

**ISSN:** 2617-6548

URL: www.ijirss.com



# Corporate governance mechanisms and financial performance of banks: Empirical evidence on the multi-theory perspective in corporate governance

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#### **Abstract**

This study aims to examine the impact of corporate governance on the financial performance of banks in the MENA region. The study uses a sample of 37 banks listed on the stock exchanges of four countries in the MENA region, namely Jordan, Palestine, Qatar, and Kuwait, from 2016 to 2020. This study employed static panel estimation methods for analysis purposes. The main findings of this study show that board size, CEO duality, and transparency and disclosure have a positive effect on banks' financial performance, while the presence of women directors on the board and insider ownership has a negative impact on banks' financial performance. The findings of this study support the multi-theory perspective in corporate governance. Furthermore, it can help managers, regulators, and policymakers focus on the areas of corporate governance that improve banks' financial performance.

Keywords: Corporate governance, Financial performance, MENA.

DOI: 10.53894/ijirss.v8i2.5396

Funding: This study received no specific financial support.

History: Received: 4 February 2025 / Revised: 7 March 2025 / Accepted: 13 March 2025 / Published: 14 March 2025

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**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Publisher: Innovative Research Publishing

#### 1. Introduction

Financial intermediaries known as banks are those that lend to deficit spending units and borrow funds from surplus spending units [1]. Banks play a fundamental role in determining not only the size of economic development but also the social and political development of a country, so the overall performance of the bank is evaluated by many stakeholders, including investors and the government [2].

However, the Middle East and North Africa (MENA) region faces many political and economic challenges. The growing political turmoil in the region, along with the turbulent fluctuations in the global oil market, increases the necessity for economic and governance reforms in the region [3, 4]. In this context, previous research has shed much light on the essential role of the banking system in achieving economic growth in MENA countries [5-7]. The soundness of a country's banking system also impacts the stability of its economy. The economic sector will not grow if there is no banking institution capable of receiving, handling, and directing public funds [8]. Therefore, analyzing the factors that may determine bank financial performance has become an important phenomenon in the region [9, 10]. In this regard, prior studies have examined corporate governance practices as a significant factor influencing a bank's financial performance [11-13].

The banking sector dominates the financial system in the MENA region, with the banking sector accounting for half of the market capitalization in the region due to its high contribution to the GDP of MENA countries. This is also attributable to the mandatory listing of banks by law in some MENA countries [14]. Therefore, banks are expected to become engines of economic growth, which requires good corporate governance practices in the context of the MENA region. From an agency theory perspective, Millstein [15] defined corporate governance as the mechanism by which directors' control is monitored and maintained to fairly promote company profits and shareholder gains.

The term "corporate governance" has become more popular as the reputation of active markets in the past decades has been tarnished by various corporate scandals involving Enron, Banco Espirito Santo, and Satyam Computers, to name a few [16]. Moreover, the 2007/2008 global financial crisis was the most severe since the Great Depression of the 1930s, during which some of the world's most popular financial institutions collapsed [17]. The 2007/2008 financial crisis sparked a keen interest in corporate governance (CG).

In accordance with global development, in the past decade, the MENA region has witnessed a key development in corporate governance, with most MENA countries enacting codes of corporate governance principles [18, 19]. Despite this development, the region still faces many challenges that stand in the way of entrenching corporate governance principles. The need for a more transparent corporate culture, the low representation of women in senior management, and concentrated ownership by families and the state are the three primary issues facing corporate governance in the MENA area, according to the OECD [20]. Apart from these difficulties, it appears that not all companies are dedicated to implementing MENA corporate governance codes [21].

Using information from 37 banks listed on the stock exchanges of four countries in the MENA region during 2016-2020, we examine the relationship between corporate governance mechanisms and the financial performance of banks. The main findings of this study show that board size, CEO duality, and transparency and disclosure reflect a positive effect on financial performance, while the presence of women directors on the board and insider ownership shows a negative impact on financial performance as measured by the return on equity (ROE).

