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The Influence of Board Ownership on Bank Performance: Evidence from Saudi Arabia

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Abstract

The current study aims to investigate the influence of different categories of ownership held by different types of board members on bank performance. The study uses a sample of Saudi listed banks for the period from 2011 to 2018. The results of the panel data analysis using firm fixed-effects regression model indicate that bank performance is significantly and positively affected by the chairman ownership and the CEO ownership. However, board independent members' ownership has a negative influence on bank performance. While non-executive board members' ownership and family board members have an insignificant impact on bank performance. Control variables, including board size, non-executive board members, government ownership, leverage, and bank size are significantly associated with bank performance. Overall, the results indicate that Saudi bank performance is higher in smaller banks that have smaller boards with lower non-executive members, lower portion of shares held by independent board members, higher portion of shares held by the chairman, CEO, and government, and higher leverage. The results of this study provide important implications for regulatory authorities and market participants in Saudi Arabia and countries with ownership concentration to understand the actual role of different categories of board ownership on firm performance in addition to optimize board ownership.

Keywords: Board Ownership, Chairman Ownership, CEO Ownership, Bank Performance, Saudi Arabia

JEL Classification Code: G32, G21, L25

1. Introduction

The association between ownership structure and firm performance has become an issue of interest and attracted a considerable attention among academics, regulatory bodies, and market participants. Agency theory suggests that the type of the company owners and the size of their ownership could significantly affect agency conflicts, and thus, firm performance.

Haniffa and Hudaib (2006) argue that there are various internal and external governance mechanisms have been suggested, such as board composition, inside ownership or board ownership and outside ownership as means to control agency conflicts and mitigate agency costs.

Accounting theories, including agency theory and entrenchment theory highlight the critical role of inside ownership or board members' ownership such as executive, non-executive, and independent board members' ownership, chairman ownership, CEO ownership, and family board members' ownership. These theories suggest that such types of board ownership can act as a double-edged sword in terms of their influence on agency costs and firm performance.

Board members' ownership could reduce agency conflicts as a result of the alignment of interests between board members and owners. However, higher levels of board ownership could create a state of entrenchment, and thus, exacerbate agency conflicts by encouraging controlling shareholders to act opportunistically to expropriate wealth from other shareholders (Morck et al., 1988; Shleifer & Vishny, 1997).

Despite the extensive research on the relationship between ownership structure and firm performance, most efforts focused on the impact of outside ownership such as

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government, institutional, and foreign ownership on firm performance (e.g., Ehrhardt et al., 2006; Hu & Izumida, 2008; Kao et al., 2019), and less attention has been paid to the potential role of inside ownership, in general, and board ownership, in specific, such as the chairman, CEO, independent, non-executive, and executive board members' ownership on bank performance. Moreover, most research on the influence of board ownership on firm performance is mostly conducted in developed countries and the evidence is even inconclusive (e.g., Bhagat & Bolton, 2013; Krivogorsky, 2006; Merendino, & Melville, 2019; Shan, 2019). Furthermore, little research has been directed at emerging markets such as the Gulf Cooperation Council (GCC), in general, and Saudi Arabia, in particular.

In addition, prior work on the relationship between board ownership and firm performance has either addressed a specific type of board ownership or use a single scale of different types of ownership related to board members and executive managers (e.g., Al Farooque et al., 2020; Amran et al., 2008; Berke-Berga et al., 2017; Bhagat & Bolton, 2013; Krivogorsky, 2006; Shan, 2019; Tleubayev et al., 2020) instead of using an accurate measure representing each type of board members' ownership Therefore, the current study aims to narrow the gap in literature by investigating the potential impact of different types of ownership related to board members, including independent board members' ownership, non-executive board members' ownership, chairman ownership, CEO ownership, and family board members on Saudi bank performance.

