CORPORATE GOVERNANCE PRACTICES AND FIRM PERFORMANCE IN SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN NAIROBI COUNTY, KENYA

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[1] Mwajedi, A., 2 Kising'u, T., & [3] Gichinga, L.

[1] Master Student, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya
[2,3] Doctor, Lecturer, Jomo Kenyatta University of Agriculture and Technology [JKUAT], Kenya

ABSTRACT

This study examined the effect of corporate governance practices on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The study utilized the cross-sectional survey for the collection of primary data and the correlational research design for testing non causal relationships among variables. The unit of analysis was the savings and credit cooperative society, while the unit of inquiry was the chief executive officer/ secretary to board of the savings and credit cooperative society. The collected data was processed and entered into the statistical package for social sciences (SPSS) version 26 to create a data sheet to be used for statistical analysis. Data was analyzed using descriptive and inferential statistics. The Pearson's product moment correlation analysis was performed to confirm or deny the relationship between the study variables. The correlation results showed that board meetings, board composition, and board size had strong positive significant relationship with firm performance. Interestingly, board independence had moderate strong negative significant relationship with firm performance. A standard multiple linear regression analysis was performed with firm performance as the dependent variable and board meetings, board independence, board composition, and board sizeas the predictor variables. The regression results indicated that board meetings, board independence, board composition, and board size had a positive and significant effect on the firm performance. Interestingly, board independence had negative significant relationship with firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The moderated multiple regression results showed that board gender diversity had a positive significant moderating effect on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The findings provide managers with useful insights and serve as an underpinning for the policy regulatory efforts aimed at strengthening the corporate governance practices and the performance savings and credit cooperative societies, Kenya. Future researchers might examine governance practices and firm performance in other sectors.

Key Words: Board Meetings, Board Independence, Board Composition, Board Size

INTRODUCTION

Over the past 20 years, corporate governance has received considerable attention from practitioners, policymakers and academics (Muhammad, Migliori, & Mohsni, 2022).Corporate governance is the collection of systems, procedures and relations utilized by numerous parties to regulate and run a business (Rosenstein & Thomson, 2021). Scholars opine that corporate governance is the set of rules and practices that define a firm's management's obligations and ensure that the best interests of shareholders are pursued (Goel, Dhiman, Rana, & Srivastava, 2022). Therefore, corporate governance is a collection of corporate policies and best practices enacted by corporate organizations to fulfil their goals in relation to their stakeholders. Corporate governance constitutes the institutional arrangements fundamental to decision-making and coordination of the associations among various interest groups such that the directions and performances of firms are determinable (Nasrallah & El Khoury, 2022). Furthermore, corporate governance is an instrument for sustaining the quality of life of firms based on the needs of the stakeholders such as the management, shareholders, employees, suppliers, creditors, consumers, government and their agencies and the public (Adedeji, San Ong, Uzir, & Hamid, 2020). Nevertheless, to date there is no universally accepted definition of what constitutes good corporate governance (Areneke, Adegbite, & Tunyi, 2022).

Corporate governance has become a prominent topic in the capital markets and academic discussions. Extant literature posits that corporate governance has assumed a central place in the continued effort to sanitize corporate reporting and shore up public confidence in financial markets around the world (Mishra, Manogna, & Jain, 2022). However, the insufficiency of existing corporate governance legislation, principles, structures, and processes to prevent these types of frauds has stoked disputes over the effectiveness of these governing mechanisms (Alfalah, Muneer, & Hussain, 2022).Scholars opine that corporate governance has received attention globally due to the recent corporate failure in many corporate organizations (Areneke *et al.*, 2022;Munyoki, 2021).The general view is that implementation of corporate governance improves firm performance, and safeguards the shareholders' interests (Jan *et al.*, 2021).However, corporate governance practices can only be aligned with sustainable goals if there is a broad and full engagement of professionals who deal with the management of corporations (Flores *et al.*, 2022).

In Kenya, corporate governance has gained a lot of superiority over the last 15 years and this has been attributed to the poor performance of both private and public companies (Magalla, 2019). Kenya has been suffering from poor corporate governance practices and this has led to the proposed Kenya Stewardship Code 8. This is an optional tool to help the institutional investors in observing companies' compliance in which they have invested in (Dignam & Lowry, 2019). A study done to investigate the effect of corporate governance on fraud occurrence in banks in Kenya found out that there was a significant relationship between corporate governance and the fraud occurrence, and the amount of loss incurred. Ahmed and Rugami(2019) did a study about effects of corporate governance on the banking industry in Kenya and found out that size of the audit committee, gender of the board and capital available for the bank had no significant relationship or effect on the profitability of the bank and also size of the board did not influence or affect the performance of the organization.

Financial performance of deposit taking SACCOs is determined by two major factors; financial institutions related factors and the macroeconomic factors (Mwaniki, 2019). The financial institution related factors are SACCOs ownership structure, Sacco size, internal control and risks management capacity while macroeconomic factors are economic growth, inflation, political instability and interest rates offered by the SACCOs. Chen, Dong, Hanand Zhou (2019), asserts that these financial

institutions factors are within the control of the management and can easily be manipulated for the better financial performance of the SACCOs. Asset quality, Capital Adequacy, earning ability, Management Efficiency and Liquidity (CAMEL)framework is commonly used to measure overall financial performance of the financial institutions such as SACCOs. Macroeconomic factors are not within the control of the SACCOs management but adversely affect the performance of the SACCO financially.

According to SASRA report (2019) the principal parameters for measuring growth and performance of financial institutions such as DT-SACCOs that mobilize deposits and issue credit facilities include their total assets, total deposits, gross loans, allowance for loan losses and core capital. The SACCOs' financial performance showsan increase in the total asset base of DT-SACCOs from Kshs 495.25 Billion in 2018 to Kshs 556.71 Billion in 2019 representing a 12.41% growth. The total deposits on the other hand grew by 11.27% from Kshs 341.91 Billion in 2018 to 380.44 Billion in 2019, thereby depicting a scenario in which the rate of growth of total deposits was much lower than the rate of growth of total assets which was at 12.41%. The gross loans on the other hand grew by 12.09% to reach 419.55 Billion in 2019 from Kshs 374.29 Billion recorded in 2018. Once again, the growth rate of the gross loans portfolio exceeded that of the total deposits which grew by 11.27%. The foregoing implies that the demand for loans by members of DT-SACCOs in the aggregate exceeds the rate at which the DT-SACCOs are able to mobilize deposits and savings from their members. This is however an undesirable situation as DT-SACCO's are forced to fund the deficit from external sources, which often than not turns out to be quite expensive.

Research Hypotheses

The study tested five null hypotheses:

- **H_{01}:** Board meetings have no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

- **H_{02}:** Board independence has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

- **H_{03}:** Board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

- **H_{04}:** Board size has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

- **H_{05}:** Board gender diversity has no significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

RELATED LITERATURE

Theoretical Framework

Agency Theory

The agency theory (Barley & Myers, 1932; Eisenhardt, 1989; Jensen & Meckling, 1976) postulates that in organizations, there exists principal agent relationship mainly between owners and managers (Naz, Ali, Rehman, & Ntim, 2022). The theory is relevant in explaining the effect of corporate governance practices on firm performance, withboard gender diversity as a moderator in savings and credit cooperative societies in Nairobi County, Kenya. The agency theory posits that all stakeholders have interests in organizations that often conflict, and that each stakeholder endeavors to attain their own benefits, but when the interests of agents are not aligned to the principals, agency conflicts occur (Xu, Wang, & Ma, 2022).Many studies undertaken on corporate governance are informed by agency theory, which posits that corporate governance is necessary in order to ensure that the principal-agent problem is mitigated (Sokhulu, 2020). According to the agency theory, board gender diversity brings unique ideas to resolve the many issues and biases related to the information on the development of new strategies (Syakhroza, Diyanty, & Dewo, 2021).An agent is someone who performs work on behalf of another individual. The difficulty that arises from the

principal-agent relationship is that it is not possible for principals to contractually define everything that the agent should do in every conceivable situation (Syam & Sharma, 2019). The 'ideal' or 'complete' contract is impossible due to bounded rationality. The problems arising from the principal-agent relationship may be exacerbated by three factors: hidden information, sunk costs and opportunism. Hidden information occurs when agents possess knowledge that the principal is unaware of and the agent has an incentive to conceal this knowledge from the principal, ceteris paribus. The significance of hidden information is that the agent will be able to 'shirk' or minimize efforts to the detriment of the principal (Tan, 2021).

