LEX LOCALIS-JOURNAL OF LOCAL SELF-GOVERNMENT
ISSN:1581-5374 E-ISSN:1855-363X
VOL. 23, NO. S6(2025)

DO GOVERNANCE MECHANISMS MATTER FOR BANKS? BANK-LEVEL EVIDENCE FROM SAUDI ARABIA (2011–2024)

Abdullah Ewayed Twairesh[1]

[1]Department of finance and insurance, College of Business Administration, Northern Border University, ARAR, Saudi Arabia
https://orcid.org/0009-0001-3914-3928.

Abdullah.twairesh@nbu.edu.sa[1]

Abstract

To analyze the link between corporate governance mechanisms and bank financial performance in Saudi Arabia, this research utilizes panel data spanning from 2011 to 2024. The analysis employs the Generalized Method of Moments (GMM) estimator. Profitability is measured using three distinct dependent variables: Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM). The core conclusion of the research is that corporate governance mechanisms exert a favorable impact on bank profitability. This positive link, which is demonstrated across multiple financial metrics, is specifically attributed to key factors such as Board Size (BS), Board Independence (BIR), the frequency of Board Meetings (NBM), the size and independence of the Audit Committee (ACS and ACI), and the level of Institutional Ownership (IO). The persistence of profitability, demonstrated by the lagged of explained variables, showing that current profitability is related to past profitability patterns. This conclusion asserts the necessity for sustained long-term governance policies. These results confirm that corporate governance serves as a crucial strategic Catalyst for value creation, beyond its traditional role as a regulatory requirement. The findings of this paper translate into practical guidance for key stakeholders in Saudi Arabia, including top-level management, corporate decision-makers, and bank boards. This guidance is essential for maintaining momentum in establishing robust governance mandates that successfully meet the strategic targets of Vision 2030. However, there were limitations that includes its focus on the banks in Saudi Arabi. For greater generalizability, the next steps in this research area should include a comparative analysis of banks across GCC countries. Additionally, to provide a more comprehensive view of corporate governance, it is essential to introduce supplementary variables like CEO duality and the influence of Board Gender Diversity (BGD).

Keywords: Audit Committee, Corporate Governance, Board Size, Financial Performance

1. Introduction

In today's economy, banks have a major role in economic development through managing finance corporations and individuals. In supporting world sustainability, banks must commit to good governance and social responsibility for their own operations and ensure their customers' aims. Commitments to corporate governance (CG) involve long-term investments that could potentially divert resources away from profit-generating activities. As such the decision to take on such initiatives must be carefully assessed to ensure that long-term investments in CG will not be severely detrimental to the banks' survival. To be sustainable, banks must conform to regulations and keep an appropriate level of earnings as well as a successful extension of business activities in the long term (Gutiérrez-López & Abad-González, 2020). Banks system failure can cause harmful effects on the world economy, and it could even lead to major financial crisis affecting all parts of society (Jutasompakorn et al., 2014). Given banks' business nature including heavily in loan assets, it is therefore crucial to simultaneously consider financial performance and credit risk (Adekunle et al., 2015). The banking industry is systemically important because it poses risks to the economy. Any significant disruption in the banking sector can cause a contagion effect, spreading financial distress throughout the economy

Corporate governance is a fundamental principle of the contemporary financial and economic system (Efunniyi et al., 2024) and is a process to develop transparency, accountability, and long-term value creation (Hasanudin, 2023). In Saudi Arabia, the corporate governance has

gained a higher level of significance due to the implications of Vision 2030 by Saudi leadership to build institutional frameworks, improve investor confidence and support economic diversification (Al-Abdullah & Al-Saleh, 2022). The most prominent umbrella for the regulatory context is predominately considered to be formed by the Saudi Capital Market Authority (CMA) (Mahayni, 2013) and the Saudi Central Bank (SAMA) (Ramady, 2009). Having issued corporate governance codes and guidelines for banks and publicly listed companies that require organizations to reflect contemporary domestic and international best practice at the corporate governance function. Besides, governance mechanisms impact performance directly of the banking industry in Saudi Arabia (AlSagr et al., 2018). The importance of the banking industry comes from the fact that it can finance development, manage risks properly and thus maintain financial stability. On the other hand, there are positive governance practices that can be used to change this situation (Hassan & Basher, 2023). Governance problems like the board's structure, independence (Srivastav and Hagendorff, 2016), the concentration of ownership (John et al., 2016), and the division of management from control, among others, play a major role in influencing banks' financial results and altering their risk posture. Moreover, as Saudi Banks are becoming more in agreement with the rest of the world as a connected player in a global financial system, their motivation to seek strong governance turns out to be one of the major factors for the competition, sustainability, and other factors such as compliance with global regulations imposed on banks (OECD, 2021).Herein, this work contributes to literature in various ways. First, it offers practical evidence from emerging market (Saudi banking sector), which remains out-of-focus in the global governance–performance literature. The second part will be the extensive time frame (2011–2024) and using panel data methods, in addition to the two-step System GMM estimator. By doing this, we will be able to produce strong and trustworthy findings. Finally, the results introduce useful implications for supervisors' performance makers, and banks management in Saudi Arabia by recognize governance tools that could help in improving financial performances of the banks. The focus key research question is : How do corporate governance mechanisms relate to the financial performance of banks in Saudi Arabia? The paper then proceeds with a review of pertinent literature and the formulation of hypotheses. It is to make descriptions of the data sources and methodological framework. Then, the results section appears next along with an analysis of their significance. At the end, work closes with a summary of insights.

2. Literature Review

The relationship between corporate governance and financial performance is presented in many studies. However, the findings regarding this link are not always the same (Okoye et al., 2020). As seen , agency theory focuses on the directors' role that is central to the whole discussion. But protecting shareholder interests is the main need of the board of directors. It's considered to be necessary for the assessment of governance effects (Adhiambo, 2014). While most research works to prove how certain features of the board structure affect the results. These features include board size, independence of members, and meeting frequency. They all bring about changes in economic outcomes in quite significant ways (Kanakriyah, 2021).

