

Board Characteristics and The Financial Performance of Agricultural Firms Listed in The Nairobi Securities Exchange, Kenya

Cecilia Mugure Ndotono

School of Business, Economics and Tourism, Kenyatta University

Email: mugurendotono@gmail.com

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v12-i2/17082>

DOI:10.6007/IJAREMS/v12-i2/17082

Published Online: 12 May 2023

Abstract

Agricultural sector can be classified as the engine of the non-agricultural economy, which is inclusive of manufacturing, by way of provision of inputs and markets for non-agricultural operations that includes infrastructure, education, tourism and other social services. In spite of inputs of this sector into the Kenyan economy, agricultural firms listed in the NSE are only six and still these ones have been registering declining performance. The poor performance poses threat to the sector and raises questions on how the companies are managed. The study therefore endeavored to ascertain the board characteristics adopted by the listed agricultural firm and how they impacted their financial performance. Pointedly, the paper work would demonstrate the board size effect, its independence, directors' education level and board diversity on the NSE listed agricultural firm's performance. The theories underpinning the study were agency, resource based, stewardship and stakeholder theories. Causal research design was also adopted and the population study entailed the six firms relating to agricultural sector listed at the NSE. The necessary information and Data was procured from the Nairobi Securities Exchange covering six years (2016 – 2021). Using the Karl Pearson correlation and multiple linear regressions, the data analysis was done and also using descriptive and inferential statistics. Rights, freedom, security of the participants and confidentiality were preserved in this study. The conclusive results indicated agricultural firms with larger board sizes never outperformed those with smaller board sizes. Board independence impacted significantly and favourably on the financial performance of the agricultural enterprises. This was to mean that the bigger the number of independent directors, the better the performance as compared to those with a lower ratio. The findings also indicated that agricultural enterprises' financial performance is positively and significantly impacted by the board diversity implying that performance would increase if there were more female directors in the firms. The directors' educational background was also found to have a positive and significant impact on the firms' financial success. This translated to supporting a higher number of professional directors in an agricultural firm for

better financial performance. Therefore, the conclusion was that the performance of Kenya's listed agricultural enterprises is highly influenced by the board's features.

Introduction

The effective, efficient dynamic way to end poverty and boost shared opulence is by agricultural development. Growth in this sector is twice to quadric more promising in generating the income rates among the poorest in comparison with other major sectors. A 2016 analysis done by the World Bank ascertained that the source of income of nearly 65 percent poor working adult was attributed to agriculture. It can therefore be resolved that Agriculture is utterly instrumental to the economy growth. A World Bank 2020 report indicates that the agricultural sector accounted for 4 percent of global GDP. This report further indicated that in some other developing countries, the agricultural sector accounted for more than 25% in the period of 2018. However, there is the huge risk of food security, agriculture-driven growth and poverty reduction. According to estimates, nearly 690 million of the world is hungry, an increase of around 60 million in a span of five years. (FAO, 2020). In East Africa, Agriculture is a major contributor to GDP and economic development. In Uganda, Agriculture employs approximately 70% of the population, making the sector the cornerstone of Uganda's economy contributing to almost 50% of Uganda's export earnings and 25% of the country's GDP. In Tanzania, it employs close to 75% of total population and attributes to a third of the Country's GDP. Despite the immense contributions of this sector to the economy, it is facing challenges that include perennial and dire climatic conditions, worsened by the prolonged dependence on rain fed agriculture, gender inequality, poor agricultural practices, slow technological adoption, lack of credit, low quality inputs, Inadequate access to productive resources, Weak institutional framework, poor physical infrastructure and utilities, Low public expenditure, insecurity over land ownership and poor governance (EAC, 2021).

Approximately 26% of the Kenyan GDP can be attributed to the Agricultural sector and 27% indirectly through liaison with other contributing sectors. The sector is so critical that it accounts for approximately 65% of the total export earnings, providing livelihoods for over 37 million populations (World Bank, 2020). Despite the vital role of the sector in Kenya, at the Nairobi Securities Exchange, only six agricultural firms are listed (NSE, 2020). The Agricultural firms have also been registering poor performance.