Stewardship Theory

In contrast to agency theory, stewardship theory assumes managers are good stewards who will act in the best interest of the owners (Buallay, Cummings, & Hamdan, 2019). The fundamentals of stewardship theory are based on social psychology, which focuses on the behavior of executives who believe their duty is to safeguard the interest of the principal. In a similar vein to the agency approach, stewardship theory posits that the corporate governance of an organization is necessary to ensure that the interests of stakeholders and the long-term survival of the institution are realized (Gastrow, 2020). The steward's behavior is pro-institutional and collectivistic and has higher utility than individualistic self-serving behavior.

According to Gastrow (2020), the steward's behavior will not deviate from the interest of the institution because the steward seeks to optimize the objectives of the institution where steward's utilities are also maximized as organizational success increases; which is very important to achieve the mission of the stewards (Ozbek & Boyd, 2020). According to this theory, corporate governance is necessary to ensuring that the organization is headed in the right direction, with this direction referring to the interests of stakeholders (Ozbek & Boyd, 2020). Stewardship

theory revolves around the notion that leaders can instill a common set of values and understanding within an institution and that stewardship has the capacity to subsume and incorporate concerns about efficiency into a more socially responsible, normative framework.

Stakeholder Theory

Stakeholder theory endeavors to incorporate elements of agency and stewardship theories Keay (2019). The theory represents recognition by management scholars that current approaches to understanding the business environment fail to take account of a wide range of groups who can affect or are affected by the corporation, its stakeholders (Galati, Tulone, Tinervia, & Crescimano, 2019). The contention of stakeholder theory is that the long term commercial and strategic performance of institutions, particularly corporatized firms, is dependent on its relationship with stakeholders. Stakeholders, however, must be parties that have indirect interests in the activities and performance of an organization (e.g., employees, communities in which the organization operates and shareholders) Previous definitions the 'stake' denoted by the term 'stakeholder' is understood to impose normative obligations and hence a stake is identified as 'an interest' for which a valid normative claim can be advanced (Galati *et al.*, 2019).
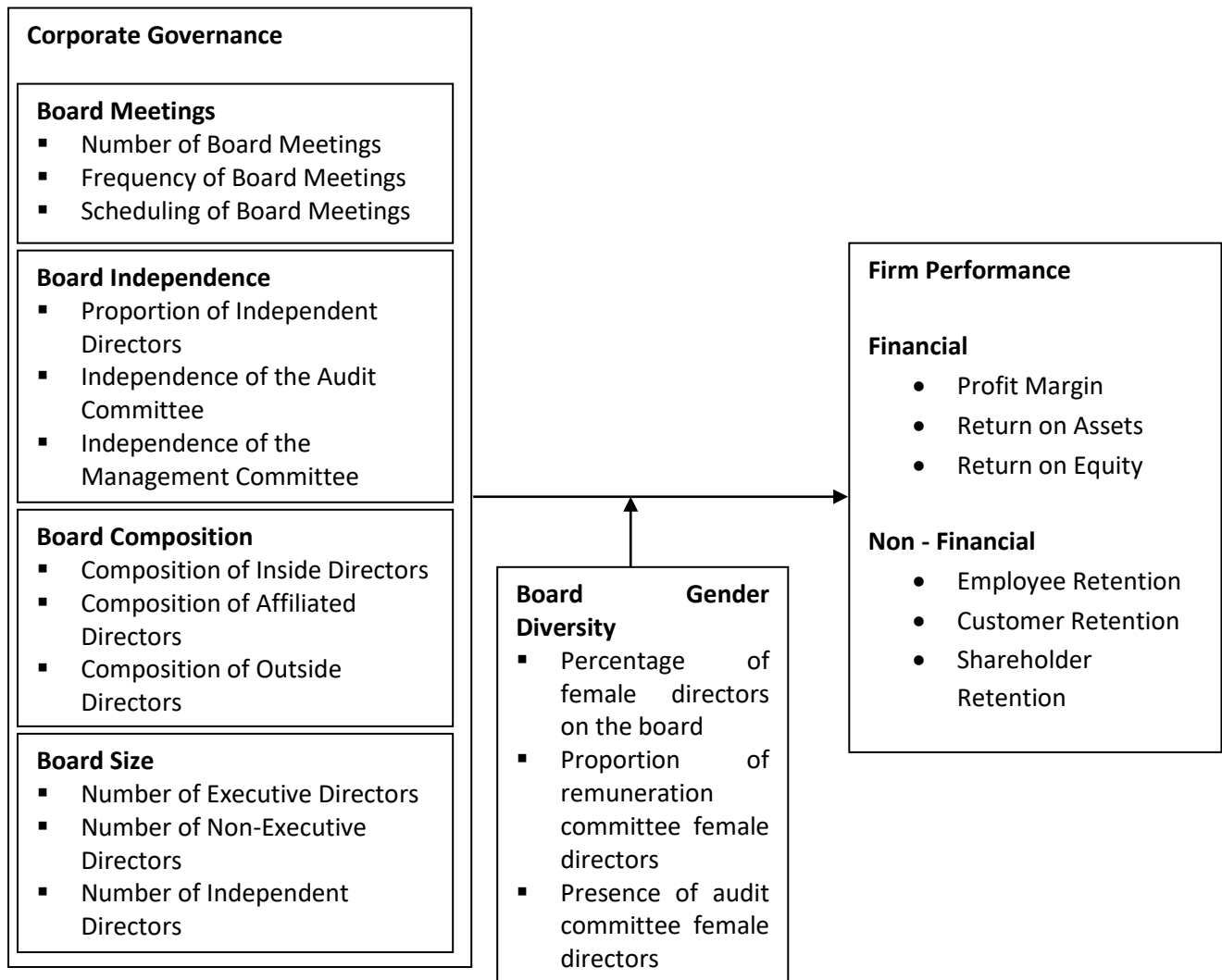
Managerial Hegemony Theory

One of the dominant theories of board power has been, managerial hegemony theory which relates back to the thesis of Berle and Means of 1932 that although share holdersmay legally own large corporations, they no longer effectively control them, since control has been effectively ceded to a new professional managerial class. This theory suggests that managers, through their professional knowledge and control of key power sources such as information and other organizational resources, are able to exert most influence over key organizational decisions. Over time a variety of empirical studies have, with a few caveats, lent support to this theory. For example, Vaidya, Ambad and Bhosle (2019) in the US concluded that boards

did not get involved in strategy except incrises, and that control rested with the chief executive rather than the board. Wheelan and Hunger (2019) came to similar conclusions but argued that managerial power was always inthe context of various constraints and the latent power of stakeholders such as external board members. From this perspective the board ends up as little more than a 'rubber stamp' for management's decisions. Its function becomes essentially symbolicto give legitimacy to managerial decisions.

Conceptual Framework

Figure 1 presented the conceptual framework for the study.