The focus on board ownership in Saudi listed banks is motivated by the following reasons. First, this study is motivated by the call of Almoneef and Samontaray (2019), Habtoor (2020), Habtoor (2021), and Leung et al. (2014) for further research on the potential role of different mechanisms of corporate governance and ownership structure on bank performance in Saudi Arabia and GCC countries. Second, accounting theories, including agency theory and entrenchment theory highlight the critical effect of board members' ownership as a double-edged sword in terms of their influence on agency costs and firm performance. Third, Saudi firm ownership is highly concentrated (Habtoor, 2020; Habtoor et al., 2019b) with different types of inside and outside controlling shareholders who have potential mixed effects on agency costs and firm performance (Habtoor et al., 2019a). Fourth, ownership structure and board ownership, in specific, and its impact on governance and performance is important in banking industry due to the unique role plied by banks in the overall economy and in its credit provision and liquidity functions (Abraham, 2013).

The current study contributes to the literature on the impact of ownership structure, in general, and board ownership, in particular, on firm performance and provides important practical implications as follows. First, this study attempts to narrow the gap in literature on the influence of board ownership on firm performance by investigating the potential role of different types of ownership held by board members on Saudi bank performance. Second, this study extent the existing literature by the focus on an emerging and developing country with different social, economic, legal, and institutional contexts from developed countries. Third, the results of this study provide a comprehensive view of the role of different types of board ownership on Saudi bank performance, which have not been previously documented. Finally, the results of the current study have important implications for policy makers, regulatory authorities, and market participants in Saudi Arabia and countries with high concentrated ownership to understand the potential role of different types of board ownership on firm performance, and to optimize board ownership and improve firm performance.

The remainder of this study is structured as follows. Section 2 presents the literature review and hypotheses development. Section 3 explains the research methodology. Section 4 discusses the main results of the study. Conclusions, limitations, and future research are presented in Section 5.

2. Literature Review and Hypothesis Development

Accounting theories suggest that ownership structure have strong and mixed effects on agency conflicts, and thus, firm performance. While prior empirical studies focused on the role of outside ownership on firm performance, less attention has been given to inside ownership and board ownership such as independent board members' ownership, non-executive board members' ownership, chairman ownership, CEO ownership, board and family board members' ownership.

2.1. Independent and Non-executive Directors' Ownership and Firm Performance

Agency theory indicates that the main purpose of the creation of the board of directors is to mitigate agency conflicts between firm owners and managers. Therefore, monitoring and directing executive management behavior to act in line with shareholders' interests is the key function of the independent and non-executive board members. According to Jensen (1993), firm shares owned by independent and non-executive directors would align their interests to other shareholders, which encourage them to monitor and supervise the firm's activities to enhance firm value (Bhagat & Bolton, 2013; Farrer & Ramsay, 1998).

However, entrenchment theory suggests that when independent and non-executive directors' ownership exceeds a certain threshold, they may become more entrenched and less fearful of disciplinary actions, and thus, they tend to serve

their self-interests at the expense of minority shareholders (Morck et al., 1988).

Empirical evidence on the impact of independent and non-executive directors' ownership on firm performance is inconclusive and still rather controversial (e.g., Al Farooque et al., 2020; Berke-Berga et al., 2017; Bhagat & Bolton, 2013; Krivogorsky, 2006; Shan, 2019; Tleubayev et al., 2020). A possible reason of contradicting results is that most of previous studies use a single measurement of most types of ownership related to board members and executive managers instead of using of an accurate measurement representing each type of board members' ownership. For instance, Al Farooque et al. (2007), Berke-Berga et al. (2017), Bhagat and Bolton (2013), Amran et al. (2008), Krivogorsky (2006), and Tleubayev et al. (2020) investigate the relationship between firm performance and board ownership as measured by the percentage of shares owned by all board members (executive, independent, and non-executive directors). Moreover, Al Farooque et al. (2020), Demsetz and Villalonga (2001), Krivogorsky (2006), Morck et al. (1988), and Shan (2019) examine the impact of managerial ownership (measured by the percentage of shares owned by executives and CEO) on firm performance. The results are mixed where some studies reveal a positive impact on firm performance while others report a negative influence or an insignificant effect on firm performance.