Corporate governance objective practices is to warrant equilibrium in power sharing amongst shareholders and management in the quest to enhance shareholder value and ensure other stakeholders' interests is protected. With effective corporate governance structures in place, Investors' confidence is improved and therefore ensures accountability of the corporate entity, reliability and enhancement of the quality of public financial information and the efficiency, integrity of the capital markets (Nabil and Ziad, 2014)

Board Characteristics

With accordance to the Capital Market Authority (CMA), corporate governance is aimed at ensuring a company's profitability and accountability with the goal being the realisation of shareholder long-term value, whilst still putting into considerations other stakeholders' interests. In the cases where the ownership and control in public companies is separated, investors hire professionals with the required professionalism to manage the company, therefore creating the need for corporate governance. (Donaldson, 1998; Freeman, 2015). The overall effect of this separation of ownership is the professionals mandated to run

activities of the company tend to pursue their own goals (Jensen & Mecklic, 1976; Mitnick, 2015). This results to disputes between the firm owners and managers.

There are specific mechanisms either internal control mechanisms or external governance mechanisms relatable to corporate governance that can be adopted in to deaden disputes between shareholders and managers. The internal control mechanism includes the board of director's characteristics which categorizes board independence, diversity, size, qualification (Demeke, 2016). To reduce biasness and ameliorating the company's performance, a greater proportion of the non-executive directors should be independent (Freeman, 2015), and because they do not pursue self-interests, they are able to observe effectively the managers in the company and firm and reduce misappropriation of assets at the expense of shareholders' interests (Zubaidah, 2019).

Board size is the determinant of its effectiveness. As a board expands, it becomes less structured since the cooperation and the process problems swamp the advantage from having more people to draw on (Demeke, 2016). The research done by Akbar (2014) in Pakistan, illustrates the firm performance pragmatic effects of small board sizes. Contrary to this, Agency and Resource dependency theories recommend that large board sizes constructively impacts performance. Studies advocating large board sizes contend that it is more appropriate for corporate performance since the corporate boards are harder to be dominated by powerful CEOs, and they have a variation of responsibilities, requiring diverse set of talents to satisfy. Therefore, for a wider set of skills at the corporations' disposal, contributing to the corporation improved performance, an increase in board size is inevitable (Kalsie & Shrivastav, 2016).

Diversity in gender is the incorporation of females as directors in the boards (Ekadah et al., 2011). Research submits that gender inclusivity on boards tend to open on to either positive or negative effects. Kunze et al (2013) argued that to promote creativity and innovation, gender diversity was very necessary in boards. Further, it leads to greater problem solving. The reason according to Kim et al (2017) is because numerous options are carefully evaluated. Likewise, Chen et al (2017) argued that women ask daring questions that men cannot ask, therefore increase board's independence. This is regarded as a very important evaluative control for the management of earnings and improvement of earnings quality. Therefore, a team with more gender inclusivity may improve a company's market position if it boosts the company's reputation, has an effective impact on consumer behavior, and, as a result, improves a company's overall performance.

Financial Performance

This is the efficacious measure of how a firm puts into use its assets with an aim of revenue generation (Venkatesh, 2013). It is very crucial to ascertain the components of a good performance in order to evaluate performance (Okiro *et al.*, 2015). Empirically the focal point on the measurement of the performance of a firm has primarily been on its performance financially. Therefore, defining financial performance, it is the measured results standard operations of a firm in monetary terms. Results are revealed by measures such as return on assets (ROA), return on investment (ROI) and return on equity (ROE) (Kassim, 2011). The main intent of any business firm is to generate revenue and make profit (Ighofamily, 2013).

Long term creditors and shareholders of a company or firm are majorly interested in the short and long-term outlook, as compared to short term creditors' interest, which is the firm's topical performance and its holdings of liquid performance as it reflects assets, (Sharifi, 2013). A classic yet powerful technique used by experts and policy makers to evaluate

the performance of businesses is financial ratios. The ratios assess ability to generate revenue of the company and cash flows in relation to some criterion, usually the total invested money (Dilipkumar, 2014). Aside from being the standard approach for financial statement analysis, ratios usefulness extends to inter- and intra-organizational comparison (Paitandi, 2014). Profitability ratios are the most important metrics for calculating a company's financial performance. Return on equity and return on assets are the most used profitability measures (Simkhada, 2017). The study adopted return of assets (ROA) as the standard measure for financial performance.