Corporate Governance

Board Meetings
- Number of Board Meetings
- Frequency of Board Meetings
- Scheduling of Board Meetings

Board Independence
- Proportion of Independent Directors
- Independence of the Audit Committee
- Independence of the Management Committee

Board Composition
- Composition of Inside Directors
- Composition of Affiliated Directors
- Composition of Outside Directors

Board Size
- Number of Executive Directors
- Number of Non-Executive Directors
- Number of Independent Directors

Board Gender Diversity
- Percentage of female directors on the board
- Proportion of remuneration committee female directors
- Presence of audit committee female directors

Firm Performance

Financial
- Profit Margin
- Return on Assets
- Return on Equity

Non - Financial
- Employee Retention
- Customer Retention
- Shareholder Retention

Independent Variables   **Moderating Variable**   **Dependent Variable**

Figure 1: Conceptual Framework

Board Meetings

Frequency of board meetings measures the intensity of a board's activities, and the quality or effectiveness of its monitoring (Vefeas 2019). All else equal, a higher frequency of board meetings can result in a higher quality of managerial monitoring, and thereby impacts positively on corporate financial performance (Ntim 2019). Also, it has been contended that regular meetings allow directors more time to confer, set strategy, and to appraise managerial performance (Vafeas 2019). This can help directors to remain informed and

knowledgeable about important developments within the firm, and thereby place them in a better position to timely address emerging critical problems (Mangena & Tauringana 2019). In fact, it is suggested that regular meeting attendance is considered a hallmark of the conscientious director. Further, frequent meetings intermingled with informal sideline interactions can create and strengthen cohesive bonds among directors and thereby impact positively on corporate performance.

An opposing theoretical view is that board meetings are not necessarily beneficial to shareholders. Firstly, Vefeas (2019) argues that normally the limited time directors spend together is not used for the meaningful exchange of ideas among themselves. Instead, routine tasks, such as presentation of management reports and various formalities absorb much of the meetings, and this reduces the amount of time that outside directors would have to effectively monitor management (Lipton & Lorsch 2019), which can impact negatively on corporate performance. Secondly, and board meetings are costly in the form of managerial time, travel expenses, refreshments and directors' meeting fees (Vafeas, 2019) that can negatively influence corporate performance.

Board Independence

Board independence isa significant aspect of corporate governance, defined as the proportion of independent non-executive directors on corporate boards, calculated from the number of independent members divided by the number of members on the board (Jaidi, Wenhao, & Mohidin, 2022). Researcher notes that board independence is computed as the percentage of the total number of independent directors sitting in the board (Sethi, Sahu, & Maity, 2022).Scholars aver that board independence is measured by dividing the number of outside or non-executive directors by the total number of directors (Hassan, Soliman, Ragab, & Rageb, 2020). Some scholarly works posit that board independence refers to the state in which all or a majority of the members of a board of directors

do not have a relationship with the company except as directors (Elms & Pugliese, 2022). However, some scholars assert that board independence is not only a function of the proportion of inside to outside directors, rather it includes whether the board has dual leadership role and the degree of director share ownership (Hu, Lin, & Tosun, 2022).Therefore, board independence refers to the ratio of the total number of independent board members to board size.

Board Composition

Board composition isa significant aspect of corporate governance, defined as the distinction between inside and outside directors, and this is traditionally measured as the percentage of outside directors on the board (Titilayo, Adediran, & Achimugu, 2022).Prior studies avow that board composition is a subset of corporate governance in firms, where corporate governance in a particular firm improves then firm performance will also increase (Khan & Awan, 2021). Some scholars assert that board composition may be easily differential into inside directors, affiliated directors and outside directors (Nasiru & Ahmed, 2021). Past studies notes that the board composition distinction is derived from the extent of their participation in firm management (Mohammed & Kurawa, 2021).

Board Size

Board size is a significant aspect of corporate governance, defined as the total head counts of directors either executive, non-executive, and independent directors seating on the corporate board of an organization (Benvolio & Ironkwe, 2022). Scholars opine that board size refers to the total number of directors that can influence the board's functioning and effectiveness (Qaderi*et al.*, 2022).Existent literature posits that board size is the complete number of directors appointed to serve on the corporate board of a firm (Kyei, Werner, & Appiah, 2022). Scholars aver that board size represents the number of people that make up corporate board and that determine how effective it discharges its fiduciary responsibilities (Mohammed & Kurawa, 2021).For the purpose of

this study, board size is defined as the total number of directors on the corporate board of each sampled firm which is inclusive of the chairperson of the board, the chief executive officer or managing director, executive directors and non-executive directors in a given financial year (Goel *et al.*, 2022).

Board Gender Diversity

Board gender diversity isa significant aspect of corporate governance, defined as the presence of female directors on the board of directors of a firm (García-Sánchez *et al.*, 2022). Extant literature posits that the resource dependency theory posits that gender diversity on boards may well facilitate the provision of additional resources and enhance the company's reputation and legitimacy (Goel *et al.*, 2022). Similarly, the agency theory holds that the presence of female directors on the board may introduce more knowledge, experience and skills that foster an effective monitoring function (Titilayo *et al.*, 2022). Scholars opine that a higher presence of female directors is expected to drive the greater dissemination of integrated reporting information, which, in turn, reduces information asymmetry and resulting agency problems (Qaderi *et al.*, 2022).Evidence that supports the arguments of board gender diversity accentuates the significant role of female directors on the board regarding the relationship between a firm's corporate governance and corporate sustainability performance (Naeem *et al.*, 2022). Scholars aver that the gender socialization theory rationalizes why board gender diversity adds value to firms and leads to higher social responsibility (Kara, Nanteza, Ozkan, & Yildiz, 2022).

Firm Performance

Firm performance represents a measure of how well or poorly an entity is putting its resources into use (Benvolio & Ironkwe, 2022). Some studies show that firm performance is the set of financial and nonfinancial indicators which provide information on the degree of achievement of set goals and objectives (Úbeda-García, Claver-Cortés, Marco-Lajara, & Zaragoza-Sáez, 2021). Researchers opine

that firm performance measures the efficiency applied by firm in the use of its assets to create profits (Sethi *et al.*, 2022). Scholars avow that firm performance measures the level at which financial objectives are being met (Titilayo *et al.*, 2022).

Firm performance, specifically why firms perform differently, is a core theme in strategic management research. Extant literature posits that firm performance has been recognized as a relevant construct in strategic management research and has been frequently used as a dependent variable (Oudgou, 2021). Scholars avow that the performance of a firm is very much essential for survival, growth and diversification in this competitive marketand the collapse in the performance of a firm leads to the emergence of several problems like labor turnover, stakeholder dissatisfaction and liquidation (Sethi *et al.*, 2022).Prior studies assert that it is widely accepted that the composition of the corporate board could play a vital role in determining firm performance (Benvolio & Ironkwe, 2022).

METHODOLOGY

The study utilized the cross-sectional survey for primary data collection. The study utilized the correlational research design for testing non causal relationships among variables. The cross-sectional survey and correlational research design was appropriate for collecting primary data at one time point (Falatah, Al-Harbi, & Alhalal, 2022) to objectively test non causal relationships among variables without the researcher controlling any of the variables (Yu*et al.*, 2022). The positivist research philosophy was appropriate because it emphasizes quantifiable observations that are used for statistical analysis (Kangea, Nasieku, & Muturi, 2022). The unit of analysis was the SACCO, while the unit of inquiry was the Chief Executive Officer/Secretary to Board of the SACCO. A standard multiple linear analysis was performed with board meetings, board independence, board composition and board size predicting firm performance to test direct effect of corporate governance practices on firm performance. The

standard multiple linear regressions model for the testing of H_01, H_02, H_03, and H_04 was specified as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \ldots \text{ Model 1}$$

Where:

Y = Firm Performance

β_0 = Constant Term

X_1 = Board Meetings

X_2 = Board Independence

X_3 = Board Composition

X_4 = Board Size

$\beta_1 - \beta_4$ = Regression Coefficient to be estimated

ε = Stochastic Error Term

To test H_05, a moderated multiple linear analysis was conducted. The linear regressions models for the test of H_05 were specified as:

$$Y = \beta_0 + \beta_5 X + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots. \quad \text{Model 2}$$
$$Y = \beta_0 + \beta_6 X + \beta_7 Z + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots \quad \text{Model 3}$$
$$Y = \beta_0 + \beta_8 X + \beta_9 Z + \beta_{10} X_* Z + \varepsilon \ldots\ldots\ldots\ldots \text{ Model 4}$$

