including the board of directors on banking performance. Empirical studies of governance are characterized by the dominance of the contractual framework of agency theory. These studies relate to the composition of the board of directors, namely the size of the board, the independence of the directors, the duality of management, the existence of specialized committees, the expertise and the diversity of the members of the board.

2.1. Impact of the board of directors on banking performance

To study the impact of the board of directors on banking performance we must explain the impact of its characteristics.

2.1.1. Impact of the size of the board of directors on banking performance

According to Jensen (1993), the size of the board plays an important role in the effectiveness of an organization's governance system. Large boards, while allowing greater control over managerial latitude, can also incur costs. Indeed, large boards open up spaces for the stowaway behavior of certain directors. Therefore, Jensen (1993) argues that large boards are less effective, due to problems of coordination, control and flexibility in decision-making and in granting excessive control over CEOs.

In a sample of small and medium-sized Finnish businesses, Eisenberg et al. (1998) found a negative correlation between the size of the advisory boards and profitability and proposed that this may be due to coordination and communication

issues. Bennett and Robson (2004) found little evidence of a strong correlation between the size of the advisory councils, their qualifications, or their organisational structure and the performance of the businesses they studied in a large sample of SME in the United Kingdom.

When referring to SME in Ghana, Abor and Biekpe (2007) found positive correlations between a number of independent variables (including the size of the board of directors, its makeup, the level of the director's competence, the duality of the CEO, and the companies' internal, familial, and external property holdings) and their financial performance.

Afrifa and Tauringana (2015) examined the impact of the size of the board of directors, the age and mandate of the PDG, the NDI, and the compensation of the administrators on the performance (Q de Tobin) of PME listed in the United Kingdom and found that these factors had negative effects, while the board's size and the administrators' pay had positive effects. Arosa et al. (2013) studied the effects of the size, activity, directional structure, and mandate of the CEO, as well as the composition of the board of directors. They found a negative correlation between the number of outsiders on the board of directors and its size.

Roffia et al.(2022) analyses the relationship between board of director (BoD) attributes and financial performance in small and medium-sized enterprises (SMEs) for 184 Italian SMEs along with their financials over a 4-year period (2014–2017) and they found a significant correlation between certain BoD attributes and financial performance.

Naoki et al.(2022) examine the role of independent directors in Japanese stakeholder oriented corporate governance over the period of 2009–2016.They show that independent directors do not effectively mitigate conflicts among shareholders in a stakeholder-oriented corporate governance framework. Their results imply that stakeholder-oriented corporate governance systems contribute to reducing conflicts among stakeholders.

Fadare (2011) examined the links between financial performance and board size in the banking sector in Nigeria, he found that boards with less than 13 members are more productive in the bank, due to the problems of 'agency. Parthan and Skully (2010) find an insignificant relationship between board size and financial performance.

Al Hawary (2011) who examined the impact of bank governance on performance by studying a sample of commercial banks in Jordan between 2002 and 2009, came to results which reveal that an increase in the size of the board has a negative effect on the productivity of the company. According to these studies we can propose the first hypothesis:

H 1: There is a negative relationship between banking performance and the size of the board of directors.

2.1.2. Impact of independent directors on banking performance

The notion of independence in governance practice has been the subject of several studies. This work shows that independent directors occupy an important place in corporate governance. Their presence on the board of directors reinforces, in a sense, objectivity in decision-making given their impartiality.

Governance is a crucial component of the system for assessing an organization's performance and the dependability of its management. Additionally, in the current, dynamic, and globalised economic environment, organizations are constantly looking for new business opportunities to boost productivity and competitiveness (Suhaimi et al., 2017). The risks associated with poor corporate governance, such as a lack of commitment to the task at hand, a lack of risk management skills, a lack of social responsibility on the part of businesses, a lack of fiscal oversight, and a lack of internal control, increase the likelihood of fraud and moral risk in the organization (Karim et al., 2018; Nawawi et Salin, 2018; Nor et coll., 2017; Norbit et al., 2017; Salin et al., 2017; Omar et al., 2016).