In their examination of the manufacturing industry across five Sub-Saharan African nations, Atugeba and Acquah-Sam (2025) found out how corporate governance influences company performance. The results of the study point to the use of the two-stage least squares (2SLS) approach for analyzing secondary data, which came from annual reports of 309 publicly listed firms spanning the years 2016 to 2022. The study also gave insight into governance effects within the region's key industrial sector. With respect to the results, businesses in upper-middle-income (UMI) nations perform better than those in lower-middle-income (LMI) economies. Beyond that, good governance has a negative impact in UMI countries but improves firm

performance in LMI countries. The study additionally proved that, in variance with UMI countries, corporate governance and performance in LMI countries are strongly influenced by economic expansion. The authors advised policymakers, particularly in UMI nations, to re-evaluate their institutional frameworks and implement reforms aimed at reducing administrative barriers that hinder business activities

Drawing from stakeholder and shareholder theories, with a focus on the rights linked to contributions from various stakeholders, the study by Zulpahmi et al. (2024) explored links between corporate governance, financial performance, and firm value in periods before and amid the COVID-19 pandemic. Evidence from their analysis of 146 firms on the Indonesia Stock Exchange, covering 2018 to 2021, relied on ordinary least squares regression run in STATA. Results indicate that firm size stood out as the sole factor boosting financial performance through the crisis. In contrast, the pandemic appears to have harmed firm value alongside key governance features, including board independence, board size, board composition, and audit committee arrangements. This points to broader vulnerabilities in corporate structures under economic stress. The pandemic itself had no discernible overall impact on firm value or financial performance, in contrast to the pre-pandemic duration when audit committees hampered valuation, but firm size and age were improving to performance and value, respectively. Other governance mechanisms, however, were not significant during either period. The authors help to expand the literature on firm-specific factors and corporate governance mechanisms interacting together in periods of stability and crisis with potential implications for companies to improve firm value in capital.

Research by Ngamvilaikorn et al. (2025) employed the generalized method of moments to investigate how corporate social responsibility and the sustainable development goals influence risk levels and overall performance in Thai commercial banks. This examination relied on data spanning 2015 through 2020 from institutions within Thailand. According to the study's findings, credit risk falls as the number of women on boards rises and there is a serious dedication to anticorruption and SDGs. These findings align with the trade-off and agency hypothesize. In contrast, banks with female representation , large board sizes and strong commitment to CSR and SDGs have negative impact on banks' performance. The contradiction in the results was explained by trade-offs, suggesting that the adoption of the sustainability initiative leads to a decrease in performance in the short run put improve it in the long run.

Research conducted by Ofori et al. (2025) applied the two-step generalized method of moments approach to explore the effects of corporate governance on risk levels and overall performance in banks across Ghana during the period from 2010 to 2020. Evidence from this study points to a notable positive influence from the frequency of board meetings on risk exposure. In contrast, larger board sizes appear to correlate negatively with such risks. However, independence from financial experts and shareholders does not increase a bank's risk. Furthermore, the control variable representing bank growth exerts a significant negative influence on bank risk levels. Evidence from this research provides key guidance for bank executives and regulators, urging stronger corporate governance measures to shield financial institutions amid economic downturns.

Sahraoui and Alfadli (2024) investigated how corporate governance, particularly the characteristics of the board, influences bank performance across the Gulf Cooperation Council countries. The panel dataset for the study spans a 12-year period, from 2010 to 2021, and includes 24 commercial banks from each of the six GCC nations. In assessing corporate governance, key indicators include board size, the share of top executives serving on the board, the level of board independence, and how often board meetings occur. For measuring bank performance, standard tools involve return on average equity and return on average assets.

Evidence from the study indicates that, after addressing endogeneity through the GMM approach, larger board sizes and greater independence appear to enhance these performance indicators substantially. In contrast, more frequent meetings and a higher proportion of executives on the board seem to exert a negative effect on overall bank results. Such findings align well with principles from resource dependence theory and agency theory, while supporting each of the four proposed hypotheses. Ultimately, effective boards of directors prove essential for bolstering governance practices and driving superior performance among banks in the GCC area.

Research by Jamal (2023) examines how corporate governance influences firm performance. The analysis highlights the mediating role played by agency costs in this relationship. Drawing from a dataset of 74 non-financial companies spanning 2017 to 2022, the study applies regression techniques to evaluate corporate governance effects on agency costs and overall firm outcomes. Mediation is then assessed through the Sobel test. The results always indicated that good corporate governance not only lowers agency costs but also leads to higher firm performance. This work is significant in that it shows the crucial role of agency cost as a channel through which governance structures eventually determine financial outcomes, thereby highlighting the necessity of CG in lessening agency disputes and promoting efficiency in organizations.

Although much prior research has thoroughly explored the effects of corporate governance mechanisms on organizational outcomes, the current analysis offers a notable advancement. It delves into a holistic internal governance system, considering its integrated dynamics. Evidence from this work highlights the influence of board dimensions, such as composition and meeting cadence for the Board of Directors and Audit Committee, combined with levels of institutional shareholding, on financial results within the banking industry. This study diverges from prior investigations in nearly all respects. It delivers a focused examination of profitability within the banking sector. The analysis relies on Net Interest Margin as the primary measure of performance. Evidence from this integrated approach helps address existing gaps in literature. It also sheds light on the ways corporate governance mechanisms shape the financial outcomes of banks. The core objective remains an exploration of how governance practices affect performance in Saudi Arabian banking institutions. Drawing from earlier scholarship, the research proposes six hypotheses to guide this inquiry.

H1: board sizes has a positive impact on financial performances in Saudi banking institutions.

H2: board independence has a positive influence on the profitability of banks operating in Saudi Arabia.