Where:

Y = Firm Performance

β_0 = Constant Term

X = Corporate Governance

Z = Board Gender Diversity

X*Z = Corporate Governance*Board Gender Diversity

$B_5 - \beta_{10}$ = Regression Coefficient to be estimated

ε = Stochastic Error Term

RESULTS

Multiple Linear Regressions Analysis Results

A standard multiple linear regression analysis was performed with firm performance as the dependent variable and board meetings, board independence, board composition, and board sizeas the predictor variables.The standard multiple linear regression analysis, α = .05 (two-tailed),was conducted to examine the extent to which, if any, of the linear combination of board meetings, board independence, board composition, and board size predict the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Existent literature posits that a standard multiple

linear regression analysis is a powerful analytical tool used to determine which specific independent variables predicts the variance of dependent variable selected by the research (Kothari & Garg, 2019).The null hypothesis was that the linear combination of board meetings, board independence, board composition, and board size does not significantly predict the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The alternative hypothesis was that the linear combination of board meetings, board independence, board composition, and board size significantly predict the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Model Summary

The standard multiple linear regression results showed that the model as a whole was able to significantly predict the variance in the firm performance, $F_{(4, 101)} = 78.594$, $p < 0.001$, $R^2 = 0.764$, in savings and credit cooperative societies in Nairobi County, Kenya. From the model summary table, the value of coefficient of correlation (R) was 0.874, while the value of coefficient of determination (R^2) was 0.764, the value of the adjusted R^2 was 0.754, the Std. Error of the Estimate value of 0.26708, and the Durbin-Watson statistic was 1.702.The R^2 value of 0.764indicates that the linear combination of predictor variables (board meetings, board independence, board composition, and board size)could significantly predict and explain approximately 76.4% of the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The Adjusted R Square value of 0.754 indicated that the model as a whole was not able to predict the remaining 24.6% of the variance in the firm performancein savings and credit cooperative societies in Nairobi County, Kenya. The Std. Error of the Estimate value of 0.26708 indicates that there were other factors not included in the model, in the current study that could also predict the remaining 24.6% of the variance in the firm performance in

savings and credit cooperative societies in Nairobi County, Kenya. Therefore, this calls for future researches to discover the other variables not included in the model in the current study that also predict the remaining variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. From the model summary table, the Durbin-Watson test statistic had a value of 1.702, falling within the optimum range of 1.5 to 2.5, implying that there was no severe autocorrelation detected in the in the residual values in the datasets. Existent literature posits that the Durbin-Watson statistics falling within the optimum range of 1.5 to 2.5 indicate that there is no severe autocorrelation detected in the in the residual values in the datasets (Hair *et al.*, 2020). Table 1 presents the standard multiple linear regression's model summary results.

Table 1: The Standard Multiple Linear Regression's Model Summary[b] Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.874[a]	.764	.754	.26708	1.702

a. Predictors: (Constant), Board Size (X_4), Board Meetings (X_1), Board Composition (X_3), Board Independence (X_2)

b. Dependent Variable: Firm Performance (Y)

Analysis of Variance

From the Analysis of Variance (ANOVA) table results, the overall multiple regression model (the model involving constant, board meetings, board independence, board composition, and board size),achieved a high degree of fit, as reflected by R = 0.874, R^2 = 0.764, adj. R^2 = 0.754, F (4, 101) = 78.594, p<0.001.From the results, the model as a whole was able to significantly predict firm performance, F (4, 101) = 78.594, p < 0.001, R^2 = 0.764, in savings and credit cooperative societies in Nairobi County, Kenya.The results led to the rejection of the null hypothesis that the linear combination of predictor variables (board meetings, board independence, board composition, and board size) does not significantly predict firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the linear combination of predictor variables (board meetings, board independence, board composition, and board size) significantly predict firm performancein savings and credit cooperative societies in Nairobi County, Kenya.

Table 2 presents the standard multiple linear regression's ANOVA results.

Table 2: The Standard Multiple Linear Regression's ANOVA[a] Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.424	4	5.606	78.594	.000[b]
	Residual	6.919	97	.071		
	Total	29.343	101			

a. Dependent Variable: Firm Performance (Y)

b. Predictors: (Constant), Board Size (X_4), Board Meetings (X_1), Board Composition (X_3), Board Independence (X_2)

Regressions Coefficients

From the coefficients table, the unstandardized regression coefficients (B) were substituted to the multiple regression model specified for the study to specifythe final predictive equation:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where:

Y = Firm Performance

β_0 = Constant Term

X_1 = Board Meetings

X_2 = Board Independence

X_3 = Board Composition

X_4 = Board Size

$\beta_1 - \beta_4$ = Regression Coefficient to be estimated

ε = Stochastic Error Term

Therefore, the final predictive equation was:

$Y = -0.117 + 0.541X_1 + -0.301X_2 + 0.232X_3 + 0.548X_4$

From the results, holding all factors in to account constant (board meetings, board independence, board composition, and board size, constant at zero, firm performance would be -0.117. The multiple regression suggests that with all other factors held constant, a unit increase in board meetings would lead to 0.541unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The findings revealed that with all other factors held constant, a unit increase in board independence would lead to 0.301unit decrease in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The results also indicated that with all other factors held constant, a unit increase in board composition would lead to 0.232unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The findings further showed that with all other factors held constant, a unit increase in board size would lead to 0.548unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Based on the magnitude of the unstandardized regression coefficients (B) of the independent variables, the board meetings, was the best predictor of the value of in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

In the standard multiple linear regression model, board meetings had a positive and significant effect on the firm performance (β_1 = 0.508; t = 7.449; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. The research findings showed that board independence had a negative and significant effect on the firm performance (β_2 = -0.391; t = -3.626; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. The findings revealed that board composition had a positive and significant effect on the firm performance (β_3 = 0.256; t = 2.771; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. The results further showed that board sizehad a positive and significant effect on the firm performance(β_4 = 0.641; t = 9.922; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. From the coefficients table, it is also clear that the tolerance values were greater than 0.1, while the variance inflation factors (VIF) values were less than 10, indicating that there was no multicollinearity among the predicator variables (Hair *et al.*, 2020).

Table 3 presents the standard multiple regression coefficients results.

Table 3: The Standard Multiple Linear Regressions Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	-.117	.243		-.481	.632		
Board Meetings (X_1)	.541	.073	.508	7.449	.000	.522	1.917
Board Independence (X_2)	-.301	.083	-.391	-3.626	.000	.210	4.773
Board Composition (X_3)	.232	.084	.256	2.771	.007	.284	3.519
Board Size (X_4)	.548	.055	.641	9.922	.000	.583	1.715

a. Dependent Variable: Firm Performance (Y)

Moderated Multiple Linear Regressions Analysis

A moderated multiple linear regression analysis was performed to examine the moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.Nevertheless, prior to investigating the moderating effect on the relationship between corporate governance practices and firm performance, a composite index, corporate governance, was computed for board meetings, board independence, board composition, and board size. The composite index, corporate governance, was necessary as it provided for the different weights associated with the four critical dimensions of the independent variable. Furthermore, the composite index, corporate governance, formed the basis for testing the moderating effect of board gender diversity on the zero-order correlation between corporate governance practices and firm performance using regression models. In the first step for testing moderation, the composite independent variable (corporate governance) was regressed on firm performance and the out associated with this analysis. In the second step for testing moderation, the composite independent variable (corporate governance) and board gender diversity were regressed on firm performance and the out associated with this analysis. In the third step, corporate governance, board gender diversity and the interaction term (corporate governance*board gender diversity) were regressed on firm performance.