As a result, the corporate governance system is becoming more and more crucial to the operation of the business. It refers to a set of control principles and procedures and offers helpful guidance for the organization's success. A balance of interests between the stakeholders involved in an enterprise who have varying rights and obligations is encouraged by good corporate governance. Besides, she has stringent oversight mechanisms, regulations, inspection and control procedures, which have forced banks to do their business more effectively (Quoc Trung, 2021).

According to Charreaux et al. (1991), the independent administrator with complete freedom in his decision-making. Its independence enables it to provide appropriate responses to the problems of conflicts of interest that may exist between managers and shareholders. Previous studies on the relationship between board independence and company financial performance have not all come to the same conclusion. Some studies had shown that the presence of independent directors had a positive effect while others concluded that it had a negative effect.

Some studies conducted in Vietnam, such as Phan (2012), Nguyen (2015,2020), Tran and Pham (2020), and Nguyen and Do (2020), investigate the effects of board director characteristics on the performance of a bank. The results of studies on the effects of DBO characteristics, property structure, and the kind of audit cabinet on bank performance have been inconsistent because to the lack of transparency of the Vietnamese stock market. Trung et al.(2022) identify the board of directors' characteristics affecting commercial banks' performance in Vietnam over eleven years (2010–2020) for a set of 35 Vietnamese commercial banks. They document statistically significant factors that involve the BOD's characteristics affect banks' performance, namely board size, nationality diversity and board of directors' advanced education. They demonstrate the influence of ownership structures on those banks' performances. Their results reveal that banks are owned and controlled by the government, and ownership concentration can improve and increase their performance.

Setiyono and Tarazi (2018) analyse the impact of the various characteristics of the council members on the effectiveness and risk of banking activities. The authors estimate diversity by looking at many characteristics and find that it has a significant impact on the performance of banks by using data from Indonesian banks from 2001 to 2011 that includes 4200 observations of five people and 21 ethnic groups. In general, diversity is positively correlated with bank performance but not ethnicity. The presence of the gender (females) and professional diversity lower the risk, but national and ethnic diversity is linked to a higher risk. The diversity of educational levels results in higher volatility and a greater risk of loss.

Tariah (2019) investigates the relationship between gender and ethnic diversity in the administrative council and strong performance (ROA). In order to analyse this relationship, the study runs a regression with the aid of a fixed-effects model, which helps to explain the endogeneity problem. The findings show a positive correlation between genre diversity, CEO diversity, and corporate performance.

The authors of Brahma et al. (2020) examined the variety of genres in the DBO as well as the performance of businesses in the United Kingdom (as measured by the ROA and the Q of Tobin). The findings demonstrate that the CA made up of three women or more has a significant impact on an organization's performance. Additionally, Brahma et al. (2020) demonstrate the influences of age, education, and professional status that have a favorable impact on the profitability of businesses.

The relationship between the characteristics of board director and the financial performance of Vietnamese banks was examined by Nguyen and Do in 2020. Its findings demonstrate the beneficial effects of the size of the administrative councils, the training of their members, and the percentage of non-executive administrators on the ROA and ROE of Vietnamese companies' banks.

Adams and Mehran (2003) find that the percentage of outside directors has no effect on the stock market and accounting performance of banks. Prowse (1997) states that these administrators are less effective in disciplining bank managers than the regulatory mechanisms put in place by governments.

Spong et al. (2001) find that the number of outside directors, their average age and the length of their terms of office do not affect the performance of the bank. Thus, Fogelberg et al. (2000) do not perceive any relationship between performance and board composition.

Cornett et al. (2009) observed a positive impact of independent members on banking performance expressed as return on assets (ROA), due to increased oversight on managers. Hence the following hypothesis:

H 2: There is a positive relationship between board independence and banking performance.