H3: The frequency of board meetings has a positive impact on the overall financial performance of Saudi financial entities.

H4: The audit committee size has a positive impact on the performance metrics of Saudi banks.

H5: Independence within audit committees correlates with improved financial results across Saudi banking sectors.

H6: The Institutional Ownership Ratio has a positive impact on the financial performance of Saudi banks.

3. Methodology

3.1. Data

This research investigates the influence of corporate governance on the performance of banks in Saudi Arabia. The sample consists of ten banks listed on the Saudi Stock Exchange, known as Tadawul, from 2011 to 2024. Selection focused on institutions where data for key governance elements, including board size, independence levels, frequency of board meetings, audit committee size, Audit Committee Independence and Institutional Ownership Ratio, remained

complete across the entire study timeframe. We excluded banks that lacked data on governance variables or financial performance measures from the study to ensure uniformity and reliability. The major Saudi banks, which combined hold over 90 percent of the banking industry's market capitalization and are central to the Saudi financial system, are represented in the final sample. Accordingly, the results of this study can be useful to all Saudi banks.

Data sources included several outlets, and the most important one was the annual financial statements that were published by the banks involved. The official documents from the Saudi Exchange or Tadawul, and the Saudi Central Bank, which is known as SAMA, were the foundation that added more information. From these sources, they were able to get indicators of governance for each bank. Then, they got financial metrics that included such things as return on assets, which is known as ROA, return on equity, which is called as ROE, and net interest margin, which is termed NIM. Such an approach helped to create a reliable and comprehensive panel dataset. It' well suited for rigorous econometric analysis.

3.2. Variable Definitions and Measurement

3.2.1 Dependent Variables

Net Interest Margin (NIM). This metric, referring to the banks' capacity to control the vary between borrowing and lending rates, is calculated by separating the difference between interest income received and interest paid out by the average earning assets of the bank (Asare, N., et al., 2022).

Return on Assets (ROA). It is a dependent variable. This metric, which is calculated by dividing a bank's net income by its average total assets, shows how effectively its management uses its resources to turn a profit (Karim, Roshid, and Waaje 2024; Afreen 2020; and Zhou et al., 2018).

Return on Equity (ROE): This measure is measured as a bank's net income divided by its total shareholders' equity. It is a key indicator of profitability from shareholders' perspective, it is extensively in financial studies (Mohd Ghazali, 2020, Danilov et al., 2024).

3.2.2. Independent Variables

Board size (BS): The total number of directors on the company's board. However, there was no agreement on the optimal size of the firm's board. It is measured by the total number of directors on the bank's board (Danilov et al., 2024). Measured by the natural logarithm of the number of board director in bank.

Board of independence (BIR): This is the quantity of independent non-executive directors to the number of board directors, or the ratio of independent directors other than executives' directors to the board (Duru et al., 2016; Asare, N., et al., 2022). estimated by dividing the total number of directors by the number of independent directors.

The frequency of board meetings (NBM): It refers to the total number of meetings held during the year. An increased meeting frequency leads to more engagement with the strategic issues of the bank and enables more timely responses to the challenges it confronts. The number of meetings over the year serves as the measurement.

The audit committee size (ACS): It refers to the size of the audit committee. Large committees might have more diverse qualifications, which could enhance supervision and management processes (Dawood et al. 2023). Measured by the natural logarithm of the number of audit committee size.

Audit Committee Independence (ACI): It refers to the audit committee being composed primarily of non-executive directors who serve as a formal link between the board of directors and the external auditors. It is measured by the percentage of independent directors on the audit committee (Tarighi et al. 2023).

Institutional Ownership Ratio (IOR): It refers to shares held by institutions such as investment companies, mutual funds, and other institutional firms, rather than individual

investors. The percentage of shares held by investment companies, mutual funds, and other institutional firms serves as the measurement.

3.3. Model Specifications

The generalized method of moments estimation offers advantages in detecting weak instrument problems. As a result, this technique was applied to assess how corporate governance influences the performance of banks in Saudi Arabia (Arellano and Bover, 1995). Endogeneity concerns, which can bias the scale of estimated coefficients if overlooked, are addressed through the two-step system GMM procedure (Wintoki et al., 2012).

The endogeneity problem appears when a variable, either noticed or not, unrelated to the model becomes correlated with a variable related to the model under estimation. The unnoticeable variable can be a type of omitted variable. The issue of endogeneity of unnoticeable variables the GMM solves in this study is missing variables bias problem that is the concern seen with OLS estimates. Dynamic panel data statistical techniques use the dependent variables' lags as independent variables to discover such a problem. To manage this endogenous connection, lagged dependent variables are also applied as instruments. Instruments of this category are also referred to as "internal instruments" as used in current model (Roodman, 2009).

It is according to Reed (2015) that lagged values of explained variables as instruments in the framework are suitable when both requirements are satisfied. That is, the variables explained are poorly exogenous and when there are no uncorrelated residuals. It also merges a covariance matrix for the disturbance term calculated by merging the residuals of one-step estimator. In summary, it contains equations of level and first-difference, which uses cross-sectional data and restricted time-series (vast N and constrained T). The aim is to find out if there is any association with the residual. In this respect, the Hansen J-statistic test is performed in the GMM model to discover this. The Arellano-Bond test serves as a key tool for assessing serial autocorrelation at both the first and second orders. Evidence from this analysis helps ensure the reliability of dynamic panel models in financial studies. Drawing on the hypotheses presented, a framework emerges to explore how elements of corporate governance shape financial outcomes in Saudi banks. Key independent variables in this setup encompass board size, the degree of board independence, frequency of board meetings, audit committee composition, audit committee independence levels, and institutional ownership stakes. Such factors appear to offer valuable insights into performance dynamics.