Model Summary

From the moderated multiple linear regression results, model 1 as a whole was able to significantly predict the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya, $F_{(1, 101)} = 40.749$, $p < 0.001$, $R^2 = 0.290$.From the model summary table, the values of the coefficient of correlation (R) were0.538,0.591,0.633 while the values of the coefficient of determination (R^2) were0.290,0.350,0.401, the values of the adjusted R^2 were0.282,0.337,0.383,and the values of the Std. Error of the Estimate were 0.44599,0.42884,0.41356 for model 1, model 2, and model 3, respectively.

For model 1, the R^2 value of 0.290indicates that corporate governance could significantly predict and explain approximately 29.0% of the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. From the moderated multiple linear regression results, model 2 as a whole was able to significantly predict the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya, $F_{(2, 101)} = 26.615$, $p < 0.001$, $R^2 = 0.350$. For model 2, the R^2 value of 0.350indicates that the linear combination of predictor variables (corporate governance and board gender diversity)could significantly predict and explain approximately 35.0% of the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

From the moderated multiple linear regression results, model 3 as a whole was able to significantly predict the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya, $F_{(3, 101)} = 21.896$, $p < 0.001$, $R^2 = 0.350$. For model 3, the R^2 value of 0.401indicates that the linear combination of predictor variables (corporate governance, board gender diversity, and corporate governance*board gender diversity) could significantly predict and explain approximately 40.1% of the variance in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. From the model summary table, the Durbin-Watson statistic was 1.795,falling within the optimum range of 1.5 to 2.5, implying that there was no severe autocorrelation detected in the in the residual values in the datasets. Existent literature posits that the Durbin-Watson statistics falling within the optimum range of 1.5 to 2.5 indicate that there is no severe autocorrelation detected in the in the residual values in the datasets. Table 4 presents the model summary results.

Table 4: Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.538[a]	.290	.282	.44599	.290	40.749	1	100	.000	
2	.591[b]	.350	.337	.42884	.060	9.157	1	99	.003	
3	.633[c]	.401	.383	.41356	.052	8.452	1	98	.005	1.795

a. Predictors: (Constant), Corporate Governance (X)

b. Predictors: (Constant), Corporate Governance (X), Board Gender Diversity (Z)

c. Predictors: (Constant), Corporate Governance (X), Board Gender Diversity (Z), Corporate Governance * Board Gender Diversity

d. Dependent Variable: Financial Performance (Y)

Analysis of Variance

From the Analysis of Variance (ANOVA) table, model 1 (the model involving constant, and corporate governance), achieved a high degree of fit, as reflected by R = 0.538, R^2 = 0.290, adj. R^2 = 0.282, $F_{(1, 101)}$ = 40.749, $p < 0.001$. For model 1, the regression results showed that corporate governance was able to significantly predict firm performance, $F_{(1, 101)}$ = 40.749, $p < 0.001$, R^2 = 0.282, in savings and credit cooperative societies in Nairobi County, Kenya.

The results indicated that model 2 (the model involving constant, corporate governance, and board gender diversity) also achieved a high degree of fit, as reflected by R = 0.591, R^2 = 0.350, adj. R^2 = 0.337, $F_{(2, 101)}$ = 26.615, $p < 0.001$. The model 2 further showed substantial improvement compared to model 1, and the model. From the ANOVA table results, model 2(the model involving constant, corporate governance, and board gender diversity), as a whole was able to significantly predict firm performance, $F_{(2, 101)}$ = 26.615, $p < 0.001$, R^2 = 0.350, in savings and credit cooperative societies in Nairobi County, Kenya.The regression results indicated that the linear combination of predictor variables (corporate governance and board gender diversity) significantly predict firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

From the ANOVA table results, model 3 (the model involving constant, corporate governance, board gender diversity, and corporate governance * board gender diversity) also achieved a high degree of fit, as reflected by R = 0.633, R^2 = 0.401, adj. R^2 = 0.383, $F_{(3, 101)}$ = 21.896, $p < 0.001$. The results showed that the model 3 as a whole was able to significantly predict firm performance, $F_{(3, 101)}$ = 21.896, $p < 0.001$, R^2 = 0.401, in savings and credit cooperative societies in Nairobi County, Kenya. The moderated multiple regression results indicated that the linear combination of predictor variables (corporate governance, board gender diversity, and corporate governance * board gender diversity) significantly predict firm performance in savings and credit cooperative societies in Nairobi County, Kenya. From the results, model 3 showed substantial improvement compared to model 1, signifying that board gender diversity had a significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Table 5 presents the moderated multiple linear regression's ANOVA results.

Table 5: The Moderated Multiple Linear Regression's ANOVA[a] Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.105	1	8.105	40.749	.000[b]
	Residual	19.891	100	.199		
	Total	27.996	101			
2	Regression	9.789	2	4.895	26.615	.000[c]
	Residual	18.206	99	.184		
	Total	27.996	101			
3	Regression	11.235	3	3.745	21.896	.000[d]
	Residual	16.761	98	.171		
	Total	27.996	101			

a. Dependent Variable: Firm Performance (Y)

b. Predictors: (Constant), Corporate Governance (X)

c. Predictors: (Constant), Corporate Governance (X), Board Gender Diversity (Z)

d. Predictors: (Constant), Corporate Governance (X), Board Gender Diversity (Z), Corporate Governance * Board Gender Diversity

Regressions Coefficients

From the coefficients table, the unstandardized regression coefficients (B) were substituted to the specified models for the testing the moderating effect of board gender diversity on the relationship between corporate governance practices and firm performance to specify the final predictive equation:

$$Y = \beta_0 + \beta_5 X + \varepsilon$$
$$Y = \beta_0 + \beta_6 X + \beta_7 Z + \varepsilon$$
$$Y = \beta_0 + \beta_8 X + \beta_9 Z + \beta_{10} X*Z + \varepsilon$$

Where:

Y = Firm Performance

β_0 = Constant Term

X = Corporate Governance

Z = Board Gender Diversity

X*Z = Corporate Governance*Board Gender Diversity

$B_5 – \beta_{10}$= Regression Coefficient to be estimated

ε = Stochastic Error Term

Therefore, the final predictive equationsfor the testing the moderating effect of board gender diversity on the relationship between corporate governance practices and firm performance were:

$$Y = 3.895 + 0.283X + \varepsilon$$

$$Y = 3.895 + 0.510X + -0.261Z + \varepsilon$$

$$Y = 3.952 + 0.390X + -0.251Z + -0.066X*Z$$

From the simple linear regressions coefficients results in model 1, holding all factors in to account constant (corporate governance, constant at zero, firm performance would be 3.895. The positive slope for corporate governance,β_6= 0.283 indicates that with all other factors held constant, a unit increase in corporate governance would lead to 0.283unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. However, the positive slope for corporate governance, in the moderated multiple linear regression results, model 3, β_8= 0.390 indicates that with all other factors held constant, a unit increase in corporate governance would lead to 0.390unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the results suggest that board gender diversity had a positive significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

From the regressions coefficients table in model 2,holding all factors in to account constant (corporate governance, board gender diversity, constant at zero, firm performance would be

3.895.The positive slope for corporate governance,β_7= 0.510 indicates that with all other factors held constant, a unit increase in corporate governance would lead to 0.510unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. However, the negative slope for board gender diversity,B_8= -0.261 indicates that with all other factors held constant, a unit increase in board gender diversity would lead to 0.261unit decrease in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

From the moderated multiple linear regression results, model 3 suggests that holding all factors in to account constant (corporate governance, board gender diversity, and corporate governance*board gender diversity, constant at zero, firm performance would be 3.952. From the moderated multiple linear regression coefficients table, the positive slope for corporate governance,B_8= 0.390 indicates that with all other factors held constant, a unit increase in corporate governance would lead to 0.390unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. However, the negative slope for board gender diversity,B_9= -0.251 indicates that with all other factors held constant, a unit increase in board gender diversity would lead to 0.251unit decrease in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. From the results, the negative slope for the interactive term, corporate governance*board gender diversity,B_{10}= -0.066 indicates that with all other factors held constant, a unit increase in corporate governance*board gender diversity would lead to 0.066unit decrease in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The findings revealed that with all other factors held constant, a unit increase in board independence would lead to 0.301unit decrease in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The results also indicated that with all other factors held

constant, a unit increase in board composition would lead to 0.232unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The findings further showed that with all other factors held constant, a unit increase in board size would lead to 0.548unit increase in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Based on the magnitude of the unstandardized regression coefficients (B) of the independent variables, the board meetings, was the best predictor of the value of in the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