This study provides several contributions. First, this study addresses a wide range of corporate governance mechanisms, including board structure, ownership structure, and transparency and disclosure, taking into account corporate governance problems facing the region. Second, the sample of this study considers the banking industry of MENA countries with different economic potentials that differ mainly due to oil rents Ghosh [22], which in turn adds value to this research. Third, the findings of this study support the multi-theory perspective on corporate governance in that managers could be good stewards or opportunists. Moreover, the findings can help managers, regulators, and policymakers to focus on the areas of corporate governance that improve banks' financial performance.

The structure of this paper is as follows: The second section explores the theoretical background and outlines the hypotheses. The third section details the research methodology. The fourth section presents the findings and discussion. Finally, the paper concludes with key insights, implications, limitations, and suggestions for future research.

#### 2. Theoretical Framework and Hypotheses Formation

## 2.1. Theoretical Framework

This section delves into important theories related to corporate governance, such as resource dependence theory, agency theory, transaction cost theory, and stewardship theory. The aim is to illustrate how corporate governance has evolved from a theoretical standpoint.

### 2.1.1. Resource Dependence Theory

Resource-dependence theory assumes that corporate success depends on the corporate power to obtain the required and scarce resources that are necessary for the organization to continue in its operation [23]. In other words, a company's performance depends on the efficiency of the company's network or communication with different parties that facilitate the company's access to various resources [24]. It suggests that the key factor in this fundamental role is the board of directors. The board of directors plays a pivotal role in acquiring diverse resources, such as information, skills, potential employees, access to appropriate suppliers, and social and legal groups, using their connections to the external environment that facilitate this organizational role [25]. The resource-dependence perspective on corporate governance directs attention to board characteristics, including skills, education, size, diversity, independence, etc., as crucial elements for securing essential resources, ensuring company success, and achieving superior performance [26].

## 2.1.2. Agency Theory

Agency theory is an attempt to explain the agency relationship, in which one party (the principals) delegated a task to another (the agents), who carried it out [27]. It focuses on the key problem of separating ownership and management, which is called the agency problem [28]. From the agency theory perspective, agency problems may arise due to the principal-agent

conflict of interest. It fully agrees with the view that the separation of ownership from managerial control leads to managerial opportunism [29, 30]. While the principal (shareholders) is unable or it is expensive to verify the agent's (managers) behavior [31]. To reduce agency problems, corporate governance (CG) principles are used as a management mechanism that governs the relationship between directors and shareholders [32].

#### 2.1.3. Stewardship Theory

In direct contrast to agency theory, stewardship theory focuses on non-economic motives for managerial behavior [16]. In fact, whereas agency theory relied on economic motives to explain the relationships within the company, stewardship theory considers a group of non-economic motives for managerial behavior, including the need for recognition, achievement, and self-esteem achieved through successful performance and ethical work [33]. In this regard, stewardship theorists portray managers as good stewards who work diligently to achieve high levels of profits and shareholder returns. Therefore, empowering managers will maximize financial performance [34]. Thus, the purpose of corporate governance under stewardship theory is not to focus on motivating the CEO but rather on strengthening facilitative and empowering structures [28].

#### 2.1.4. Stakeholder Theory

Stakeholder theory in corporate governance extends the conventional perspective that companies are only responsible to shareholders by acknowledging the interests of various stakeholders, such as staff, clients, regulators, and society as a whole [35, 36]. This theory posits that firms exist within an extensive social and economic context, wherein fulfilling stakeholder expectations enhances long-term profitability and sustainability [37]. The growing impact of non-governmental organizations (NGOs), activists, and regulatory authorities has intensified the need for ethical company conduct and corporate social responsibility [38]. Research suggests that firms that effectively engage with stakeholders can enhance their reputation, reduce risks, and improve financial performance [37]. Furthermore, legislative advancements in numerous nations have expanded the scope of fiduciary duty beyond shareholders, emphasizing the necessity for governance frameworks that encompass the interests of various stakeholders [36].