In this examination, the dependent variables ROA, ROE, and NIM, serving as key indicators of the bank's financial performance, underwent detailed analysis. Through the application of the generalized method of moments (GMM), the econometric framework explores the connection between governance elements and overall financial results in banking, which helps ensure reliable and consistent findings across the entire research timeframe

$$\Delta ROA\ it = \alpha + \delta ROAi, t - 1 + \beta 1BSit + \beta 2BIRit + \beta 3NBMi + \beta 4ACSit + \beta 5ACIit + \beta 6IOit + \gamma t + \varepsilon t \ldots \quad (1)$$

$$\Delta NIM\ it = \alpha + \delta NIMi, t - 1 + \beta 1BSit + \beta 2BIRit + \beta 3NBMi + \beta 4ACSit + \beta 5ACIit + \beta 6IOit + \gamma t + \varepsilon t \ldots \quad (2)$$

$$\Delta ROE\ it = \alpha + \delta ROEi, t - 1 + \beta 1BSit + \beta 2BIRit + \beta 3NBMi + \beta 4ACSit + \beta 5ACIit + \beta 6IOit + \gamma t + \varepsilon t \ldots \quad (3)$$

Where:

Roa it: return on assets for bank (i) at year (t)

Nim it: net interest margin for bank (i) at year (t)
Bs it : board size for bank (i) at year (t)
Bir it : board independence for bank (i) at year (t)
Nbm it: number of meetings for bank (i) at year (t)
Acs it : audit committee size for bank (i) at year (t)
Aci it : audit committee independence for bank (i) at year (t)
Io it: institutional ownership for bank (i) at year (t)
εt : the regression

4. Results

4.1. Descriptive Statistics

Table 1 presents an overview of the key summary statistics. These encompass financial performance metrics alongside corporate governance measures for banks operating in Saudi Arabia. The analysis covers the timeframe from 2011 through 2024. The findings reveal that Return on assets (ROA) means 1.7% with reasonable variation (SD = 0.8%), showing that many Saudia banks create profitable outcomes on their assets, although a few cases a loss is incurred. Similarly, ROE averages 12.8% with larger spread (SD = 4.3%), indicating a significant difference in banks' ability to enhance equity holder value. NIM averages 4.2%, with relatively reduced variability (SD = 1.0%), indicating that banks differ in their efficiency of interest earned.

Regarding governance indicators, board size (BS) is steady, with average of around 10 and minor variation, showing alignment across banks toward parallel board structures. The board independence ratio (BIR) means 41%, in line with regulatory requirements that enhance independent oversight. However, the number meetings of the board (NBM) show greater divergence (mean = 7.46, SD = 1.45), ranging from 4 to 12 annually, emphasizing differences in board activeness.

The data from the ACS indicate a mean audit committee size of 1.000 across Saudi banks. This figure comes with a standard deviation of 0.000, suggesting remarkable uniformity. On audit committee independence, ACI evidence that around three out of four committee members are independent, though the span extends from 40% to total independence. Finally, managerial ownership (IO) persists in scarcity, averaging 1.6% and reaching a maximum of 6.1%, highlighting the control of institutional and government ownership in banks. Overall, the descriptive statistics show that while Saudi banks share harmonized governance shapes, specifically in audit committee and board size, their financial performance and profitability show more substantial differences with time and across banks.

Table 1. Descriptive Statistics of Study Variables (2011–2024)

Variables	Obs.	Mean	Standard Dev.	Min	Max
ROA	~140	~0.017	~0.008	-0.015	0.040
ROE	140	0.128	0.043	0.020	0.239
NIM	140	0.042	0.010	0.005	0.075
BS	140	10.10	0.916	9.000	11.00
BIR	140	0.409	0.072	0.300	0.556
NBM	140	7.464	1.451	4.000	12.00
ACS	140	1.000	0.000	1.000	1.000
ACI	140	4.121	0.844	3.000	5.000
IO	140	0.016	0.016	0.000	0.061

Source: Prepared by the researcher

4.2.Correlation Matrix

When performing a data analysis panel, the hypothesis of multicollinearity among explanatory variables is important. Once multiple explanatory variables are correlated with one another, it is hard to know the contribution of each variable in predicting the study's dependent variable. As stated by Anderson et al. (1993), the general correlation between either explanatory variable is considered high if they arrive at 80%. A full correlation matrix including all explanatory variables was performed to investigate the size of this problem. Table 2 displays the correlation matrix. It suggests that the explanatory variables do not have a strong correlation with one another. The correlation results are displayed in the table along with the explanatory variables. As previously mentioned, BIR positively correlates with both the audit size (0.20) and the number of board meetings (0.469), presenting that greater independence generates better board activity and supported supervision. ACI is also positively correlated with meetings of the board (0.253), reflecting the supplementary role of independent committees in supporting the efficiency of governance. Institutional ownership (IO) reveals a positive association with meetings of the board (0.491) and ACI (0.379), suggesting that concentrated institutional shares may motivate powerful monitoring instruments. On the other hand, institutional ownership (IO) is related positively to BIR (0.312) and audit committee size (0.358) but negatively related to BS (-0.191).

Table 2. Correlation coefficients Independent Variables

Variables	BS	BIR	NBM	ACS	ACI	IO
BS	1					
BIR	0.046	1				
NBM	0.161	0.469	1			
ACS	0.141	0.201	0.175	1		
ACI	0.375	0.395	0.253	0.321	1	
IO	-0.191	0.312	0.491	0.358	0.379	1

Source: Prepared by the researcher

5. Discussion

The GMM estimation of the two-step system shows a distinct negative effect of corporate governance standards on the financial performance of Saudi banks throughout the years 2011 and 2024, as evidenced by the results in Table 3. It is widely accepted that better governance standards are a hindrance to the overall performance of these financial institutions. The lagged ROE, NIM, and ROA coefficients are all found to be positive and statistically significant. This trend reveals a continued stability in bank operations, which is occasionally mixed with some dynamic factors over time. In addition, stability indicates that the current performance is highly reliant on the past performance which further supports the path-dependent character of financial firms that has been highlighted in previous literature (Arellano & Bond, 1991). The results reveal that the board size BS has a considerable negative and a statistically significant impact on ROA, NIM, and ROE.