From the simple linear regression results, in model 1, corporate governance had a positive and significant effect on the firm performance (β_5 = 0.538; t = 6.383; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. With model 2, the results showed that corporate governance had a positive and significant effect on the firm performance (β_6 = 5.914; t = 5.914; p ≤ 0.05), while board gender diversity had a negative significant effect on the firm performance (β_7 = -0.496; t = -3.026; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. From the moderated multiple linear regression results in model 3, corporate governance had a positive and significant effect on the firm performance (β_8 = 0.740; t = 4.194; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. However, board gender diversity had a negative significant effect on the firm performance (β_9 =-0.478; t = -3.020; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. The moderated multiple linear regression results showed that the interactive term, corporate governance*board gender diversity, had a negative significant effect on the firm performance (β_{10} =-0.312; t = -2.907; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, board gender diversity had a positive significant moderating effect on the relationship between corporate governance

practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Table 6 presents the moderated multiple linear regression coefficients results.

Table 6: The Moderated Multiple Linear Regressions Coefficients[a] Results

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3.895	.044		88.213	.000		
	Corporate Governance (X)	.283	.044	.538	6.383	.000	1.000	1.000
2	(Constant)	3.895	.042		91.740	.000		
	Corporate Governance (X)	.510	.086	.969	5.914	.000	.245	4.086
	Board Gender Diversity (Z)	-.261	.086	-.496	-3.026	.003	.245	4.086
3	(Constant)	3.952	.045		87.146	.000		
	Corporate Governance (X)	.390	.093	.740	4.194	.000	.196	5.100
	Board Gender Diversity (Z)	-.251	.083	-.478	-3.020	.003	.244	4.093
	Corporate Governance * Board Gender Diversity	-.066	.023	-.312	-2.907	.005	.532	1.879

a. Dependent Variable: Firm Performance (Y)

Hypotheses Test Results

In total, five null hypotheses were tested to examine the direct and the indirect of corporate governance on firm performance. The H_01, H_02, H_03 and H_04 were on the direct effect of corporate governance on firm performance. However, H_05 was on the direct effect of corporate governance on firm performance, with board gender diversity as the moderator. To test the H_01, H_02, H_03 and H_04 H_01, H_02, H_03 and H_04, a standard multiple linear regression analysis was performed with firm performance as the dependent variable and board meetings, board independence, board composition, and board size as the predictor variables. The standardized regression coefficient (β), the corresponding t-values, and P-values were used to test the H_01, H_02, H_03 and H_04 at 95% confidence level, α = 0.05, and t = 1.960 to statistically help draw acceptable and realistic inferences. Therefore, the decision rule was to reject the null hypothesis H_0iif the P ≤ 0.05, and otherwise fail to reject

the null hypothesis H_0iif the P > 0.05. Existent literature posits that in hypotheses testing at 5% level of significance (α = 0.05) and 95% confidence level, the decision rule is to reject the null hypothesis H_0iif the P ≤ 0.05, and otherwise fail to reject the null hypothesis H_0iif the P > 0.05 (Bryman & Bell, 2019).

Hypothesis One Test Results

The first null hypothesis (H_01) predicted that showed that board meetings have no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The decision rule was to reject the null hypothesis H_01 if the $\beta_1 \neq 0$, t ≥ 1.960, P ≤ 0.05, and otherwise fail to reject the null hypothesis H_01 if the $\beta_1 = 0$, t < 1.960, P > 0.05. The standard multiple regression results showed that board meetings had a positive and significant effect on the firm performance ($\beta_1 = 0.508$; t = 7.449; p ≤ 0.05) in savings and credit cooperative societies in Nairobi County, Kenya.

Consequently, the $H_0 1$ was rejected, providing the empirical support for $H_1 1$. Therefore, conclusion was made that board meetings have significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Hypothesis Two Test Results

The second null hypothesis ($H_0 2$) predicted that board independence has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The decision rule was to reject the null hypothesis $H_0 2$if the $\beta_2 \neq 0$, t ≥ 1.960, P ≤ 0.05, and otherwise fail to reject the null hypothesis $H_0 2$if the $\beta_2 = 0$, t < 1.960, P > 0.05.The standard multiple regression results revealed that board independence had a positive and significant effect on the firm performance ($\beta_2 = -0.391$; t = -3.626; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 2$ was rejected, providing the empirical support for $H_1 2$. Therefore, conclusion was made that board independence has a significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Hypothesis Three Test Results

The third null hypothesis ($H_0 3$) predicted that board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The decision rule was to reject the null hypothesis $H_0 3$if the $\beta_3 \neq 0$, t ≥ 1.960, P ≤ 0.05, and otherwise fail to reject the null hypothesis $H_0 3$if the $\beta_3 = 0$, t < 1.960, P > 0.05.The standard multiple regression results indicated that that board composition had a positive and significant effect on the firm performance ($\beta_3 = 0.256$; t = 2.771; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 3$ was rejected, providing the empirical support for $H_1 3$. Therefore, conclusion was made that board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Hypothesis Four Test Results

The fourth null hypothesis ($H_0 4$) predicted that board size has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The decision rule was to reject the null hypothesis $H_0 4$if the $\beta_1 \neq 0$, t ≥ 1.960, P ≤ 0.05, and otherwise fail to reject the null hypothesis $H_0 4$if the $\beta_1 = 0$, t < 1.960, P > 0.05.The standard multiple regression results showed that board size had a positive and significant effect on the firm performance ($\beta_4 = 0.641$; t = 9.922; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the $H_0 4$ was rejected and conclusion was made that board size has a significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Hypothesis Five Test Results

The fifth null hypothesis ($H_0 5$) predicted that board gender diversity has no significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. To test the $H_0 5$, a moderated multiple regression analysis was performed by regressing firm performance as the dependent variable with the corporate governance, board gender diversity, and the interactive corporate governance*board gender diversity as predictors. In the first step for testing moderation, the composite independent variable (corporate governance) was regressed on firm performance and the out associated with this analysis. From the simple linear regression results, in model 1, corporate governance had a positive and significant effect on the firm performance($\beta_5 = 0.538$; t = 6.383; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya.

In the second step for testing moderation, the composite independent variable (corporate governance) and board gender diversity were regressed on firm performance and the out associated with this analysis. With model 2, the results showed that corporate governance had a positive and significant effect on the firm performance($\beta_6 = 5.914$; t = 5.914; p ≤ 0.05), while

board gender diversity had a negative significant effect on the firm performance(β_7 = -0.496; t = -3.026; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. In the third step, corporate governance, board gender diversity and the interaction term (corporate governance*board gender diversity) were regressed on firm performance. From the moderated multiple linear regression results in model 3, corporate governance had a positive and significant effect on the firm performance (β_8 = 0.740; t = 4.194; p ≤ 0.05) in savings and credit cooperative societies in Nairobi County, Kenya. However, board gender diversity had a negative significant effect on the firm performance (β_9 =-0.478; t = -3.020; p ≤ 0.05)in savings and credit cooperative societies in Nairobi

County, Kenya. The moderated multiple linear regression results showed that the interactive term, corporate governance*board gender diversity, had a negative significant effect on the firm performance (β_{10} =-0.312; t = -2.907; p ≤ 0.05)in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, theH_05 was rejected, providing evidence for the support of the H15. Consequently, conclusion was made that the board gender diversity had a positive significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

Table 7 presents the hypotheses test results.