In Saudi Arabia, A large portion of Saudi companies' shares are owned by a variety of groups of board members, including independent and non-executive directors' ownership, which are expected to have different and mixed effects on bank performance. Therefore, it can be hypothesized (without specific direction) that.

H1: *There is a significant relationship between independent directors' ownership and bank performance.*

H2: *There is a significant relationship between non-executive directors' ownership and bank performance.*

2.2. Ownership of Leadership and Firm Performance

Corporate governance literature indicates that firm's leadership structure is critical in monitoring management and enhancing firm performance and success. The separation of the positions of the chairman of the board and CEO is a good governance practice in many corporate governance codes (Krivogorsky, 2006). On the other hand, Jensen and Meckling (1976) and Mallette (1992) argue that CEO duality can challenge the board's ability to monitor management.

Empirical evidence on the role of leadership on firm performance reveals mixed and inconclusive results. For example, Al Farooque et al. (2020) and Kao et al. (2019) find a negative impact of CEO duality on firm performance. In contrast, Abor and Biekpe (2007) and Waheed and Malik (2019) document a positive impact of CEO duality on firm performance. However, Al-Matari et al. (2012), Arora and Sharma (2016), and Merendino and Melville (2019) find an insignificant relationship between CEO duality and firm performance.

One possible reason of such inconclusive results is the potential role of ownership held by firm leadership, including the chairman ownership and CEO ownership, which may directly influence firm performance and/or indirectly through affecting the direction and significant of the relationship between leadership and firm performance. Prior research on the association between leadership and firm performance largely ignored the potential role of ownership related to leadership on firm performance.

From agency theory perspective, acquiring bank shares by the bank leaders (i.e., chairman and CEO) would align their interests with other shareholders and enhance actions and decisions that protect shareholders' rights and maximize bank value.

However, the entrenchment theory suggests that when the bank leaders (i.e., chairman and CEO) owns a significant portion of bank shares, they become more entrenched and less fearful of replacement and other disciplinary actions with greater power to act in their interests apart from the rights of shareholders, which in turn negatively affects bank performance. It is worth noting that the inclusion of the ownership held by the CEO among board ownership categories is based on the results of descriptive statistics, which reveal that more than one-half (57%) of the CEOs in Saudi banks are board members. Accordingly, this study proposes a significant effect (without specific direction) of bank leaders (i.e., chairman and CEO) on Saudi bank performance.

H3: *There is a significant relationship between the chairman ownership and bank performance.*

H4: *There is a significant relationship between the CEO ownership and bank performance.*

2.3. Family Board Members and Firm Performance

The hypothesis of the convergence of interest proposed by agency theory suggests that ownership held by controlling shareholders such as families' members would alleviate agency conflicts between majority and minority ownership as a result of the alignment of interest of family owners with other shareholders.

However, the entrenchment theory argues that higher levels of family ownership could lead to entrenchment, which creates incentives for family controlling shareholders to expropriate wealth from other shareholders and extract

private benefits from the company at the cost of minority shareholders (Morck et al., 1988; Shleifer & Vishny, 1997).

The business environment and corporate governance is strongly affected by the social and institutional environment contexts within a country (Adams et al., 2010; Aguilera & Jackson, 2010; Alamri, 2014; Wanyama et al., 2009). Saudi society depends on a strong structure of tribal and family system which plays a significant role in Saudi business and governance.

Most of previous studies aimed to investigate the impact of family ownership on firm performance used the percentage of shares held by families as a measurement of family ownership (e.g., Al-saidi, 2013; Bennouri et al., 2018; Habbash & Bajaher, 2015; Kao et al., 2019; La Rosa & Bernini, 2018) and ignored the potential role played by family members sitting on the board on firm performance.