#### 2.1.5. The Multi-Theory Perspective in Corporate Governance

The multi-theory perspective in corporate governance offers an expansive framework for organizational management, overcoming the constraints of a single theoretical perspective, the "one size fits all approach" [32, 39]. Although agency theory emphasizes the interaction between shareholders and management, it inadequately addresses other significant issues that affect governance. Stakeholder theory broadens this perspective by acknowledging that corporations are responsible not only to shareholders but also to employees, consumers, regulators, and society [36]. This viewpoint corresponds with the increasing significance of corporate social responsibility and ethical business practices [37]. Resource dependence theory emphasizes the significance of external factors and posits that organizations require robust leadership and diverse boards to adeptly navigate external hazards and obtain essential resources [23, 25]. Stewardship theory posits that managers frequently operate in the company's best interest, particularly in organizations characterized by robust ethical cultures and professional ideals [28]. In contrast to agency theory, which posits conflicts between managers and shareholders, stewardship theory proposes that trust and collaboration can enhance governance [36]. A multi-theory approach, by integrating various theories, offers a more equitable and pragmatic framework for corporate governance, aiding organizations in enhancing accountability, stakeholder involvement, and long-term sustainability [40].

## 2.2. Corporate Governance and Financial Performance

Over the past decade, banks corporate governance has received increasing interest in both developing and developed countries, as it can be considered a key driver of banks' financial performance [41, 42]. From the point of view of agency theory, the opportunistic behavior of bank managers depends on the corporate governance structure [43]. Therefore, a firm with a good corporate governance structure can enhance the interests of shareholders, reduce agency problems, and achieve better financial performance [44]. In this respect, it is concluded that a good corporate governance structure is positively associated with financial performance.

## 2.2.1. Board Structure and Financial Performance

Corporate boards are responsible for the company's financial strategy and management control, so the company's profitability can be affected by the board's structure [45]. Moreover, researchers argued that the effectiveness of the boards depends on their structure, composition, and characteristics [46]. Thus, previous research has investigated the effects of different aspects of board structure, including board size, board gender diversity, and CEO power. Researchers stated that the board's size is an important element of board structure that promotes the optimal achievement of corporate governance practices [47]. The larger number of board members leads to a diverse set of knowledge, experience, and recourses, which contribute to improving the quality of decisions [25]. The high quality of decisions affects the company's performance and governance practices, as well as building a good relationship between the company and its stakeholders [48]. Thus, empirical research has found that a larger number of directors has a positive effect on financial performance [49, 50].

 $H_{1a}$ : The board size has a positive impact on the financial performance of banks in MENA region.

Female participation in top management is another important feature of the board structure. This interest comes as a result of the spread of regulations and practices in most developed countries that recommend increasing the representation of women on boards of directors to the extent of parity [51]. Researchers claimed that gender diversity promotes innovation and

creativity [52]. Moreover, it can affect the perceptions of outside agents in that the board of directors operates more effectively [53]. However, empirical findings on the relationship between female directors and financial performance are very confusing, with some research finding positive [54, 55]. Negative [56, 57]. And mixed results in terms of different financial performance proxies [58].

Researchers explained that the diversity in these findings relates to various factors, including cultural contexts (Nekhili, et al. [59]), institutional contexts (Post and Byron [60]), business complexity (Foss, et al. [61]), and so on. According to Allison, et al. [62], a study covering a wide range of developing countries describes female leadership as a collaborative approach that offers some benefits but also has some costs. These costs are associated with an increased risk of oversharing sensitive information, the cost of time in the decision-making process, and gaining the team's trust. In addition, groupthink may influence or marginalize experts' opinions, which negatively affects the company's performance. Moreover, in the case of developing countries, gender inequality in terms of other aspects such as education and freedom, which are directly related to the ability of women to reach or successfully manage senior management positions, is a more serious concern in these countries [63].

 $H_{1b}$ : The proportion of women directors on the boards has a negative impact on the financial performance of banks in MENA region.

CEO duality takes place when one person holds both the CEO and the Chairman positions at the same time [64, 65]. On one hand, CEO duality may increase agency conflict and, in some cases, increase the opportunistic behavior of CEOs due to concentrated managerial power [66]. Therefore, CEO duality may negatively affect financial performance [67]. On the other hand, under duality leadership, CEOs may consider firm success a personal challenge; furthermore, it may support the decision-making process, particularly under urgent circumstances [68]. In this regard, previous empirical research has found a positive association between CEO duality and financial performance [65, 69].