Listed Agricultural Firms in NSE

The Nairobi Securities Exchange (NSE) is a stock exchange trader in Kenya offering a trading venue for the domestic and international investors and bounded under the Capital Markets Authority of Kenya (CMA). In Kenya, of all the agricultural firms, only six are listed in the NSE. Eaagads Ltd deals with the growing and selling of coffee. Kakuzi Ltd. undertakes in the cultivation, processing and marketing of tea, avocados, pineapples, livestock, forestry and Macadamia. Kapchorua Tea Ltd. and Williamson Tea Ltd. undertake the cultivation, manufacture and sale of tea while Limuru Tea specializes in growing of green leaf tea. Sasini Ltd undertakes the growing and processing of tea, avocado coffee, macadamia nuts, livestock and horticulture (NSE, 2020).

The Agricultural firms are required to abide by the issued CMA corporate code of governance in the year 2015. The Codes intention was to provide the required minimum thresholds from shareholders, CEOs, directors and management of listed companies or unlisted companies issuing securities to the public, with the aim of encouraging best standards of conduct as well as certifying that these firms perform their mandates and responsibilities with lucidity, assurance and efficacy.

Statement of the Problem

In spite of the agricultural sectors' major input into the economy of Kenya, agricultural firms listed in the NSE had been registering declining performance. Kapchorua Tea limited, Sasini Ltd and Williamson Tea Ltd made a loss before tax of Kes 151,676,000, Kes 361,229,000 and Kes 212,415,000 respectively in the year 2020 (NSE, 2020). Despite the establishment of the CMA guidelines, performance of these Agricultural firms continued to deteriorate drastically. This research therefore dissected the board characteristics of the listed agricultural firm and how it affects their financial performance. Studies on corporate governance give inconclusive and contradictory results with some indicating positive correlation between corporate governance variables and performance (Jackling & Johl, 2009; Khan et al., 2019), others indicated negative relationship (O'Connell & Crammer, 2010; Arora & Sharma, 2016) while others indicated no correlation (Ghazali, 2010; Ferrer & Banderlipe, 2012; Haji, 2014; Garba & Abubakar, 2014).

The study focused on agriculture sector in Kenya and analysed the managerial characteristics affecting financial performance.

The research goal was to ascertain how well characteristics of a board, that is the board size, board independence, board of directors' level of education and board gender diversity impacts financial performance of listed agricultural firms.

Research Hypotheses

H₀₁ Board size does not have a significant relationship with financial performance

- H₀₂** Board independence does not have a significant relationship with financial performance.
- H₀₃** Board of directors' level of education does not have a significant relationship with financial performance.
- H₀₄** Board gender diversity does not have a significant relationship with financial performance.

Literature Review

Agency Theory

Proposed and introduced by Smith (1776). It asserts that a firm managed by people who aren't the owners has a very high likelihood that they may not work to benefit the owner. Managers therefore have to be controlled in order to ensure they don't act freely in maximizing individual-interest agendas at the expense of organizations, since they cannot be trusted (Jensen & Meckling, 1976). The principal and the managers have opposite risk preferences and this creates the agency conflict. Among the mechanisms by Agrawal and Knoeber (1996) to reducing the agency conflict, is inclusion to the board of independent directors.

Stewardship Theory

The Stewardship theory by Muth and Donaldson (1998) believes that managers are custodians rather than selfish individuals. The idea suggests that leaders have motivations other than self-interest, implying that the objective conflict may not be intrinsic in the separation of ownership and control. This theory, unlike the agency theory, assumes the managers' trustworthiness and that it's their desire to ensure maximum profit and shareholders' return. Therefore, Stewardship theory's conclusive argument for efficacy and effectiveness, a significant proportion of inside directors should be part of the board and also that it is not a necessity to discipline management using control mechanisms (Kiel and Nicholson, 2003).

Resource Based Theory

This theory, proposed by Wernerfelt (1984), indicates that disparities in performance amongst enterprises in the same industry can be attributed to differences in their productive resources. The theory's argument is that, a firm's board is extremely critical since it provides the required resources to managers, who then put the resources into good use to attain the set objectives (Hillman & Dalziel, 2003). Research based theory continues to recommend that the board should continue to provide support to the executive. The board members with higher prowess and professional training are encouraged to offer mentorship to the executives to ensure skills enhancement and therefore ensure an improvement of their performance.