2.1.3. Impact of dual management on banking performance

Studies that have addressed the effect of duality on performance are not numerous and present differing opinions. Several studies find a negative relationship between duality and performance such as Anderson and Anthony (1986), Pi and Timme (1993) and Platt and Platt (2012), claim that the separation of the functions of CEO and Chairman of the Board leads to superior performance. Others find a positive relationship (Donaldson and Davis (1991); Godard and Schatt (2000); Simpson and Gleason (1999).

Yu et al.(2022) examine the relationship between board leadership structure and firm performance. The results show that the mixed research findings are due to different firm performance measurements, research designs, sampling practices and approaches of dealing with endogeneity issues. Studies utilizing multiple-country data, multinational companies, small firms or regions covering Africa, the Middle East, Eastern Europe and South America are under-represented. They found board characteristic such duality may affect bank performance. The dual PDG status

represents a more extensive "internal control" where a strong PDG who also serves as president abridges the oversight of the council. This could have a bad impact on how well the business performs. More and more international decision-makers and stock exchanges, as well as activist shareholders of Goldman Sachs and JP Morgan Chase, have called for the separation of the dual-direction post due to concerns about the weak oversight of the board of administration in such a structure of leadership (Krause et al. 2014).

Procopiou (2016) shows that while the role of the moderator of the duality of the PDG does nothing but exacerbate the issue of profit management, the increase in the actionariat of the PDG has a detrimental effect on profit management. The result is that opposing forces are at play. According to the predictions of various theories, such as the theory of agencies, the theory of intention, or the theory of contingency, the moderating effects vary. Future research must pinpoint the moderating factors of governance that either increase or decrease the discretionary power of the direction and reveal the relationship between the agent and the delegate. Hence, the following hypothesis:

H 3: Duality has a negative effect on the performance of banks.

2.1.4. Impact of representatives of the state to the board on banking performance

Numerous studies have focused on the governance of banks in emerging countries (such as Khalid et al, (2004) in Pakistan; Koh et al, (2004) in Malaysia; Lin et al, (2004) in Taiwan) and have also highlighted that the State or public institutions hold large shares in their capital. Their work highlights the negative effects of this participation and the presence of state representatives on boards on the performance of banks. Hence, the following hypothesis:

H 4: There is a negative relationship between directors who represent the state and banking performance.

2.1.5. Impact of inflation on banking performance

The effect of inflation on profitability is first discussed by Revell (1980). He showed that inflation can have an effect on banking performance. This hypothesis has been empirically tested by Bourke et al. (1989).

Revell (1980) introduces the question of the relationship between bank profitability and inflation, indicating that the effect of inflation on bank profitability depends on both wages and other bank operating costs.

In this context, Perry (1992) concludes that the impact of inflation on bank profitability depends on the magnitude if inflation is fully anticipated. If the rate of inflation is fully anticipated by bank management, they can adjust interest rates appropriately and increase revenues faster than costs, which should have a positive impact on profitability.

Recent studies (Alexiou and Sofoklis (2009); Athanasoglou et al., (2008); Claey's and Vander Vennet (2008); García-Herreto et al. (2009); Kasman et al. (2010); Pasiouras and Kosmidou, (2007) confirm a positive relationship between inflation and profitability. While, Sufian et al. (2009), showed that inflation has a negative relationship with banking performance in Bangladesh. This allows us to formulate the hypothesis next:

H 5: Inflation has a negative relationship with banking performance.

3. Methodology

This work aims to study the impact of the characteristics of the board of directors on the financial performance of the 8 Tunisian commercial banks during the period 2000-2015.

3.1. Presentation of the sample

To answer our research problem, we perform panel data regressions through a sample which consists of 8 Tunisian commercial banks listed on the Tunis Stock Exchange (BVMT).

The sample of selected banks is made up of 8 commercial banks which account for more than 90% of total banking sector assets.