In countries such as Saudi Arabia where families own substantial equities, little physical separation exists between those who own the firm and those who are delegated to run it. Consequently, and regardless of the volume of firm shares they owned, Saudi family members sit on firms' boards both as executive and non-executive directors, and have strong voting power to nominate and elect board and management members, and even the CEO or the chairman to serve their own interests at the expense of other shareholders (Alanezi & Albuloushi, 2011). Therefore, it is worthwhile to investigate the potential impact of family board members on the Saudi bank performance, and thus, a hypothesis cab be formulated as follows.

H5: *There is a significant relationship between family board members and bank performance.*

3. Research Methodology

3.1. Sample Selection and Data Collection

To examine the influence of board ownership on bank performance, this study examines a sample of 12 Saudi banks listed in the Saudi Stock Exchange (Tadawul) over a period of eight years, from 2011 to 2018. The study excludes non-financial and other financial firms from the sample as they are less-regulated and the applied accounting standards differ from those of banks. Moreover, eight bank-year observations are also dropped from the sample due to missing data for some independent and control variables. Data on variables included in the study is collected from the banks' annual reports downloaded from Tadawul and banks websites.

3.2. Variables Definition and Model Specification

To test hypotheses of the study, variables involved in the regression analysis are classified into three categories: dependent variables, independent variables, and control variables, with full definitions as reported in Table 1.

Table 1: Definition and Measurement of Variables

Abbreviated Name	Full Name	Description / Measurement
Dependent variable (firm performance)		
ROA	Return on assets	Net income divided by book value of total assets
ROE	Return on equity	Net income divided by book value of total equities
Q	Tobin's Q	Market value of total shares plus book value of debt divided by book value of assets
Independent variables (board ownership)		
Ind_Own	Independent board members' ownership	Percentage of bank shares owned directly and / or indirectly by independent board members
Non_Exe_ Own	Non-executive board members' ownership	Percentage of bank shares owned directly and / or indirectly by non-executive board members
Chairman_ Own	Chairman ownership	Percentage of bank shares owned directly and / or indirectly by the chairman
Ceo_Own	Chief executive officer's ownership	Percentage of bank shares owned directly and / or indirectly by the chief executive officer
Fam_Board_ Mem	Family board members	Number of family members on the board
Control variables (board, ownership, and firm characteristics)		
Board_Size	Board size	Total number of board members
Non_Exe_ Mem	Non-executive board members	Percentage of non-executive members on the board
Gov_Own	Government ownership	Percentage of bank shares held by government agencies
Leverage	Leverage	Ratio of total debt to total assets
Bank_Size	Bank size	Total bank employees

Firstly, the dependent variable is bank performance, which is measured in three different ways. Return on Assets (ROA) as an operational performance measure, Return on Equity (ROE) as financial performance measure, and Tobin's Q (Q) as a market-based performance measure (refer Table 1).

Secondly, to test the impact of main hypotheses (H1-H5) related to board ownership on bank performance, the independent variables are the independent board members' ownership, non-executive board members' ownership, chairman ownership, CEO ownership, and family board members (refer Table 1).

Finally, to control for potential omitted variable bias (Gujarati, 2003; Wooldridge, 2010) and to rule out alternative explanations for the mean results (Singh et al., 1986), this study uses a number of control variables, including board characteristics (board size, non-executive board members), ownership structure (government ownership), and firm-specific characteristics (leverage, bank size,) (refer Table 1). It is worth noting that there is an extensive body of research suggesting a significant effect of such variables on firm performance (e.g., Al Farooque et al., 2020; Dang et al., 2020; Hamdan, 2018; Hardiyansah et al., 2021; Kao et al., 2019; Majeed et al., 2020; Merendino & Melville, 2019; Nguyen, 2020; Nguyen & Nguyen, 2020; Omer et al., 2020; Rahman & Saima, 2018; Shan, 2019; Waheed & Malik, 2019).

3.3. Data Analysis

Due to the panel nature of the data, this study applies panel data analysis using STATA statistical software to examine the impact of board ownership on bank performance. Compared to cross-sectional or time-series techniques, panel data analysis controls for individual heterogeneity, mitigates multicollinearity problems, alleviate the undesirable effects resulting from the use of a relatively small sample size, and provide more informative data (Baltagi, 2008; Hsiao, 2003).