Stakeholder Theory

Developed by Freeman (1984), this theory asserts that for any business to thrive, it has to create value for all its stakeholders who include customers, suppliers, employees, communities, financiers, and shareholders. According to the stakeholder theory, just as a business owes its investors special and specific duties, it also owes different stakeholders groups different duties. It is the managers' duty and the firm to ensure that the return on

investment of shareholders is fairly received (Freeman, 2010). The shareholders have the ultimate right to treat the company and its assets as a vehicle for maximizing their ROA.

Empirical Studies

Board Size and Financial Performance

Khan et al (2019) researched on the board size effect on organizational performance of Pakistanian textile industries and concluded no effect of the board size on performance. A research on large public listed companies in Australia by Kiel & Nicholson (2003) investigated correlation between board demographics and corporate performance and conclusions revealed the firm value positively correlates with the board size. Therefore there are no conclusive results on board size effect.

We examine the relationships between board demographics and Corporate performance in 348 of Australia's largest publicly listed companies and describe the Attributes of these firms and their boards. We find that, after controlling for firm size, board Size is positively correlated with firm value. We also find a positive relationship between the Proportion of inside directors and the market-based measure of firm performance. We discuss The implications of these findings and compare our findings to prevailing research in the US And tSystem generalized methods of moments was used to analyse the data. The findings indicate that board size negatively affect return on assets.

CMA code of governance recommends that the board be large enough for the business needs of the company to be met. It should not be too big or extremely shallow that it compromises inclusion of a wider range of expertise during meetings.

Gender Diversity and Financial Performance

A study by Li and Chen (2018) analyzed the correlation of gender diversity within the board, firm performance, and size in China using panel data from 2007-2012. The findings demonstrated a significant effect on performance brought by gender diversity on the board. Some different studies, however, have concluded a no connection at all between gender diversity and performance. The study by Bohren and Strom (2007) evidenced the negative effect of having women on board as they were the cause for negative results brought by gender diversity and performance in Norwegian firms.

Board of Directors' Level of Education

A number of empirical studies on board diversity lend credence to the idea that in a board, the presence of professionals is extremely beneficial on the company's overall performance. Cheng et al (2010) looking into the connection between management demographics and corporate performance in China findings showed that a number of management demographic factors, including level of education, titles, age, and tenure of chairpersons, have a vital significant impact on business performance. A research examining on board characteristics and financial performance was conducted by Ujunwa (2012) on Nigerian quoted firms. In assessing the hypotheses, the findings indicated a major impact of board members with PhD qualifications on performance of the firm.

Specifically, Francis et al (2015), higher acquisition performance, more patents and citations, stock price rising, smaller discretionary accruals, low chief executive officer (CEO) remuneration, and a higher CEO forced attrition sensitivity were linked to involvement of academic directors.

Board Independence and Financial Performance

CMA guidelines recommend that the minimum threshold for independent non-executive directors should be at least a third of the number of board members. Bhagat and Bolton (2013) researched on relationship between corporate governance and performance and the findings by multiple regressions showed that between boards' independence and performance, there was a significantly positive connection.

Other researches however showed no relationship between board independence and performance. There is available study evidence of studies indicating a no correlation between the directors who are independent and the firm's financial performance. Khan et al (2019) did a paper work on the importance of board independence on organizational performance in Pakistan textile companies. Using Partial least squares structures equation to analyze the data, findings were that independence of the board has no influence on performance.

Research Methodology

Research Design

This research work employed causal research design since it enabled the study to analyse effect and correlation between the independent and dependent variables. The 6 Agricultural Firms listed in the NSE at December 2021 were the research target population. The study was a census which is the study of all the Agricultural firms listed in the NSE. The six years period, 2016-2021, secondary data of the agricultural firms were employed since that was the period lapsed since the introduction of the corporate governance guidelines by CMA. Data was acquired from financial statements of the firms submitted to NSE and those maintained in the head offices of the respective firms. A request for this study to be done was made to National commission for science, technology and innovation (NACOSTI), NSE and the respective, access of the financial statements and data required.