Table 7: Hypotheses Test Results

Hypothesis	β	t	Sig.	Decision
H_01: Board meetings have no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.	.508	7.449	.000	Reject the H_01
H_02: Board independence has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.	-.391	-3.626	.000	Reject the H_02
H_03: Board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.	.256	2.771	.007	Reject the H_03
H_04: Board size has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.	.641	9.922	.000	Reject the H_04
H_05: Board gender diversity has no significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.				Reject the H_05

Model		B	Std. Error	β	t	Sig.	Decision
1	(Constant)	3.895	.044		88.213	.000	
	Corporate Governance (X)	.283	.044	.538	6.383	.000	Reject the H_05
2	(Constant)	3.895	.042		91.740	.000	
	Corporate Governance (X)	.510	.086	.969	5.914	.000	
	Board Gender Diversity (Z)	-.261	.086	-.496	-3.026	.003	
3	(Constant)	3.952	.045		87.146	.000	
	Corporate Governance (X)	.390	.093	.740	4.194	.000	
	Board Gender Diversity (Z)	-.251	.083	-.478	-3.020	.003	
	Corporate Governance * Board Gender Diversity	-.066	.023	-.312	-2.907	.005	

a. Dependent Variable: Firm Performance (Y)

Discussions of Key Findings

This section presents a discussion of the key findings of the study. The general objective of this quantitative non-experimental correlational study was to examine the effect of corporate governance practices on firm performance, with board gender diversity as a moderator in savings and credit cooperative societies in Nairobi County, Kenya. Specifically, the study examined the effect of board meetings, board independence, board composition, and board size on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The study further examined the moderating effect of board gender diversity on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The Pearson's product moment correlations analysis results indicated that there was a strong positive and significant relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The simple linear regression results showed that corporate governance practices had positive and significant effect on the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The results are in harmony with the results of past studies. For example, Nasrallah and El Khoury (2022) indicated that corporate governance had a positive significant effect on the financial performance of small and medium enterprises (SMEs) in Lebanon. Alfalah *et al.* (2022)showed that corporate governance practices had a positive significant effect on firm performance in the telecommunication sector in Saudi Arabia. George and Muiruri (2022) indicated that corporate governance practices had positive significant effect on firm performance of microfinance institutions in Rwanda. Munyoki (2021) found that corporate governance structures had positive and significant effect on firm performance in family-owned businesses in Nairobi County Kenya.

In contrast, the results are inconsistent with the results of prior empirical studies. For example, Mishra *et al.* (2022) showed that corporate governance practices had negative effect on the performance of firms in the Indian context. Onu and Ndah (2022) showed that corporate governance had insignificant effect of on financial performance of quoted insurance companies in Nigeria. Nyakurukwa (2022) showed that the corporate governance had insignificant effect on financial performance of companies listed on the Zimbabwe Stock Exchange. Ncurai and Rambo (2022) revealed that corporate governance was an insignificant predictor of the performance of deposit taking SACCOs in Kenya.

Effect of Board Meetings on Firm Performance

The first specific objective was to examine of board meetings on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The first null hypothesis (H_01) predicted that showed that board meetings have no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive and significant relationship between board meetings on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board meetings had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the H_01 was rejected, providing the empirical support for H_11. Consequently, conclusion was made that board meetings have significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The results are consistent to previous studies (Agustia *et al.*, 2022; Mlay *et al.*, 2022;Syakhroza *et al.*, 2021)that indicated that board meetings had significant positive effect on firm performance. However, the results are inconsistent with the results of prior research (Onu & Ndah (2022)that revealed that

board meetings had insignificant positive effect on firm performance.

Effect of Board Independence on Firm Performance

The second specific objective was to establish the effect of board independence on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The second null hypothesis (H_02) predicted that board independence has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a moderate strong negative significant relationship between board independence on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board independence had a negative and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the H_02 was rejected, providing the empirical support for H_12. Therefore, conclusion was made that board independence has a significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The results are in harmony with the results of past research. For instance, Nepal and Deb (2022) indicated that there was a negative significant relationship between the board independence and financial performance in the Indian textiles sector. Similarly, Goel *et al.* (2022)showed that board independence had negative significant effect on firm performance in Indian companies.

In contrast, the results were inconsistent with the results of previous empirical studies. For instance, Rahman*et al.*(2022)showed that board independence had positive significant effect on firm performance in on-financial listed companies in Pakistani. Kivaya (2022) showed that board independence had a positive and significant effect on the performance of microfinance institutions in Nairobi City County in Kenya. Onyim *et al.* (2021)

showed that there was a positive insignificant relationship between board independence and financial performance in deposit taking SACCOs in Western Kenya.

Effect of Board Composition on Firm Performance

The third specific objective was to examine the effect of board composition on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The third null hypothesis (H_03) predicted that board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board composition on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board composition had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the H_03 was rejected, providing the empirical support for H_13. Consequently, conclusion was made that board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The results are consistent to previous studies. For instance, Kipkemoi (2022) showed that board composition had a positive and significant effect on the performance of deposit taking SACCOs in Kenya showed that board composition had a positive and significant effect on the performance of deposit taking SACCOs in Kenya. Goel *et al.* (2022) revealed that board composition had positive significant effect on firm performance in Indian companies. Alfalah *et al.* (2022)showed that board composition had significant and positive effect on firm performance on firm performance in the telecommunication sector telecommunication sector in Saudi Arabia. Ogunlokun *et al.* (2022)revealed that board composition had positive significant effect on firm performance in the insurance sector in Nigeria. Amin *et al.* (2021)

revealed that the board composition significantly predicted firm performance. Study revealed that the board composition significantly predicted firm performance. Kivaya (2022) showed that board composition had a positive and significant effect on the performance of microfinance institutions in Nairobi City County in Kenya. however, the results are inconsistent to the results of prior studies. For instance, Munyoki (2021) found that board composition had an insignificant effect on firm performance in family-owned businesses in Nairobi County Kenya.

Effect of Board Size on Firm Performance

The fourth specific objective was to assess the effect of board size on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The fourth null hypothesis (H_04) predicted that board size has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board size on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board size had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the H_04 was rejected, providing the empirical support for H_14. Consequently, conclusion was made that board size has a significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The results are consistent to previous studies. Alfalah *et al.* (2022)showed that the internal board size hada significant and positive effect on firm performance in the telecommunication sector in Saudi Arabia. George and Muiruri (2022) indicated that board sizehad a positive significant effect of on firm performance of microfinance institutions in Rwanda. Mishra *et al.* (2022) showed that board size had a positive significant effect on the performance of firms in the Indian context.

Rahman*et al.*(2022)showed that board size had positive significant effect on firm performance in non-financial listed companies in Pakistani. Goel *et al.* (2022) indicated that board size had positive significant effect on firm performance in Indian companies. Nepal and Deb (2022) showed that there was a significant positive association between the board size and firm performance showed that there was a significant positive association between the board size and firm performance in the Indian textiles sector. Ogunlokun *et al.* (2022)indicated that board size had positive significant effect on firm performance in the insurance sector in Nigeria. However, the results are inconsistent to the results of prior research. Onyim *et al.* (2021) showed that there was positive insignificant relationship between board size and financial performance in deposit taking SACCOs in Western Kenya.

The Moderating Effect of Board Gender Diversity on the Relationship Between Corporate Governance Practices and Firm Performance

The fifth specific objective was to examine the moderating effect of board gender diversity on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The fifth null hypothesis (H_05) predicted that board gender diversity has no significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board gender diversity and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The moderated multiple regression results showed that board gender diversity had a positive significant moderating effect on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the H_05 was rejected, providing evidence for the support of the H15. Consequently, conclusion was

made that the board gender diversity had a positive significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The results are consistent to previous studies. For example, Anas*et al.*(2022)provided empirical evidence which proposes that board gender diversity significantly moderates the relationship between corporate governance practices and firm performance. Naeem*et al.*(2022)revealed that board gender diversity significantly and positively moderated the relationship between the corporate governance and corporate sustainability performance relationship in Malaysian financial firms. Chin *et al.* (2019) showed that board gender diversity had significant moderating effect in the relationship between corporate governance and firm value.