Prior to analysis, the main assumptions of multivariate analysis, such as outliers, normality, linearity, multicollinearity, heteroskedasticity, in addition to endogeneity are checked, and then corrected or controlled. Skewness and kurtosis are among the common statistical tests for normality. One of the criteria for using skewness and kurtosis as a measurement of normality is based on the values of skewness and kurtosis. Thus, a data-set with values that fall within the threshold of +/– 3 for skewness (Kline, 2011) and within the threshold of +/– 10 for kurtosis (Hoyle, 1995; Kline, 2011) represents an acceptable level of normality. The results show that the skewness and kurtosis values for variables fall within the thresholds of the acceptable level of normality, which means that the data is normally distributed (refer Table 3).

Linearity is tested using the scatter plots, which show no clear departure from linearity. In addition, the results of Ramsey test indicate an appropriate linear specification of the

Table 2: Pearson Correlation Matrix and VIF of Variables

Variables	VIF	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) ROA		1												
(2) ROE		0.807**	1											
(3) Q		0.591**	0.642**	1										
(4) Ind_Own	1.61	0.282**	0.278**	0.150	1									
(5) Non_Exe_Own	4.84	0.214*	0.246*	–0.038	0.096	1								
(6) Chairman_Own	2.45	0.507**	0.463**	0.391**	0.438**	0.189	1							
(7) Ceo_Own	5.69	0.082	0.207*	–0.100	0.131	0.618**	0.295**	1						
(8) Fam_Board_Mem	3.31	0.471**	0.459**	0.562**	0.378**	–0.070	0.495**	–0.100	1					
(9) Board_Size	2.51	0.457**	0.458**	0.461**	0.039	0.252*	0.295**	0.116	0.557**	1				
(10) Non_Exe_Mem	1.71	0.067	0.075	0.174	–0.026	–0.011	0.156	–0.302*	0.385**	0.323**	1			
(11) Gov_Own	5.42	0.156	–0.082	–0.149	–0.023	0.216*	–0.152	–0.405*	–0.195	–0.286**	0.007	1		
(12) Leverage	1.64	0.013	0.501**	0.187	0.111	0.147	0.071	0.199	0.091	0.143	0.141	–0.274**	1	
(13) Bank_Size	3.48	0.542**	0.562**	0.555**	0.147	–0.011	0.484**	–0.246*	0.599**	0.331**	0.164	0.267*	0.029	1
Mean VIF	3.26													

Note: *, ** significant at the 0.05, and 0.01 levels (2-tailed) respectively.

regression models of the study. Concerning multicollinearity, the results of Pearson correlation matrix and variance inflation factor (VIF) tests indicate no severe multicollinearity problem since the maximum values do not exceed the threshold value (0.80) of correlation and (10) of the VIF (Gujarati, 2003; Hair et al, 2010) as reported in Table 2.

To determine whether the ordinary least squares (OLS) or panel data (fixed or random effects) technique is more appropriate to analyze the data, the Lagrange Multiplier (LM) test (Breusch & Pagan, 1980), the *F*-test, and the Hausman test (Hausman 1978) are performed, and the results (for brevity not reported here, but available on request) indicate that the panel data analysis using fixed effects model is an appropriate technique of analysis.

Regarding heteroscedasticity and autocorrelation in fixed effects models, the Modified Wald statistic test for groupwise heteroscedasticity in fixed effects regression models (Greene 2003), and Wooldridge test for autocorrelation (Wooldridge 2002) are run, respectively. The results (for brevity not reported here, but available on request) confirm the presence of both heteroscedasticity and autocorrelation problems, which need to be solved or controlled. Therefore, a fixed effects regression model clustered at the bank level is developed and employed by this study as it controls for endogeneity and produces a robust estimator to cross-sectional heteroscedasticity and within-panel correlation (Li, 2016; Rogers, 1993). Accordingly, the following fixed effects regression models are performed to examine the impact of board ownership on bank performance.