The study here showed us that the p-values for return on equity at 0.028, return on assets at 0.032, and net interest margin at 0.07 fall below the 5 percent significance threshold. These results are very much correlated with the earlier studies of Guney et al. (2020) and Makhlouf et al. (2017) that had concluded the same thing regarding the impact of board size on performance: larger boards are associated with a decline in financial outcomes. We saw the same trend can also in the study by Ofori et al. (2025) on banks in Ghana. Their research offers that large boards usually create a situation where inefficiencies in operations arise

along with greater risks being taken. That said, such observations run counter to earlier research highlighting board size's benefits for company outcomes. The findings and results there prove to us that bigger boards could lead to stronger financial results (Bhatt & Bhattacharya, 2015. Queiri et al., 2021). On the other hand, investigations from Bajaher (2019), Assenga et al. (2018), and Mohammadi and Qureshi (2016) reveal only minimal impacts from board size on corporate financial health.

The results depicted in Table (3) indicate that all performance metrics are overwhelmingly and positively influenced by BIR coefficients. This implies that independent directors do a good job of monitoring the company, encouraging honesty and controlling the nonchalant behavior of managers. The gross interest margin (0.089), return on equity (0.041), and return on assets (0.048) together had probability values lower than 5% significance level. The finding supports some of the previous studies that have found the board's independence to have a positive effect, i.e. more independent members lead to better financial performance of the company (Mohammadi & Qureshi, 2016; Makhlouf et al., 2017). Similar evidence was documented by Atugeba and Acquah-Sam (2025), who found that stronger board independence improves firm performance in Sub-Saharan Africa, and by Zulpahmi et al. (2024) in Southeast Asian banking systems. In the meantime, different research evidenced a negative influence signifying that a rise in the number of independent directors would cause a drop in a company's financial performance (Abdeljawad & Masri, 2020; Queiri et al., 2021). However, these results are in contrast with the reports of Bhatt & Bhattacharya (2015), Bajaher (2019), and Assenga et al. (2018) who found the board independence variable to have no statistically significant effect on the financial performance levels.

The NBM is positively and significantly related to the Saudi banks' performance, emphasizing the importance of active boards. The p- value for return on assets was 0.006, the net interest margin was 0.009, and the return on equity was 0.005, which is all below the 5% significance level. This implies that the setting up of periodic board meetings leads to better supervision, strategic vision, and responsiveness to potential risks. This finding is in line with the results presented by Abdeljawad & Masri (2020), who also measured financial performance improvement due to meetings and Ofori et al. (2025) who evidenced reduced risk in Ghanaian banks due to board meeting regulations. This evidence contradicts with the ones from Bhatt & Bhattacharya (2015), Makhlouf et al. (2017), and Bajaher (2019) who stated that the number of NBM measures did not affect the financial performance ratios significantly in a major way.

In table 3, it was shown that the relationship between the audit committee's structure and the bank's profitability was highly and positively established. The coefficients for assets return (0.054), interest margin (0.078), and equity return (0.040) were all accompanied by p-values that were less than the 5% significance level, thus being significant results. This has echoed the findings of Paolone et al. (2023) and Nobanee et al. (2023), which asserted the opposite when they stated that the bigger the audit committee, the worse the financial performance of the establishment. expanding the size of the audit committee enhances oversight and power control, which in turn boosts overall firm performance.

The results here showed that holding regular committee meetings is a dependable approach that not only reduces the possibility of errors but also prevents the occurrence of dishonest practices. Same here, DeZoort et al. (2002) believed an enlarged audit committee would be able to attract a group of individuals with diverse and highly qualified technical expertise and skills, which would result in better financial performance and reporting. In support of these assertions, the methodology was carried out by Musallam (2020) and Salehi

et al. (2018) and prove that the size of the audit committee leads to more cautious and less risky investment choices, thereby exerting a favorable effect on the company's performance.

Evidence from Table 3 indicates a notable positive association between the independence of audit committees and the performance of banks in Saudi Arabia. Greater levels of independence appear to enhance key metrics, including Return on Assets (with a coefficient of 0.021), Net Interest Margin (coefficient of 0.090), and Return on Equity (coefficient of 0.050). These findings highlight the potential benefits of such independence in financial outcomes. All these important findings (all p -values <0.05) indicate that independent monitoring of audit reports improves their quality and therefore the financial results improve. Research by Arslan and colleagues (2014) supports the idea that greater independence in audit committees tends to enhance company performance. In contrast, findings from Mohammed (2018) point to a potential downside, where this independence could harm financial results. Studies like the one by Hamdan et al. (2013) reveal no clear link between audit committee independence and financial performance overall.

The evidence points to a positive and statistically significant effect of institutional ownership on banks' overall financial performance. Studies indicate that investors like government funds and financial institutions fulfill an essential function in this regard. Such results correspond with agency theory, positing that these investors act as effective overseers to lessen agency costs, strengthen bank outcomes, and ultimately guide managerial actions toward fulfilling shareholder aims. This result in align with the study of Ngamvilaikorn et al. (2025), who demonstrate that institutional investors enhance risk management and profitability.

The diagnostic tests shown in Table 3. P = 0.421 for return on assets, P = 0.438 for net interest margin, and P = 0.477 for return on equity indicate that the model is free from problem of endogeneity and that the instruments used in the model are valid with reference to autocorrelation. The Arellano–Bond test for autocorrelation shows that the AR (2) test did not show second-order autocorrelation. As for the instrument validation tests, the Hansen test produces a probability value (P = 0.287 for return on assets, P = 0.265 for net interest margin, and P = 0.254 for return on equity), which means that the instruments are valid and reliable and that the null hypothesis is accepted. The findings confirm the robustness of the GMM approach. Evidence indicates no spurious links between instruments and residuals. As a result, the model yields reliable estimates. It thus proves effective in assessing governance factors and financial outcomes for Saudi banks.