H<sub>2c</sub>: There is a positive relationship between CEO duality and financial performance of banks in MENA region.

#### 2.2.2. Ownership Structure and Financial Performance

The corporate ownership structure, in the form of ownership concentration and insider ownership, is extremely important in determining managers-owners relationships. However, the concentration of ownership can lead to various consequences. First, shareholders in companies with dispersed equity ownership are expected to have low incentives and less power to monitor managerial behavior [70]. As a result, the expropriation of property is anticipated by the managers [71]. Therefore, the increase in the concentration of ownership provides better control over the managers and reduces agency problems, thereby enhancing financial performance [72]. From a different point of view, some researchers argue that large shareholding also affects the rights of minority owners and thus harms the firm's financial performance [73]. In the case of developing countries, where stock markets are weak, a higher concentration of ownership is more evident [74]. In this regard, previous studies in the context of developing countries found a positive association between ownership concentration and corporate performance, which is explained by the fact that a concentrated ownership structure protects the interests of investors and other stakeholders [74-76].

 $H_{2a}$ : The concentration of ownership has a positive impact on the financial performance of banks in MENA region.

Insider or managerial ownership refers to the shares held by executive directors. Managerial ownership may lead to different managerial behaviors. Firstly, managerial (insider) ownership can reduce agency problems due to the alignment of interests between insider ownership and the firm's management [70]. Therefore, insider ownership was found to promote financial performance [77]. On the other hand, Stulz [78] assumed that a high concentration of insider ownership might lead to managerial entrenchment. Morck, et al. [79] demonstrated that the impact of insider ownership on firm performance differs according to the intensity of insider ownership concentration, where a positive relationship was found at low levels of insider ownership concentration. While a negative relationship was observed with respect to the higher level of insider ownership concentration. They explained the negative findings based on the entrenchment hypothesis that when insider ownership reaches a certain level, the conflict of interest between management and disbursed shareholders increases and thus influences firm performance and value. In the MENA region, empirical research has confirmed that a high level of internal ownership concentration exists and negatively affects company performance as measured by return on equity [80].

 $H_{2b}$ : High concentration of insider ownership negatively impacts the financial performance of banks in MENA region. 2.2.3. Transparency and Disclosure and Financial Performance

Corporate transparency and the disclosure of information are important features of the corporate governance mechanism, as they are key factors in determining the quality of corporate governance [81, 82]. Particularly in the context of the MENA region, where debt financing dominates the corporate finance landscape, transparency and disclosure are key components of the region's corporate governance regime that improve companies' access to equity financing and attract investors. Equity financing can offer lower financing costs and risks and enable the company to access diversified sources of capital, which in turn provides a particular advantage to the company and enhances firm performance [20]. Moreover, Chi and Lin [83] argued that conflict of interest issues and agency problems arise from information asymmetry between shareholders and managers, which affects financial performance. Additionally, empirical research has found a positive association between transparency and disclosure and financial performance [84, 85].

 $H_3$ : There is a positive relationship between transparency and disclosure and the financial performance of banks in MENA region.

#### 3. Materials and Methods

#### 3.1. Sample and Data

This study uses the panel data of 37 banks from four countries in the MENA region, distributed as follows: 6 Palestinian banks, 15 Jordanian banks, 8 Qatari banks, and 8 Kuwaiti banks during the period 2016-2020, which includes all local banks compatible with the purposes of the study. As to the selection of countries, we considered two groups of MENA countries based on economic disparity, namely the oil-exporting Gulf States (e.g., Qatar and Kuwait) and the non-oil-exporting countries (e.g., Jordan and Palestine) [22]. However, this study relied on secondary data sources for data collection. Data on all the study variables were collected from the banks' annual reports.

#### 3.2. Variables Measurements

The dependent variable for this study is the bank's financial performance. The current study used ROE as a proxy for financial performance. ROE is measured as the ratio of net income before tax to the bank's total equity. In this regard, many previous studies have used return on equity to indicate a bank's financial performance [11, 86, 87].