Model 1:

$$\begin{aligned}\text{ROA}_{it} = {} & \beta_0 + \beta_1\text{Ind\_Own}_{it} + \beta_2\text{Non\_Exe\_Own}_{it} \\ & + \beta_3\text{Chairman\_Own}_{it} + \beta_4\text{Ceo\_Own}_{it} \\ & + \beta_5\text{Fam\_Board\_Mem}_{it} + \beta_6\text{Board\_Size}_{it} \\ & + \beta_7\text{Non\_Exe\_Mem}_{it} + \beta_8\text{Gov\_Own}_{it} \\ & + \beta_9\text{Leverage}_{it} + \beta_{10}\text{Bank\_Size}_{it} + \varepsilon_{it}\end{aligned}$$

Model 2:

$$\begin{aligned}\text{ROE}_{it} = {} & \beta_0 + \beta_1\text{Ind\_Own}_{it} + \beta_2\text{Non\_Exe\_Own}_{it} \\ & + \beta_3\text{Chairman\_Own}_{it} + \beta_4\text{Ceo\_Own}_{it} \\ & + \beta_5\text{Fam\_Board\_Mem}_{it} + \beta_6\text{Board\_Size}_{it} + \\ & \beta_7\text{Non\_Exe\_Mem}_{it} + \beta_8\text{Gov\_Own}_{it} \\ & + \beta_9\text{Leverage}_{it} + \beta_{10}\text{Bank\_Size}_{it} + \varepsilon_{it}\end{aligned}$$

Model 3:

$$\begin{aligned}\text{Q}_{it} = {} & \beta_0 + \beta_1\text{Ind\_Own}_{it} + \beta_2\text{Non\_Exe\_Own}_{it} \\ & + \beta_3\text{Chairman\_Own}_{it} + \beta_4\text{Ceo\_Own}_{it} \\ & + \beta_5\text{Fam\_Board\_Mem}_{it} + \beta_6\text{Board\_Size}_{it} \\ & + \beta_7\text{Non\_Exe\_Mem}_{it} + \beta_8\text{Gov\_Own}_{it} \\ & + \beta_9\text{Leverage}_{it} + \beta_{10}\text{Bank\_Size}_{it} + \varepsilon_{it}\end{aligned}$$

Where, ROA is return on assets; ROE is return on equity; Q is Tobin's Q; Ind_Own is independent board members' ownership; Non_Exe_Own is non-executive board members' ownership; Chairman_Own is chairman ownership; Ceo_Own is chief executive officer's ownership; Fam_Board_Mem is family board members; Board_Size is board size; Non_Exe_Mem is non-executive board members; Gov_Own is government ownership; Leverage is the leverage; Bank_Size is bank size; ε is error term.

4. Empirical Results and Discussion

4.1. Descriptive Statistics

The descriptive statistics of variables included in the study are reported in Table 3. The main finding is that ownership structure of Saudi banks is concentrated and controlled by board members as the mean of bank shares held by independent directors (0.086), non-executive directors (0.516), the chairman (0.06), and the CEO (0.136) are significant. Moreover, the descriptive statistics indicate a weak representation of family members on the board of directors with a mean of less than one board member (0.795). Overall, the variations among variables measurements are almost consistent with previous evidence.

4.2. Univariate Analysis

Table 2 shows the results of correlation among variables, which can be used as a mean to check for multicollinearity and to enhance the results of multivariate analysis (Field, 2013).

4.3. Multivariate Analysis

Table 4 presents the fixed effects regression results of the influence of board ownership on bank performance. The results show a significant negative impact of independent board members' ownership on bank performance measured by ROA and ROE. However, no evidence is found on the role of independent directors' ownership on Tobin's Q. These results indicate that bank shares held by independent board members are related to lower operational (ROA) and financial (ROE) bank performance, which is consistent with the theoretical perspective of the entrenchment theory and hypothesis development. Accordingly, H1 is partly accepted. The significant negative impact of independent board members' ownership can be justified and confirmed by the results from the descriptive statistics that indicate that independent board members hold around (9%) of bank shares. Morck et al. (1988) suggest that the convergence-of-interest effects tend to dominate over the low ownership range (e.g., less than 5%), while entrenchment effects begin to appear beyond this level.