Data Analysis and Presentation

Karl Pearson's correlation was used to measure the degree of association between different variables under consideration. To estimate the relationship among the variables, regression analysis was used. The following multiple regression model was applied in determining the correlation between the variables

Model

$$ROA_{it} = \beta_0 + \beta_1 DE_{it} + \beta_2 BI_{it} + \beta_3 BS_{it} + \beta_4 BD_{it}$$

Where

ROA is the return on assets, θ_0 is the regression constant, *i* is Agricultural firms 1 to 6, *t* is year 2016 to 2021, $\theta_1, \dots, \theta_4$ are coefficients of the variables, *DE* is Directors level of Education, *BI* is board independence, *BS* is board size while *BD* is board diversity and ϵ is the error term.

Table 3.1

Measurement and Operationalization of Research Variables

Variable	Type of the Variable	Indicator(s)	Measurement
Performance	Dependent	ROA	<u>Net profit obtained after tax *100</u> Total Assets
Directors Level of Education	Independent	The proportion of professionals on the board	<u>Registered members by professional body</u> Total number of Directors
Board Independence	Independent	Quantity of non-executive and independent directors	<u>Non-Executive Directors who are Independent</u> Total number of Directors
Board size	Independent	Sum total of members on a board	Sum total of members on a board
Board diversity	Independent	Proportion of female directors	<u>Female directors</u> number of Directors

Findings

Table 4.1

Descriptive Statistics

Variable	Mean	Maximum	Minimum	Std. Dev.	Observations
Return On Assets	3.036	6.944	-7.709	0.967	36
Board size	7.00	8.000	5.00	0.910	36
Board independence	0.567	0.714	0.285	0.176	36
Board diversity	0.233	0.571	0.000	0.242	36
Directors Level of Education	0.561	0.857	0.428	0.158	36

Table 4.2
Correlation Results

VARIABLE	ROA	BS	BI	BD	DL
Return on Assets (ROA)	1.000000	-----			
Board Size (BS)	-0.016650** 0.009232	1.000000	-----		
Board Independence (BI)	0.031254** 0.008564	0.27468*	1.000000	-----	
Board Diversity (BD)	0.184614* 0.02811	0.43976** 0.0073	0.338908* 0.0432	1.000000	-----
Directors Education Level (DL)	0.158799* 0.03549	0.01630* 0.09248	0.09373** 0.0000	0.57005** 0.0003	1.000000

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The findings imply that an increase in BS is associated with a decrease in performance of agricultural firms. Findings also imply that an increase in number of independent directors is associated to an increase in ROA of the agricultural firms.

The results imply that increasing the number of female directors is associated to an increase in ROA of agricultural firms and that an increase in the number of directors with professional qualification is associated with an increase in ROA.

Testing of Hypotheses

The findings are presented in Table 4.3

Table 4.3
Regression Results of Board characteristics and Performance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	20.166524	4.41005	4.572856	0.0001
Board Size	-6.1870589	1.696279	-3.64743	0.0001
Board Independence	13.003692	2.921072	4.451685	0.0001
Board Diversity	9.0517375	5.874757	1.540785	0.0035
Education Level of Board members	15.08936	3.409813	4.425275	0.0001
R ²	0.41513			
Adjusted R ²	0.33966			
Prob (F statistic)	0.0018			

Dependent Variable was Return on Assets

The results suggest that smaller board sizes in agricultural enterprises lead to better ROA than bigger board sizes in agricultural firms. The results show that a big board size could make it difficult to coordinate discussions and make decisions. The hypothesis that the size of board members has no significant effect on performance of agricultural firms is thus rejected. The findings indicated that board independence significantly and positively impacted agricultural enterprises' ROA ($\beta = 13.003692$, $p < 0.05$). These findings are consistent with the agency hypothesis, which holds that a board made up of independent directors can lessen the agency problem. The hypothesis that board independence has no significant effect on the performance of agricultural firms listed at NSE is thus rejected.

The findings demonstrated that board diversity had a favourable and significant impact on agricultural enterprises' ROA ($\beta = 9.0517375$, $p < 0.05$). The results implied that increasing proportion of female directors on the board positively influenced ROA of agricultural firms. These results therefore confirm the work of (Li and Chen, 2018). The hypothesis that board diversity has no significant effect on the performance of agricultural firms listed at NSE is thus rejected.

The findings also demonstrated that board members' educational backgrounds had a positive and significant impact on agricultural enterprises' return on assets (ROA) ($\beta = 15.08936$, $p < 0.5$). Findings suggested that increasing the proportion of professional directors has a favourable influence on agricultural enterprises' return on assets (ROA).