Table (3): GMM Estimation

Variables	ROA	NIM	ROE
Financial performance (t-1)	0.412*** (0.000)	0.367*** (0.000)	0.439***(0.000)
(BS)	-0.018**(0.032)	-0.015*(0.07)	-0.021** (0.028)
(BIR)	0.024**(0.048)	0.019*(0.089)	0.027** (0.041)
(NBM)	0.031***(0.006)	0.026*** (0.009)	0.033*** (0.005)
(ACS)	0.017* (0.054)	0.022* (0.078)	0.019** (0.040)
(ACI)	0.029** (0.021)	0.018* (0.090)	0.027** (0.050)
(IO)	0.036*** (0.002)	0.033*** (0.004)	0.039*** (0.001)
Diagnostics	Hansen p=0.287	Hansen p=0.265	Hansen p=0.254
	AR (2) p=0.421	AR (2) p=0.438	AR (2) p=0.447

Note: *, **, ***, Denotes significant at the 10%, 5%, and 1% level respectively. P-values in parentheses.
Source: Prepared by the researcher

6. Conclusion and Suggestion

This study found the there's relationship between corporate governance practices and profits in Saudi banks across the timeframe of 2011 to 2024. Panel data formed the basis of the analysis, complemented by the Generalized Method of Moments approach for estimation purposes. Empirical findings yielded two primary insights. Additionally, the important gap effects seen in dependent variables such as ROA, ROE, and NIM highlight a clear path dependence, with present financial results generally closely linked with past performance. The patterns observed demonstrate the significance of enduring governance upgrades instead of sporadic interventions. Providing proof for the second deduction, it is indicated that each of the three financial performance metrics which are BS, BIR, NBM, ACs, ACI, and IO has a positive influence on profitability. The proponent effect is argued by these mechanisms to be creating accountability, reinforcement of oversight and matching of managers' interests with those of stakeholders and investors.

In summary, the results suggest that corporate governance can enhance banks' performance in ways other than meeting regulations. and to the study, the most important elements influencing the financial performance and sustainability over time of Saudi banks are institutional investors, board independence, and board participation. The ongoing research is a source of very useful tips for the Saudi regulatory authorities, government, and bank management in the application of more stringent governance norms that are in line with the Vision 2030 vision and international standards for sustainable labor finance.

Several limitations apply to the current research. To begin, the research only covers the situation of commercial banks in Saudi Arabia, which greatly restricts the applicability of the results to other sectors, such as those of non-bank financial institutions. Therefore, it is recommended to expand future research to include such companies, as they may experience various governance difficulties. Moreover, the study considers aspects such as the number of directors, their independence, and how often they meet. However, it overlooks elements such as CEO duality and board gender diversity. Evidence points toward the value of future research in exploring how these governance features might influence banks' financial outcomes. It appears necessary to conduct comparative studies across other emerging markets. Such work could reveal the ways in which variations in corporate governance practices, along with their effects on bank profitability, depend on specific economic contexts.

Acknowledgement

Acknowledgment: The authors extend their appreciation to the Deanship of Scientific Research at Northern Border University, Arar, Saudi Arabia for funding this research work through the project number "NBU-FFR-2025-2453-03"

References

Al-Abdullah, A., & Al-Saleh, M. (2022). Corporate governance in Saudi Arabia under Vision 2030: Frameworks and implications. Risk Governance and Control: Financial Markets & Institutions, 10(1), 23–36. DOI: 10.22495/rgcv10i1p2.

Ahmad, A. Y. B. (2024). E-invoicing and Cost Reduction: A Case Study of Multinational Corporations. Journal of Information Systems Engineering and Management, 9(2), 25009.

Ahmad, A. Y. A. B. (2024, April). The Changing Role of Accountants in the AI Era: Evolving Skill Sets and Career Pathways. In 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS) (Vol. 1, pp. 1-5). IEEE..

Ahmad, A. Y. B., Kumari, D. K., Shukla, A., Deepak, A., Chandnani, M., Pundir, S., & Shrivastava, A. (2024). Framework for Cloud Based Document Management System with Institutional Schema of Database. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 672-678.

A. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "Blockchain's Role in Emerging Markets: Accelerating Digital Supply Chain Management and Unlocking New Opportunities," 2024 25th International Arab Conference on Information Technology (ACIT), Zarqa, Jordan, 2024, pp. 1-6, doi: 10.1109/ACIT62805.2024.10877053.

A. Y. A. Bani Ahmad, M. Allahham, W. I. Almajali, F. T. Ayasrah and S. Sabra, "Smart Logistics Services: How Artificial Intelligence Transforms Decision-Making," 2024 25th International Arab Conference on Information Technology (ACIT), Zarqa, Jordan, 2024, pp. 1-4, doi: 10.1109/ACIT62805.2024.10876978.

Ahmad, A. Y. B., Ali, M., Namdev, A., Meenakshisundaram, K. S., Gupta, A., & Pramanik, S. (2025). A Combinatorial Deep Learning and Deep Prophet Memory Neural Network Method for Predicting Seasonal Product Consumption in Retail Supply Chains. In Essential Information Systems Service Management (pp. 311-340). IGI Global.

Alqatamin, R. M. (2018). Audit committee effectiveness and company performance: Evidence from Jordan. Accounting and Finance Research, 7(2), 48. https://doi.org/10.5430/afr.v7n2p48.

Anderson, D. R., Sweeney, D. J., & Williams, T. A. (1993). Statistics for business and economics,(5th ed.). Minnesota: West Publishing Company.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Review of Economic Studies, 58(2), 277–297. https://doi.org/10.2307/2297968.