The independent variables of this study are corporate governance mechanisms in terms of the following aspects: board of directors' structure, ownership structure, and transparency and disclosure. Board structure includes three variables: Board size is measured as the number of directors on the board [88]. Gender is measured as the proportion of female directors [89, 90]. CEO duality is a dummy variable that takes the value of 1 if the same person holds the position of CEO and chairperson and 0 if otherwise [48, 67].

Regarding the ownership structure, ownership concentration is measured as the ratio of the number of shares owned by the top three shareholders to the total number of outstanding shares of the bank [91]. For internal ownership, we used the proportion of shares owned by the company directors to the total number of outstanding shares of the bank [92].

As to transparency and disclosure (TD), following the approach outlined by Al-ahdal, et al. [93], we employed the manual content analysis technique to derive a quantitative measure for TD as indicated in the bank's annual reports. This involved using a checklist comprising 13 items, selected based on governance requirements and insights from previous studies that examined TD in the MENA region [93, 94]. As detailed in Appendix 1, each item was scored 1 if the company matched the item and 0 if it did not, with a maximum possible score of 13 if the company complied with all examined TD items. Subsequently, an unweighted index for TD was calculated as the ratio of the actual scores awarded to the total number of checklist items.

Finally, this study used two control variables: firm size and leverage. We use firm size as different firm sizes can affect firm performance [95]. Firm size is measured as a logarithm number of total assets. Leverage refers to the company's capital structure. Previous research argued that firm financial performance may vary due to different capital structures [96]. Leverage is measured as the ratio of total debt to total equity (see Appendix 2: Measurement of variables).

#### 3.3. Empirical Models

This study aims to investigate the relationship between corporate governance mechanisms and banks' financial performance, measured by return on equity (ROE). In line with previous research [95, 97, 98], we applied three static panel approaches: pooled ordinary least squares (POLS), fixed effects model (FEM), and random effects model (REM). POLS estimates regression with a single intercept and slope for all cross-sectional units (i.e., banks in our case), thus neglecting individual heterogeneity. On the other hand, the FEM estimates common intercepts and slopes but with individual-specific intercepts (i.e., bank). The FEM can control for cross-sectional and time effects through the introduction of dummy variables. The rationale behind using FEM is that it controls for all possible unobserved characteristics of each bank in the study. The REM assumes that the variation between individuals is random and not correlated with the explanatory variables. Furthermore, REM assumes the model to be time-invariant, implying that the error term of the current period is not correlated with the past or future.

$$FP_{\mathrm{it}} = \beta_0 + \beta_1 BS_{\mathrm{it}} + \beta_2 G_{\mathrm{it}} + \beta_3 CEO_{\mathrm{it}} + \beta_4 OC_{\mathrm{it}} + \beta_5 IO_{\mathrm{it}} + \beta_6 TD_{\mathrm{it}} + \beta_7 Size_{\mathrm{it}} + \beta_8 FLV_{\mathrm{it}} + \varepsilon it$$

Where

FPit denotes financial performance measured as return on equity in bank i and time t. BSit represents board size in the bank i at time t. Git is the gender diversity in the bank i at time t. CEOit is the CEO duality in the bank i at time t. OCit denotes the ownership concentration in the bank i at time t. IOit is the insider ownership in the bank i at time t. TDit represents the transparency and disclosure index in the bank i at time t. Size it denotes the bank size of the bank i at time t. FLit represents financial leverage in the bank i at time t.  $\beta_0$  is the intercept of the equation, and  $\beta_1 + \dots + \beta_8$  is the coefficients of the independent variables. Finally,  $\epsilon$  it is the error term.

#### 4. Results and Discussion

#### 4.1. Descriptive Statistics and Correlation Matrix

Table 1 shows the descriptive statistics of the study's explanatory variables. Descriptive statistics can provide an overall assessment of corporate governance practices in the banking sector in the MENA region concerning study variables. Table 1 shows that the mean value and the standard deviation of board size are 10.48 and 1.71, respectively. The mean value and the standard deviation of female directors as a proportion of total board members (Gender) are 0.058 and 0.08, respectively, indicating lower female participation in senior management. The mean value and the standard deviation of the CEO are 0.022 and 0.146. This means that the sampled banks show a high commitment to the principles of corporate governance regarding the separation of the functions of CEO and Chairperson of the Board.