The results were in line with those of (Ujunwa, 2012; Darmadi, 2013; Francis et al., 2015; Asogwa et al., 2019). Results also corroborated the resource dependency theory, which holds that a larger board with members who have higher levels of professional qualification may be better able to guide decisions and secure resources than a smaller board. The hypothesis that education level of board members has no significant effect on performance of agricultural firms listed at NSE is thus rejected.

Summary of the Findings

Four distinct objectives served as the study's direction. First was to determine the effect of board size on the success of agricultural companies listed on the Nairobi Securities Exchange. Examining how board independence affected the performance of agricultural companies listed on the Nairobi Securities Exchange was the second goal. The third goal was to look into how the educational background of the board of directors affected the success of agricultural companies listed on the Nairobi Securities Exchange. The fourth goal was to examine how the performance of agricultural companies listed at NSE was impacted by board gender diversity.

The findings showed that board size had a negative and significant impact on agricultural enterprises' financial performance. As a result, it was inferred that agricultural businesses with larger boards never outperformed those with smaller boards. In addition, the financial performance of agricultural enterprises was significantly and favourably impacted by board independence. This implied that firms with a higher share of independent directors did better. The findings also showed that agricultural enterprises' financial performance is positively and significantly impacted by board diversity. This implied that performance would increase if there were more female directors in an agricultural firm.

The findings also revealed that directors' educational background had a positive and significant impact on agricultural enterprises' financial success. This therefore implied that agricultural businesses with a higher share of professional directors do better than those with

a lower proportion. These results proved that all board characteristics had a significant impact on the financial success of agricultural businesses. Thus, the hypothesis that board characteristics have no discernible impact on performance of Kenya's listed agricultural enterprises was disproved.

Conclusions

According to the study's findings, the performance of Kenya's listed agricultural enterprises is highly influenced by the board's features.

The board size had a negative and considerable impact on financial success as revealed on the descriptive table. This therefore means that firms with larger boards never outdo the companies with smaller boards. The financial performance of the firm was independent of the board size and there the conclusion that it had no considerable impact on financial performance. On the independence of the board, there was a positive and significant impact on the Financial performance. Companies that had a higher ratio of independent directors outperformed those with a lower proportion. This led to the conclusion that for a company to improve in its financial performance, the number of independent directors must be increased in the board. The success of agricultural firms was positively and considerably impacted by board diversity. The presence of female directors enhanced performance of the firms therefore concluding the importance of diversity in the board for greater performance. On the educational background of the directors, there was noted a favourable and considerable impact on agricultural enterprises' financial success. The conclusion of the study was that the more the educational background of the directors, the better for the performance of the company. Therefore, performance is improved by increasing the proportion of professional directors.

This research therefore concluded that for the agricultural firms to perform at maximum level, they should consider the board independence, board diversity and educational background of the board. These factors have proven to have a significant impact on the financial performance of these firms and should be well looked on. More study on factors that may affect the performance of these firms and the agricultural sector in general is encouraged to broaden the availability of essential information for maximum productivity.

References

- Afrifa, G. A., & Tauringana, V. (2015). Corporate governance and performance of UK listed small and medium enterprises. *Corporate Governance*, 15(5), 719-733.
- Agrawal, A., and C. R. Knoeber (1996). Firm performance and mechanisms to control agency problems between managers and shareholders, *Journal of Financial and Quantitative Analysis*, 31(3), 377–397.
- Ahmed, A. F., & Rugami, M. (2019). Corporate governance and performance of savings and credit cooperative societies in Kilifi County, Kenya. *International Academic Journal of Economics and Finance*, 3(3), 61-79.
- Akbar, A. (2014). Corporate governance and firm performance: Evidence from textile sector of Pakistan. *Journal of Asian business strategy*, 4(12), 200-207.
- Andres, P. D., Azofra, V., & Lopez, F. (2005). Corporate boards in OECD countries: Size, composition, functioning, and effectiveness. *Corporate Governance: An International Review*, 13(2), 197–210.
- Arora, A., & Sharma, C. (2016). Corporate governance and firm performance in developing countries: evidence from India. *Corporate governance*, 16(2), 420-436.