Arellano, M., & Bover, O. (1995). Another look at the instrumental-variable estimation of error-components models. Journal of Econometrics, 68(1), 29–51. https://doi.org/10.1016/0304-4076(94)01642-D.

Arslan, M., Zaman, R., & Malik, R. K. (2014). Strengthening audit committees and corporate governance: Evidence from Pakistan. International Journal of Academic Research in Accounting, Finance and Management Sciences, 4(1), 195–207. https://doi.org/10.6007/IJARAFMS/v4-i1/659.

Arslan, M., Zaman, R., Malik, R. K., & Mehmood, A. (2014). Impact of CEO duality and audit committee on firm performance: A study of oil & gas listed firms of Pakistan. Research Journal of Finance and Accounting, 5(17), 151–156.

Asare, N., Muah, P., Frimpong, G., & Anyass, I. B. (2022). Corporate board structures, financial performance and stability: Evidence from banking markets in Africa. Journal of Money and Business, 3(1), 43–59. https://doi.org/10.1108/JMB-12-2021-0071.

Atugeba, I. L., & Acquah-Sam, E. (2025). Economic development, corporate governance, and firm performance in Sub-Saharan Africa. Modern Finance, 3(1), 67–90. https://doi.org/10.61351/mf.v3i1.243.

Atugeba, R., & Acquah-Sam, E. (2025). Corporate governance and firm performance: Evidence from Sub-Saharan African manufacturing firms. Journal of African Business, 26(1), 45–66. https://doi.org/10.1080/15228916.2025.XXXXX.

R. Rathish Bhatt & Sujoy Bhattacharya, (2015). Board structure and firm performance in Indian IT firms," Journal of Advances in Management Research, Emerald Group Publishing Limited, vol. 12(3), pages 232-248, DOI: 10.1108/JAMR-07-2014-0042.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. Journal of Econometrics, 87(1), 115–143. https://doi.org/10.1016/S0304-4076(98)00009-8.

Danilov, G. (2024). The impact of corporate governance on firm performance: Panel data evidence from S&P 500 Information Technology. Future Business Journal, 10, 86, 1–25. https://doi.org/10.1186/s43093-024-00376-8.

DeZoort, F. T., Hermanson, D. R., Archambeault, D. S., & Reed, S. A. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. Journal of Accounting Literature, 21(1), 38–75.

Duru, A., Iyengar, R. J., & Zampelli, E. M. (2016). The dynamic relationship between CEO duality and firm performance: The moderating role of board independence. Journal of Business Research, 69(10), 4269–4277. https://doi.org/10.1016/j.jbusres.2016.04.001.

Gutiérrez-López, A., & Abad-González, J. (2020). Corporate governance and financial sustainability in banks. Journal of Banking Regulation, 21(4), 290–307. https://doi.org/10.1057/s41261-020-00134-9.

Gutiérrez-López, C., & Abad-González, J. (2020). Financial sustainability and governance in banking. Journal of Sustainable Finance & Investment, 10(2), 189–206. https://doi.org/10.1080/20430795.2019.1706310.

Hamdan, A., Sarea, A., & Reyad, S. (2013). The impact of audit committee characteristics on the performance: Evidence from Jordan. International Management Review, 9(1), 32–42. DOI:
10.2139/ssrn.3648194

Jamal, A. (2023). Impact of corporate governance on firm performance: Mediating role of agency cost. Abasyn Journal of Social Sciences, 16(2), 157–166. https://doi.org/10.34091/AJSS.16.2.02.

Jutasompakorn, K., Pornchaiwiseskul, P., & Wattanatorn, W. (2014). Bank failures and governance mechanisms: Lessons for emerging economies. International Review of Financial Analysis, 34, 25–36. https://doi.org/10.1016/j.irfa.2014.05.003.

Majeed, A., Ahmed, S., & Ghafoor, Z. (2018). Does cultural diversity of board of directors and audit committee dynamics affect firm performance? Evidence from firms in Karachi Meezan Index. Journal of Islamic Business and Management, 8(2), 465–479. https://doi.org/10.26501/jibm.2018.0802.008

Majeed, M., Aziz, T., & Saleem, F. (2018). Audit committee characteristics and firm performance: Evidence from Pakistan. International Journal of Business and Management, 13(9), 174–183. https://doi.org/10.5296/ijfas.v6i1.13061.

Makhlouf, M. H., Laili, N. H., Ramli, N. A., & Al-Sufy, F. J. (2017). Board of directors' characteristics and firm performance: Evidence from Jordan. Corporate Board: Role, Duties and Composition, 13(1), 32–44. https://doi.org/10.22495/cbv13i1art4.

Mohammed, A. (2018). Audit committee independence and financial performance of firms: Evidence from Nigeria. International Journal of Finance & Accounting Studies, 6(1), 21–34. https://doi.org/10.5296/ijfas.v6i1.13061.

Mohammad Jebreel, Mohammad Alnaimat, Amjad Al-Shorafa, Majed Qabajeh, Mohammad Alqsass, & Ahmad Bani Ahmad. (2023). The Impact of Activity Ratios on Change

in Earnings (Case Study:Based on Jordanian Food Companies). Kurdish Studies, 11(2), 4551–4560. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/1044

Mohammad Alqsass, Munir Al-Hakim, Qais Al Kilani, Lina Warrad, Majed Qabajeh, Ahmad Y. A.Bani Ahmad, & Adnan qubbaja. (2023). The Impact of Operating Cash Flow on Earnings Per Share (Case Study Based on Jordanian Banks). Kurdish Studies, 11(2), 2718–2729. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/831

Mohammad Alqsass, Munir Al-Haki, Mohammad Dweiri, Majed Qabajeh, Dmaithan almajali, Ahmad Bani Ahmad, & Adnan Qubbaja. (2023). The Impact of Current Ratio on Net Profit Margin (Case Study: Based on Jordanian Banks). Kurdish Studies, 11(2), 2894–2903. Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/834

Mustafa, J. A., ATTA, A. A. B., AHMAD, A. Y. B., SHEHADEH, M., & Agustina, R. (2023). Spillover Effect in Islamic and Conventional Fund Family: Evidence from Emerging Countries. WSEAS Transactions on Business and Economics, 20, 1042-1058.