Regarding the ownership structure, ownership concentration has a mean value and standard deviation of 42.7 percent and 25 percent, respectively, while insider ownership has a mean value of 28.6 percent and a standard deviation of 25.1 percent. These findings indicate the high concentration of ownership in the hands of large shareholders and insider shareholders. Finally, the transparency and disclosure index has a mean value of 0.751 and a standard deviation of 0.266, indicating that, on average, 75.1 percent of the 13 examined items of the TD index are reported. These findings are in line with previous research that has shown that the concentration of ownership, lack of a transparent business culture, and low participation of women in senior management are the underlying features of MENA-listed firms [20].

**Table 1.** Descriptive Statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max	
BS	184	10.481	1.71	6	15	
G	184	0.058	0.08	0	0.333	
CEO	185	0.022	0.146	0	1	
OC	185	0.427	0.25	0.025	0.955	
IO	185	0.286	0.251	0	0.897	
TD	185	0.751	0.266	0	1	
Size	185	9.803	0.617	8.547	11.442	
FLV	185	5.711	3.212	0.164	12.401	

To detect any possible multicollinearity between the independent variables, we performed a pairwise correlation analysis. Table 2 shows that multicollinearity is not a problem in this study, as all variables showed a low level of correlation, less than 0.80 [99].

**Table 2.** Pairwise Correlation.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) BS	1.000							
(2) G	0.473	1.000						
(3) CEO	0.023	0.023	1.000					
(4) OC	0.086	0.050	-0.081	1.000				
(5) IO	0.329	0.106	-0.036	0.413	1.000			
(6) TD	0.749	0.426	0.129	0.179	0.405	1.000		
(7) Size	-0.424	-0.333	-0.055	-0.271	-0.544	-0.479	1.000	
(8) FLV	0.194	0.326	0.066	-0.021	-0.239	0.143	0.098	1.000

#### 4.2. Regression Results

Table 3 shows regression results on the relationship between corporate governance mechanisms and banks' financial performance, measured by ROE. The financial performance regression model is estimated using pooled ordinary least squares (POLS), fixed effect model (FEM), and random effect model (REM). In the first stage, the Breusch and Pagan LM test compared the better model between the POLS and REM, and the result was statistically significant, indicating that the POLS model is rejected and the REM is better in this comparison. Subsequently, the Hausman test estimates the better model between FEM and REM. The result was statistically significant, indicating that the REM is rejected and the FEM is the preferred model. Hence, the FEM is used in this paper to analyze the findings.

The results show that board size has a significant positive impact on banks' financial performance, at the 10 percent level of significance. These findings indicate that a larger board size can bring a diverse set of knowledge and experience that in turn promotes financial performance [25, 48]. These findings meet our research hypothesis (H1a) and confirm the results of previous research [49, 50].

Further results show that the higher proportion of female directors on boards negatively affects banks' financial performance, at 1 percent level of significance. Previous research argued that the various outcomes of the relationship between board gender diversity and financial performance are related to the influence of country culture [100]. From the point of view of institutional theory, culture is one of the institutional factors that influence a company's behavior [101]. However, the studies of Adams and Ferreira [56] and Ahern and Dittmar [57] provide empirical evidence of the negative relationship between the presence of women on boards and financial performance. Hence, these results are consistent with the research hypothesis (H1b).

CEO duality shows a positive and significant impact on banks' financial performance at 5 percent level of significance. These findings are consistent with the stewardship theory that supports the CEO duality assumption, as it can provide clear leadership and strategy in the company and improve decision-making, thus enhancing the firm's financial performance [102, 103]. Moreover, this result supports our research hypothesis (H1c) and confirms the positive relationship between CEO duality and financial performance as found by many previous empirical studies [65, 69, 104].