The distribution of banks is as follows:

- 3 public banks (BNA, STB, and BH);
- 3 private banks with mainly foreign capital (ATB, Attijari, and UBCI);
- 3 private banks with predominantly Tunisian capital (BT, AB and BIAT).

3.2. The explanatory variables

The explanatory variables used in this study are related to the characteristics of the board of directors. They concern the size of the board, the duality of its management, the presence of independent directors, the presence of state representatives on the board of directors. A macroeconomic variable such as inflation and a control variable such as the size of the bank are added (**Table 1**).

◆The size of the board of directors (**BS**): This is the number of directors sitting on the board of directors.

◆The presence of independent directors (**INDEP**): This is the number of independent directors on the board of directors.

◆The Dual management (**DUAL**): This is the combination of functions between the chairman of the board and the CEO. It takes the value 1 if the general manager is himself the chairman of the board and 0 otherwise.

◆The presence of directors representing the state (**STAT**): This is the percentage of directors representing the state on the board of directors.

◆Inflation (**INF**): This is the rate of inflation of the Tunisian economy at time t .

◆The size of the bank (**SB**): This variable is measured by the natural logarithm of the book value of its total assets at the end of the financial year (\log total assets).

3.3. Variables to be explained: The financial performance

Bank performance can be accounting or stock market. The first is that the accounting rate of return is based on the past, while stock market profitability depends on the future.

Several works use accounting measures of performance namely return on assets (ROA), return on equity (ROE), net income, earnings per share. We cite Pi and Timme (1993), Berger (1992); Glassman et al. (1980) and Yan (1998).

Given the availability of data, we will choose in our work the return on assets (ROA) and return on equity (ROE).

◆The Return on assets (ROA): This ratio is defined by the ratio between the bank's net income and total assets.

$$\text{ROE} = \text{Net Income} / \text{Total Assets}$$

◆The Return on equity (ROE): This ratio is defined by the ratio between the bank's net income and the total equity entered under liabilities on the balance sheet.

$$\text{ROE} = \text{Net Income} / \text{Shareholders' Equity}$$

Table 1- Variables used

Nature of the variable	Abbreviation	Measures	Expected signs
Dependent variables	ROA	Net Income / Total Assets	
	ROE	Net Income / Shareholders' Equity	
Independent variables	BS	Number of directors making up the board of directors	–
	STAT	Percentage of directors representing the State sitting on the board of directors	+
	INDEP	Percentage of independent directors sitting on the board of directors	+
	DUAL	It takes the value 1 if the general manager is himself the chairman of the board and 0 otherwise	–
Macroeconomic variable	INFL	the inflation rate of the economy at time t	–
Control Variable	SB	Log (total assets)	+

4. Analysis and discussion of the results

4.1. Methodological approach

4.1.1. Specification tests

The econometric estimation, which links the financial performance equation and the characteristics of the board of directors, requires in a first step to verify the homogeneous or heterogeneous specification of the data generating process.

Table 2- Homogeneity tests

Homogeneity of constants	Homogeneity of coefficients
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Model 1: ROA	F(4.116)= 1.52 Prob= 0.1997	F(7.116)= 2.62 Prob= 0.0150
Model 2 : ROE	F(4.116)= 0.88 Prob= 0.4789	F(7.116)= -0.53 Prob= 0.8133

Source: Estimate with stata software

From **Table 2**, we conclude that the constants and coefficients of our theoretical models are homogeneous.

For model 1, the probability of $F = 0.0150 < 5\%$, so we reject H_0 . This confirms the presence of individual effects.

For model 2, the probability of $F = 0.8133 > 5\%$, so we accept H_0 . This confirms the presence of fixed effects. So, we specify our theoretical model by a panel with individual coefficients. The next step is to apply the Within and GLS method to estimate our theoretical models.

4.1.2. Static estimate of financial performance

The following table shows the results of the estimation of our regression models using the Within and GLS techniques.