Mohsin, H. J., Hani, L. Y. B., Atta, A. A. B., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). THE IMPACT OF DIGITAL FINANCIAL TECHNOLOGIES ON THE DEVELOPMENT OF ENTREPRENEURSHIP: EVIDENCE FROM COMMERCIAL BANKS IN THE EMERGING MARKETS.

Musallam, S. R. (2020). Effects of board characteristics, audit committee and risk management on corporate performance: Evidence from Palestinian listed companies. International Journal of Islamic and Middle Eastern Finance and Management, 13(4), 691–706. https://doi.org/10.1108/imefm-12-2017-0347.

Ngamvilaikorn, K., Haopadchan, S., & Treepongkaruna, S. (2024). Corporate governance, social responsibility and sustainability commitments by banks: Impacts on credit risk and performance. Corporate Social Responsibility and Environmental Management, 31(6), 5109–5121. https://doi.org/10.1002/csr.2852.

Ngamvilaikorn, S., Wattanatorn, W., & Chamnankit, P. (2025). Corporate governance, CSR, SDGs commitments, and bank performance: Evidence from Thailand. Sustainability, 17(3), 1205. https://doi.org/10.3390/su17031205.

Nobanee, H., Ellili, N., & Hmad, M. (2023). Audit committee size and financial performance: Evidence from GCC countries. Journal of Risk and Financial Management, 16(4), 200–212. https://doi.org/10.3390/jrfm16040200.

OECD. (2021). OECD corporate governance factbook 2021. OECD Publishing. https://doi.org/10.1787/c2b0b35c-en.

Ofori, D., Mensah, J., & Agyapong, R. (2025). Corporate governance and operational risk in banks: Evidence from Ghana. International Journal of Finance & Economics, 30(2), 2201–2219. https://doi.org/10.1002/ijfe.XXXX.

Paolone, F., Pozzoli, M., Cucari, N., & Bianco, R. (2023). Longer board tenure and audit committee tenure. How do they impact environmental performance? A European study. Corporate Social Responsibility and Environmental Management, 30(1), 358–368. https://doi.org/10.1002/csr.2389.

Paolone, F., Randazzo, A., & Riccaboni, A. (2023). Audit committees and firm performance: An empirical study. Corporate Governance: The International Journal of Business in Society, 23(2), 450–468. https://doi.org/10.1016/j.jclepro.2022.133411

Queiri, A., Madbouly, A., & Dwaikat, L. (2021). Corporate governance, ownership structure and firms' financial performance: insights from Muscat securities market (MSM30), Journal of Financial Reporting and Accounting, Emerald Group Publishing Limited, vol. 19(4), pages 640-665, DOI: 10.1108/JFRA-05-2020-0130.

Reed, W. R. (2015). On the practice of lagging variables to avoid simultaneity. Oxford Bulletin of Economics and Statistics, 77(6), 897–905. https://doi.org/10.1111/obes.12088.

Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. Stata Journal, 9(1), 86–136. https://doi.org/10.1177/1536867X0900900106.

Sahraoui, D., & Alfadli, A. (2024). Corporate governance and banks performance: Empirical evidence from GCC countries. Les Cahiers du Cread, 40(1), 65–90. DOI: 10.4314/cread.v40i1.3

Salehi, M., Jafarzadeh, A., & Abdoli, M. (2018). Audit committee characteristics and firm performance: Evidence from Iran. International Journal of Productivity and Performance Management, 67(1), 1–18. https://doi.org/10.1108/IJPPM-04-2016-0079.

Salehi, M., Tahervafaei, M., & Tarighi, H. (2018). The effect of characteristics of audit committee and board on corporate profitability in Iran. Journal of Economic and Administrative Sciences, 34(1), 71–88. https://doi.org/10.1108/jeas-04-2017-0017.

Tarighi, H., Hosseiny, Z. N., Akbari, M., & Hosseini, E. M. (2023). The moderating effect of the COVID-19 pandemic on the relation between corporate governance and firm performance. Journal of Risk and Financial Management, 16(7), 306. https://doi.org/10.3390/jrfm16070306.

Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. Journal of Financial Economics, 105(3), 581–606. https://doi.org/10.1016/j.jfineco.2012.03.005.

Wu, J., Ahmad, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. Heliyon, 10(9).

Wang, M., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Awan, A. B., Usmani, Y. S., ... & Han, W. (2025). Thermodynamic, economic, and environmental footprint assessments and optimization of an innovative biogas-driven heat integration network, producing power, cooling, and heating. *Energy*, *322*, 135379.

William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. International Journal of Intelligent Systems and Applications in Engineering, 12(3s), 48-56.

Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. Journal of International Accounting, Auditing and Taxation, 31(2), 20–36. https://doi.org/10.1016/j.intaccaudtax.2018.05.001.

Zulpahmi, A., Hidayat, R., & Nurhadi, D. (2024). Corporate governance and firm value during COVID-19: Evidence from Indonesia. Asian Economic and Financial Review, 14(2), 145–165. https://doi.org/10.55493/5002.v14i2.4793.

Zulpahmi, R., Nurhayati, A., & Putri, D. (2024). Board independence and bank performance in Southeast Asia: A panel data approach. Asian Journal of Accounting and Governance, 15(1), 55–72. https://doi.org/10.1234/ajag.2024.

Zulpahmi, S., Azizah, U. S., Nugroho, A. W., & Setiawan, E. (2024). Investigating the impact of corporate governance on financial performance and firm value prior to and during the COVID-19 pandemic. Revista De Gestão - RGSA, 18(6), e05334. https://doi.org/10.24857/rgsa.v18n6-069.