Moreover, the results reveal an insignificant relationship between non-executive board members' ownership and bank performance, which reject H2. This result contradicts the

Table 3: Descriptive Statistics of Variables

Variables	Obs	Mean	Std. Dev.	Min	Max	Skew.	Kurt.
ROA	88	0.019	0.005	0.008	0.033	0.348	3.663
ROE	88	0.132	0.033	0.061	0.225	0.621	3.355
Q	88	1.067	0.072	0.963	1.323	1.318	4.849
Ind_Own	88	0.086	0.114	0	0.494	1.672	5.7
Non_Exe_Own	88	0.516	0.202	0.005	0.804	–0.623	2.483
Chairman_Own	88	0.06	0.091	0	0.443	1.689	5.926
Ceo_Own	88	0.136	0.184	0	0.442	0.651	1.491
Fam_Board_Mem	88	0.795	1.532	0	6	2.12	6.983
Board_Size	88	9.807	0.814	7	11	–0.533	3.611
Non_Exe_Mem	88	0.935	0.059	0.8	1	–0.171	2.047
Gov_Own	88	0.216	0.2	0	0.644	0.807	2.206
Leverage	88	0.856	0.023	.804	0.908	–0.118	2.486
Bank_Size	88	4721.989	3511.573	1071	13684	1.602	4.231

Table 4: Firm Fixed Effects Regression Results of the Impact of Board Ownership on Bank Performance

Variables	Model 1 (ROA)	Model 2 (ROE)	Model 3 (Q)
Independent Variables			
Ind_Own	–0.007** (0.003)	–0.054** (0.019)	–0.062 (0.036)
Non_Exe_Own	–0.005 (0.005)	–0.039 (0.039)	–0.018 (0.15)
Chairman_Own	0.010*** (0.003)	0.074*** (0.018)	0.139* (0.066)
Ceo_Own	0.010** (0.004)	0.054** (0.020)	0.100 (0.172)
Fam_Board_Mem	0.000 (0.000)	0.0025 (0.002)	0.006 (0.007)
Control Variables			
Board_Size	–0.001** (0.001)	–0.0100** (0.004)	–0.032*** (0.006)
Non_Exe_Mem	–0.0012*** (0.000)	–0.013*** (0.004)	–0.002 (0.006)
Gov_Own	0.0184*** (0.004)	0.121*** (0.031)	0.032 (0.156)
Leverage	–0.043 (0.031)	0.615** (0.234)	1.057** (0.384)
Bank_Size	–0.001* (0.000)	–0.001** (0.000)	–0.001* (0.000)
Constant	0.072** (0.023)	–0.265 (0.160)	0.554 (0.266)
N	88	88	88
F-value	706.32***	87.94***	496.61***
R^2 within	0.239	0.308	0.251

Note: *, **, *** significant at the 0.10, 0.05, and 0.01 levels respectively.

theoretical perspectives of agency and entrenchment theories that propose a significant influence of bank shares owned by non-executive board members on bank performance. However, this result is consistent with Habtoor et al. (2019a) who finds an insignificant impact of non-executive board members' ownership on cooperate risk disclosure in Saudi non-financial firms. This finding is explainable by the results from the descriptive statistics, which indicate that the mean of non-executive board members' ownership is about (52%) of bank shares. This ratio may have insignificant effect because it almost falls on the edge between two levels of ownership that have an opposite effect on bank performance. In this regard, Stulz (1988) finds that company value increases when the management control of voting rights is less than 50%, whereas company value decreases as management control reaches or exceeds 50%.