Table 3- The Results of the estimation by the Within and GLS techniques

Variables	Modèle 1 : ROA		Modèle 2 : ROE	
	Within	GLS	Within	GLS
BS	-0.13155 (0.123)	-0.0773 (0.287)	-2.1825 (0.238)	0.00484 (0.980)
INDEP	0	0.0174 (0.020)	0	1.15236 (0.422)
DUAL	0	0.64850 (0.022)	0	-1.5616 (0.305)
STAT	0.01076 (0.627)	-0.031363 (0.001)	-0.2424 (0.615)	-0.0576 (0.987)
INFL	-0.95724 (0.190)	-0.0463 (0.499)	0.83729 (0.598)	-6.1137 (0.303)
SB	0.249994 (0.186)	0.123965 (0.461)	0.69250 (0.866)	1.50260 (0.522)

Source: Estimate with stata software

From **Table 3**, we can see that the estimation by the Within and GLS techniques gives expected and insignificant results. This shows the need for additional tests in

order to be able to choose the appropriate estimator. We choose between the two estimation techniques by the Hausman arbitration test (1978) to confirm the type of model, fixed or random.

Through Hausman's test, we can distinguish between models and choose the most suitable for our study. The results obtained are presented in the following table:

Table 4- The Hausman test for model 1

Test de chi 2	Chi2(3)= 12.34
	Prob Chi (2)= 0.015

Source: Estimate with stata software

From this table, the probability of Chi2 is equal to 0.015, so we reject H0, and we conclude that the model is **fixed-effect**.

Table 5- The Hausman test for model 2

Test de Chi2	Chi2(3)= 1.22
	Prob Chi(2)= 0.875

Source: Estimate with stata software

From this table, the probability of Chi2 is 0.875, so we accept H0. We conclude that the model is **random effect**.

To correct the statistical problems of heteroscedasticity and autocorrelation of errors, we re-estimate the two equations by an adequate econometric technique that eliminates these two problems.

Table 6 presents the result of the estimation by this technique for the two measures of the financial performance of Tunisian commercial banks.

Table 6- Final estimate with correction for heteroscedasticity and auto-correlation errors

Variables	ROA	ROE
SB	0.24994 (0.138)	-0.05764 (0.984)
STAT	0.01076 (0.055)***	0.00484 (0.961)
BS	-0.13155 (0.109)	-1.56161 (0.177)
DUAL	0 « omitted »	-6.11374 (0.106)
INFL	-0.95724 (0.392)	-1.15236 (0.540)
INDEP	0 « omitted »	0.05825

CONS	-1.145162 (0.617)	(0.619) 6.75597 (0.505)
N	128	128

p-values in parentheses

Source: Estimate with stata

software * $p < 0.01$, ** $p < 0.05$, *** $p < 0.1$

4.2. Study results

Before studying the results of the estimation of financial performance based on the explanatory variables, we will present the results of the descriptive statistics.

4.2.1. Descriptive Statistics

The table below presents the descriptive statistics of the dependent variables as well as the other variables included in the regression for the period 2000 to 2015.

Table 7- Descriptive Statistics (2000-2015)

Variables	N	Average	Standard deviation	Min	Max
ROA	128	0.9003864	0.7292507	-2.951731	2.912641
ROE	128	10.216	12.68425	-70.3466	101.432
SB	128	15.11025	54.72289	13.82207	16.1015
STAT	128	9.948437	13.57303	0	58
BS	128	11.19531	1.280124	6	12
DUAL	128	0.5	50.19646	0	1
INFL	128	3.817111	1.126517	1.98333	5.798545
INDEP	128	7.2875	12.842	0	33.3

Source : Estimation avec logiciel Stata

From the results obtained, the dependent variable ROA has a mean of 0.9 and a standard deviation of 0.72, while the dependent variable ROE has a mean of 10.21 and a standard deviation of 12.68. For the independent variables, the board size has an

average of 11 members and a standard deviation of 1.28. Regarding the control variable, we find that the size of the bank has an average of 15.11 and a standard deviation of 54.72.