Furthermore, the results show that insider ownership negatively affects banks' financial performance at 1 percent level of significance. These findings are consistent with the assumption that a high concentration of insider ownership leads to management entrenchment [78, 79]. The findings support our research hypothesis (H2b); moreover, this finding is in line

with the findings of previous empirical research [105, 106]. Further results show that transparency and disclosure has a positive and significant effect on banks' financial performance at 1 percent level of significance. Researchers pointed out that the quality of a firm's transparency and disclosure can enhance financial performance by minimizing the conflict of interests between owners and managers [81, 82]. In the same vein, Rawal, et al. [107] demonstrated that transparency and disclosure are two factors in a bank that can help to create a better image in the eyes of investors and other stakeholders. In this regard, many empirical studies found that transparency and disclosure help the company achieve better financial performance [84, 85, 108]. Thus, the results support our research hypothesis (H3). Finally, no significant relationship was found between ownership concentration and financial performance.

Regarding the results of the control variables, firm size reflects a positive and significant impact on banks' financial performance at the 1 percent level of significance. As expected, larger firms enjoy greater economies of scale and are more likely to have efficient reporting systems and governance practices [77]. Financial leverage has a positive and significant effect on banks' financial performance at the 1 percent significance level. Previous research has argued that more leverage increases financial performance as a result of gains earned by using these funds [109].

Table 3.
Regression Results

Variables	POLS	FEM	REM
BS	0.0063**	0.0043*	0.0063**
	(0.0028)	(0.0025)	(0.0028)
G	-0.1136**	-0.1089***	-0.1136**
	(0.0458)	(0.0402)	(0.0458)
CEO	0.0614***	0.0438**	0.0614***
	(0.0212)	(0.0189)	(0.0212)
OC	0.0166	0.0126	0.0166
	(0.0135)	(0.0118)	(0.0135)
IO	-0.0429***	-0.0447***	-0.0429***
	(0.0164)	(0.0145)	(0.0028) -0.1136** (0.0458) 0.0614*** (0.0212) 0.0166 (0.0135) -0.0429*** (0.0164) 0.0648*** (0.0192) 0.0092*** (0.0011) 0.0225*** (0.0064)
TD	0.0648***	0.0858***	0.0648***
	(0.0192)	(0.0171)	(0.0192)
FL	0.0092***	0.0095***	0.0092***
	(0.0011)	(0.0009)	(0.0011)
FS	0.0225***	0.0253***	0.0225***
	(0.0064)	(0.0057)	(0.0064)
Constant	-0.3029***	-0.3243***	-0.3029***
	(0.0728)	(0.0641)	(0.0728)
Observations	184	184	184
R-squared	0.5280	0.6141	0.5280
Number of Years		5	5
Breusch-Pagan LM test (POLS vs. REM)			20.02***
			(0.000)
Hausman test (FEM vs. REM)		72.34***	
		(0.000)	

Note: Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## 5. Conclusion

The study examines the impact of corporate governance mechanisms on the financial performance of banks listed on the stock exchanges of four countries in the MENA region. The current study found that board size, CEO duality, and transparency and disclosure reflect a positive effect on banks' financial performance, while the presence of women directors on the board and internal ownership shows a negative impact on banks' financial performance.

The basic view held by agency theory on corporate governance is that in any given situation, managers are opportunistic players who maximize their utility and focus on extrinsic rewards rather than maximizing shareholder returns unless appropriate governance structures are put in place to protect shareholder interests [110, 111]. In this particular case, our empirical results support this argument in terms of insider ownership. In addition, the findings, especially regarding board size, support the resource dependence theory, which perceives firms' directors as resource access facilitators; thus, firms' performance relies on their directors' ability to obtain various resources [25]. On the contrary, our findings regarding CEO duality are consistent with the arguments of stewardship theorists. In direct contrast to agency theorists, stewardship theorists portray managers as good stewards who will work diligently to achieve high levels of profits and shareholder returns. Finally, the results of TD align with stakeholder theory, which recognizes that companies are accountable to various stakeholder groups in society. However, the study's overall results support the multi-theory perspective in corporate governance. Scholars of this approach hypothesize that the issue of corporate governance is too complicated to be addressed from the perspective of a single theory [33, 112].