Regarding firm leadership, the results demonstrate a positive and significant effect of the chairman ownership on bank performance. This result is consistent with the argument of agency theory that bank shares holding by the chairman would align his interests with those of other shareholders which can be reflected in higher monitoring role and an improvement in bank performance. Therefore, H3 is supported. Moreover, the results of the descriptive statistics support this finding as the mean of the chairman ownership is about (6%), which justifies the significant positive such level of ownership on firm performance (Morck et al., 1988).

Moreover, the CEO ownership has a positive and significant relationship with bank performance measured by ROA and ROE, which indicates that the operational and financial bank performance improve when the CEO hold higher portion of bank stocks. This result partly supports H4, and may confirm the dominance of the convergence of interests proposed by agency theory on the association between the CEO ownership and bank performance. In this regard, it worth noted that the descriptive statistics reveal that the mean of the CEO ownership is 13.6% which may encourage the CEO to act opportunistically towards other shareholders (Morck et al., 1988). However, Chau and Leung (2006) find that at a medium level of ownership (between 5% and 25%), the convergence-of-interest effect is dominant. Furthermore, the positive impact of the CEO ownership on Saudi bank performance can be supported and justified by the results of the study of Habtoor (2021) who finds that about one-half (46%) of the CEOs of Saudi listed banks are foreigners and they almost represent the foreign ownership in Saudi banking industry, which evident its positive role on firm performance. Empirically, Habtoor (2021) finds a positive impact of foreign CEO on Saudi bank performance. This indicates that the CEO ownership may also reflect the positive role of foreign ownership on bank performance evident by previous studies.

For family board members, the results reveal an insignificant impact of family board members on bank performance. This means that family members setting on the board have no influence on bank performance, and thus, H5 is rejected. The poor role of family board members could be attributed to the weak or marginal representation of families on the board of directors, which is about less than one board member (0.795) according to the results from the descriptive statistics.

With respect to control variables, the results indicate that board size, non-executive board members, and bank size are significantly and negatively associated with bank performance. However, government ownership and leverage are positively related to bank performance. These results are in line with theoretical perspectives and previous empirical evidence.

5. Conclusion

This main purpose of this study is to investigate the impact of different categories of board ownership on performance of a sample of Saudi listed banks over a period of eight years from 2011 to 2018. Unbalance panel data analysis is applied using firm fixed effects regression models to test the main hypotheses and control for endogeneity issues and produces a robust estimator to cross-sectional heteroscedasticity and within-panel correlation. The results of multivariate analysis reveal a significant positive impact of the chairman ownership, CEO ownership, government ownership, and leverage on bank performance. However, independent board members' ownership, board size, non-executive board members, and bank size have a significant negative influence on bank performance. While non-executive board members' ownership and family board members have an insignificant effect on bank performance. These results indicate that Saudi bank performance is higher in smaller banks that have smaller boards with lower non-executive members, lower portion of shares held by independent board members, higher portion of shares held by the chairman, CEO, and government, and higher leverage.

The current study contributes to the literature as follows. First, this study aims to fill the gap in the literature on the association between board ownership and firm performance by investigating the potential role of different types of ownership held by board members on Saudi bank performance. Second, this study analyzes the relationship between board ownership and bank performance using multiple theoretical perspectives, which is essential to deeper understand how and which types of board ownership could affect bank performance. Third, the results of this study provide important implications for policy makers, regulatory bodies, and market participants in Saudi Arabia and countries

with ownership concentration to understand the role of different types of board ownership on firm performance, and to optimize board ownership and improve firm performance.

Despite the robustness of the empirical results, they are subjected to some limitations that evident in prior empirical studies. For example, the relatively small sample size used by this study may be considered a major limitation, despite applying panel data analysis. Therefore, future research may expand the sample size by adding non-listed banks or using listed banks in GCC countries as they have similar ownership structure and institutional settings. Moreover, while this study focuses on board ownership, including the chairman and the CEO, further research may address the potential role of different characteristics of the chairman and the CEO and board committees' characteristics on bank performance.

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