Concerning the macroeconomic variable, we find that inflation has an average of 3.81 and a standard deviation of 1.12.

4.2.2. Analysis of the results of the regression model

To ensure the adequacy of the variables used, we will check whether all the variables are independent (multicollinearity problem).

From **Table 8**, all Pearson correlation coefficients between the independent variables are less than 0.6, at which point the phenomenon of collinearity becomes more and more pronounced.

Table 8- Matrix of total correlations

	ROA	ROE	SB	STAT	BS	DUAL	INFL
ROA	1.0000						
ROE	0.3574	1.0000					
SB	-0.2239	0.0229	1.000				
ETAT	-0.4210	-0.1850	0.3645	1.0000			
BS	-0.4739	-0.0964	0.1425	0.2754	1.0000		
DUAL	-0.1171	-0.1750	0.1663	0.7357	-0.1889	1.0000	
INFL	-0.0108	-0.1116	0.5330	0.0126	-0.0683	0.0000	1.0000
INDEP	-0.3733	-0.1337	0.3720	0.5234	0.3595	0.5697	0.0000

Source : Estimate with stata software

According to **Table 6**, the main results obtained from the final estimation of two models (after correcting for heteroscedasticity and auto-correlation errors) can be interpreted as follows:

The board size has a negative and insignificant effect on bank financial performance. Hence, the validation of Hypothesis 1. This result is also confirmed by Hermalin et al, (2003); Fourgon et al. (2002).

Regarding the variable relating to the percentage of directors representing the State, its impact is positive and statistically significant on the return on assets and positive and not significant on the return on equity. So, hypothesis 4 is accepted.

As for the percentage of independent and foreign directors on the board, this variable is eliminated from our estimate because of a collinearity problem with other explanatory variables. The same reasoning is applied to the duality variable (it is eliminated).

For the macroeconomic variable, the results of our regression show that inflation has a negative and insignificant effect on bank financial performance. Thus, the validation of Hypothesis 5. This result is confirmed by Sufian and Habibullah (2009) who have shown that inflation has a negative relationship with banking performance.

About the bank size variable, it shows a positive and statistically insignificant effect on ROA, and a negative and insignificant impact on ROE. Large banks are performing well. This result implies that large banks have the capacity to employ better banking governance strategies.

5. Conclusion and implications for policy

The objective of this work is to study the effect of the characteristics of the board of directors on the financial performance of Tunisian commercial banks. This impact was analyzed using econometric modeling in panel data over the period 2000 to 2015.

The results of this study indicate that variables representing duality and independent directors are eliminated from our estimate due to a collinearity problem with other explanatory variables.

Regarding the size of the board and inflation variables, they negatively affect banking performance. As for the variable relating to the percentage of directors representing the State, it has a positive and statistically significant impact on the return on assets and positive and not significant relation on the return on equity. Finally, for the variable relating to the size of the bank, it exhibits a positive and statistically insignificant effect on the return on assets (ROA), and a negative and insignificant impact on the return on equity (ROE).

It should be noted that the impact of the characteristics of the board of directors on the financial performance of Tunisian commercial banks gives inconclusive results. This can be explained by the existence of other internal governance mechanisms with the board of directors such as the ownership structure, the audit committee... and external governance mechanisms that can influence banking performance, or other more relevant characteristics relating to the board of directors are not taken into account in the analysis, such as gender, frequency of board meetings, remuneration of its members, expertise and diversity of board members, ...etc.

This study can be a guide to help Banks and others financial institutions on compliance with good corporate governance practices. A failure of governance in Banking and financial institutions is one of the causes of reputable business bankruptcy.

However, this work is not free from certain limitations. We only studied some governance variables. The inclusion of more governance factors with a longer time may ameliorate our results. Moreover, a study on the link between corporate governance and performance of different types of banks in Tunisia may add value to the literature of banks firms.

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