The results are consistent to the research of Li *et al.*(2022)*et al.*(2022)that provided empirical evidence which suggests that board gender diversity may enhance or destroy firm value depending on a firm's social and environmental performance in dimensions other than diversity. In contrast, the results are inconsistent to the results of prior studies. Chin *et al.* (2019) revealed that there was no significant moderating effect of board gender diversity on the relationship between corporate governance and firm value for companies listed in Bursa Malaysia. Naeem*et al.* (2022) showed that board gender diversity insignificantly moderated the relationship between the corporate governance and corporate sustainability performance relationship in Malaysian non-financial firms.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to investigate the effect of corporate governance practices on firm performance, with board gender diversity as a moderator in savings and credit cooperative societies in Nairobi County, Kenya. Specifically, the study examined the effect of board meetings, board independence, board composition, and board size

on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The study further examined the moderating effect of board gender diversity on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's correlations analysis results indicated that there was a strong positive and significant relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The simple linear regression results showed that corporate governance practices had positive and significant effect on the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Therefore, the study concluded that corporate governance practices had positive and significant effect on the firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The first specific objective was to examine of board meetings on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The first null hypothesis (H_01) predicted that showed that board meetings have no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive and significant relationship between board meetings on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board meetings had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the H_01 was rejected, providing the empirical support for H_11. Therefore, the first conclusion was that board meetings had significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The second specific objective was to establish the effect of board independence on firm performance in savings and credit cooperative societies in

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Nairobi County, Kenya. The second null hypothesis ($H_0 2$) predicted that board independence has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a moderate strong negative significant relationship between board independence on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board independence had a negative and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 2$ was rejected, providing the empirical support for $H_1 2$. Therefore, the second conclusion was that board independence hada significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The third specific objective was to examine the effect of board composition on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The third null hypothesis ($H_0 3$) predicted that board composition has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board composition on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board composition had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 3$ was rejected, providing the empirical support for $H_1 3$. Therefore, the third conclusion was that board composition had no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The fourth specific objective was to assess the effect of board size on firm performance in savings and credit cooperative societies in Nairobi County,

Kenya. The fourth null hypothesis ($H_0 4$) predicted that board size has no significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board size on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The standard multiple regression results showed that board size had a positive and significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 4$ was rejected, providing the empirical support for $H_1 4$.Therefore, the fourth conclusion was that board size had a significant effect on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

The fifth specific objective was to examine the moderating effect of board gender diversity on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The fifth null hypothesis ($H_0 5$) predicted that board gender diversity has no significant moderating effect on the relationship between corporate governance practices and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The Pearson's product moment correlation analysis results indicated that there was a strong positive significant relationship between board gender diversity and firm performance in savings and credit cooperative societies, Nairobi County, Kenya. The moderated multiple regression results showed that board gender diversity had a positive significant moderating effect on the relationship between corporate governance and firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Consequently, the $H_0 5$ was rejected, providing evidence for the support of the H15. Therefore, the fifth conclusion was that the board gender diversity had a positive significant moderating effect on the relationship between corporate governance practices and firm

performance in savings and credit cooperative societies in Nairobi County, Kenya.

The study provides important managerial and policy recommendations, and recommendations on areas for future research.

The study recommended that it is imperative to strictly adhere to code of corporate governance practices to foster the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. Board of directors and managers can use the findings to achieve a deeper understanding of the effect of corporate governance practices on firm performance in savings and credit cooperative societies in Nairobi County, Kenya.

First, board meetings are critical to effective corporate governance. Therefore, in the management of the board meetings, the board of directors should consider the frequency, number, length of board meetings, and scheduling of board meetings. The board should work to foster open, ongoing dialogue between management and members of the board, and the directors should have access to senior management outside of board meetings.

The board of directors, with the assistance of the nominating/corporate governance committee, should consider the frequency and length of board meetings. Longer meetings may permit directors to explore key issues in depth, whereas shorter, more frequent meetings may help directors stay current on emerging corporate trends and business and regulatory developments.

Second, board independence is critical to effective corporate governance, and providing objective independent judgment that represents the interests of all shareholders is at the core of the board's oversight function. Therefore, a substantial majority of the board's directors should be independent, according to applicable rules and regulations and as determined by the board. An independent director should not have any relationships that may impair, or appear to impair, the director's ability to exercise independent judgment. When evaluating a director's independence, the board should consider all relevant facts and circumstances, focusing on whether the director has any relationships, either direct or indirect, with the company, senior management or other directors that could affect actual or perceived independence.

Third, board composition is critical to effective corporate governance, and the composition of a board should reflect a diversity of thought, backgrounds, skills, experiences and expertise that collectively, enable the board to perform its oversight function effectively. The composition of a board should also reflect a range of tenures that are appropriate given the company's current and anticipated circumstances. The boards should develop a framework for identifying appropriately diverse candidates that allows the nominating/corporate governance committee to consider women, minorities and others with diverse backgrounds as candidates for each open board seat. Therefore, directors with relevant business and leadership experience can provide the board a useful perspective on business strategy and significant risks and an understanding of the challenges facing the business.

Fourth, board size is critical to effective corporate governance. Therefore, in determining appropriate board size, the board of directors should consider the nature, size and complexity of the company as well as its stage of development. Furthermore, in determining appropriate board size, the board of directors should consider that larger boards often bring the benefit of a broader mix of skills, backgrounds and experience, while smaller boards may be more cohesive and may be able to address issues and challenges more quickly.

Fifth, board gender diversity should. Managers can use the findings to achieve a deeper understanding of the effect of board gender diversity on firm performance.

The study offers some policy guidelines on some of the vital corporate governance practices that could be incorporated in the future code development

stage to foster the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The study recommends that the policymakers could make the modifications in the corporate governance practices to foster the firm performance in savings and credit cooperative societies in Nairobi County, Kenya. The study provides policy makers with useful insights and serve as an underpinning for the regulatory efforts aimed at ensuring a minimum number of board meetings, strengthening board independence, improving board composition, optimizing board size ,and ensuring gender diversity on the board. The findings provide policy makers with useful insights and serve as an underpinning for the regulatory efforts aimed at strengthening the corporate governance practices and the performance savings and credit cooperative societies in Kenya.

Areas for Future Research

Despite its contributions to the literature, the study has certain drawbacks. First, the study was limited to the board meetings, board independence, board composition, board size, board gender diversity, and firm performance in savings and credit cooperative societies in Kenya. Therefore, it will be interesting to examine the effect of other corporate governance practices on firm performance with board gender diversity as moderator in savings and credit cooperative societies in Kenya. Second, the study was limited in context to the savings and credit cooperative societies in Nairobi County, Kenya. Thus, it will also be interesting to investigate the moderating effect of board gender diversity on the relationship between corporate governance practices and firm performance in other regions or sectors.

Third, the study was limited as it relied on a structured survey questionnaire. Accordingly, no inferences about the complex issues and opinions can be made. Thus, it will also be interesting to investigate the moderating effect of board gender diversity on the relationship between corporate governance practices and firm performance, while utilizing a blend of open-ended and structured survey questionnaire. Fourth, the study was limited as it relied on the quantitative non-experimental correlational design. Consequently, no inferences about the causality of relationships could be made and it was impossible to make cause-effect conclusions. Therefore, it will also be interesting for future researchers to utilize the mixed methods approach. Fifth, the study was limited to a cross-sectional survey approach for data collection. Consequently, it was impossible to examine the relationships over a period to time, and no inferences about the causality of relationships could be made. Therefore, it will also be interesting for future researchers to utilize the longitudinal survey approach for data collection, because the longitudinal data allows researchers to explore dynamic rather than static concepts.

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