These findings of this study provide important implications for the enhancement of financial performance among banks in the MENA region. The results can help managers and policymakers direct their efforts towards governance mechanisms (board size, CEO duality, and transparency and disclosure) that enhance banks' financial performance, as the results revealed that such aspects of corporate governance lead to a higher level of financial performance.

Conversely, the study reveals that the presence of women directors and internal ownership is negatively associated with a bank's financial performance. These findings imply that managers, policymakers, and regulatory bodies should establish and adopt corporate governance guidelines that clearly define the role of board gender diversity. Board gender diversity is not an end in itself; rather, it should consider the effective employment of women directors. Thus, the inclusion of women directors should be accompanied by strategies that effectively harness their contributions. Additionally, they should advocate for a balanced ownership structure in order to ultimately enhance bank financial performance.

This study faced some limitations, which in turn provide avenues for future research. First, this study faced some limitations regarding data availability. The study sample includes banks from only four countries in the MENA region. Missing data is the main issue that this study faced in expanding the study sample. In addition, all the data used in this study were collected manually from the companies' annual reports. These concerns limited the authors' ability to consider banks from other countries and to examine other variables that may influence a bank's performance. Therefore, the results of this study cannot be generalized to other sectors or countries in the region. It would be interesting to conduct further research to examine these relationships in the case of other sectors and other countries in the MENA region.

Second, this study evaluates banks' performance according to accounting basis, using the ROE ratio; further research can include more measures of banks' financial performance, such as return on assets (ROA), net interest margin, and Tobin's Q ratio. This study investigates the relationship between corporate governance and banks' financial performance. However, some other determinants that may be important to banks' financial performance, such as credit risk, liquidity (i.e., bank-specific factors), listing status, type of audit firm, firm age, corporate social responsibility (CSR), and financial inclusion, could be another interesting area of research. In addition, it would be interesting for further research to investigate the impact of cultural values on the relationship between corporate governance mechanisms and banks' financial performance.

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#### Appendix 1.

TD item	s checklist.						
#	Transparency and Disclosure Index (TD)						
1	Firms have an official website to disclose their financial information, financial statements, and annual financial						
	reports.						
2	The firm's objective/vision is disclosed.						
3	The firm reports follow accounting principles and/or international financial accounting standards (IFRS).						
4	The firm has published an annual corporate governance report.						
5	Annual reports are available to the public / availability of the annual report.						
6	The firm disclosed related party transactions.						
7	Firm reports provide a detailed description of the firm/corporate social responsibility.						
8	Firms disclose annual reports in the English language.						
9	The credit rating details are revealed in firm annual reports.						
10	Penalties, sanctions, and lawsuits against or by the firm are revealed.						
11	Information about risk management is included in the annual report.						
12	Meeting information in detail is available in the corporate annual report.						
13	Annual reports include stock price information.						

Appendix 2.
Measurement of variables.

#	Construct	Variable	Symbol	Definition	Source of Information	
1	Financial Performance (FP)	Return on Equity	ROE	Net income before tax to total equity.	Firm's report	annual
2	Corporate Governance Mechanisms (CG)	Board Size	BS	Number of directors on the board.	Firm's report	annual
		Gender	G	The proportion of female directors to the total number of directors.	Firm's report	annual
		CEO Duality	CEO	A variable takes the value of 1 if the same person occupied both the CEO and the Chairman positions, and 0 if otherwise.	Firm's report	annual
		Ownership concentration	OC	Top three shareholders to the total number of shares outstanding.	Firm's report	annual
		Insider (directors) ownership	Ю	Management ownership of the total number of shares outstanding.	Firm's report	annual
		Transparency and disclosure index	TD	The index includes 13 items related to transparency and disclosure aspects.	Firm's report	annual
3	Control Variables	Firm Size	Size	Log of a firm's total assets	Firm's report	annual
	Control Variables	Financial Leverage	FLV	Total liabilities to total equity.	Firm's report	annual