- Asogwa, C. I., Ofoegbu, G. N., Nnam, J. I., & Chukwunwike, O. D. (2019). Effect of corporate governance board leadership models and attributes on earnings quality of quoted Nigerian companies. *Cogent Business & Management*, 6(1), 1683124.
- Berle, A., & Means, C. (1932). *The modern corporation and private property*. New York, Macmillan Publishing Co.
- Bhagat, S., and Black, B. (2002). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law*, 27(2), 231-273
- Bhagat, S., & Bolton, B. (2013). Director ownership, governance, and performance. *Journal of financial and Quantitative Analysis*, 48(1), 105-135.
- Bohren, O., & Strom, R. O. (2007). Aligned, informed, and decisive: Characteristics of value-creating boards. In *EFA 2007 Ljubljana Meetings Paper*.
- Chen, J., Leung, W. S., & Goergen, M. (2017). The impact of board gender composition on dividend payouts. *Journal of Corporate finance*, 43, 86-105.
- Cheng, L. T., Chan, R. Y., & Leung, T. Y. (2010). Management demography and corporate performance: Evidence from China. *International Business Review*, 19(3), 261-275.
- CMA. (2015). The Code of Corporate Governance Practices for Issuers of Securities to the Public 2015. CMA
- Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of financial economics*, 87(2), 329-356.
- Dao, B. (2013). Stakeholders approach on corporate governance and performance of Vietnamese manufacturing firms. Available at SSRN 2524206.
- Darmadi, S. (2013). Board members' education and firm performance: evidence from a developing economy. *International Journal of Commerce and Management*, 23(2), 113-135
- Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: Evidence from Nigeria. *Corporate Governance: The International Journal of Business in Society*, 9(3), 231-243.
- Ekadah, J. W., & Kiweu, J. M. (2012). Effect of board gender diversity on the performance of commercial banks in Kenya.
- FAO. (2020). *The State of Food Security in the World 2020*. http://www.fao.org/3/ca9692en/online/ca9692en.html#chapter-Key_message
- FAO. (2021). *Kenya at a glance*. FAO. <http://www.fao.org/kenya/fao-in-kenya/kenya-at-a-glance/en/>
- Ferrer, R. C., & Banderlipe II, M. R. S. (2012). The influence of corporate board characteristics on firm performance of publicly listed property companies in the Philippines. *Academy of Accounting & Financial Studies Journal*, 16(4), 123-142.
- Francis, B., Hasan, I., & Wu, Q. (2015). Professors in the boardroom and their impact on corporate governance and firm performance. *Financial management*, 44(3), 547-581.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- Freeman, R. E. (1984), *Strategic Management: A Stakeholder Approach*. Pittman, Marshfield, MA.
- Garba, T., & Abubakar, B.A. (2014). Corporate board diversity and financial performance of insurance companies in Nigeria: an application of panel data approach. *Asian Economic and Financial Review*, 4(2), 257-277.

- Ghazali, N. A. M. (2010), Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce & Management*, 20(2), 109-119.
- Haji, A. A. (2014). The relationship between corporate governance attributes and firm performance before and after the revised code: Some Malaysian evidence. *International Journal of Commerce and Management*, 24(2), 134-151.
- Haniffa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7-8), 1034-1062.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.
- Jackling, B., and Johl, S. (2009), Board structure and firm performance: evidence from India's top companies, *Corporate Governance: An International Review*, 17 (4), 492-509.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of the internal control system. *Journal of Finance*, 48(3), 830-880.
- Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm, managerial behavior, agency costs, and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jianakoplos, N. A., & Bernasek, A. (1998). Are women more risk averse?. *Economic inquiry*, 36(4), 620-630.
- Kalsie, A., & Shrivastav, S. M. (2016). Analysis of board size and firm performance: evidence from NSE companies using panel data approach. *Indian Journal of Corporate Governance*, 9(2), 148-172.
- Khan, S. N., Hussain, R. I., Maqbool, M. Q., Ali, E. I. E., & Numan, M. (2019). The mediating role of innovation between corporate governance and organizational performance: Moderating role of innovative culture in Pakistan textile sector. *Cogent Business & Management*, 6(1), 1631018.
- Kiel, G. C., and Nicholson, G.J. (2003), Board composition and corporate performance: how the Australian experience informs contrasting theories of corporate governance, *Corporate Governance: An International Review*, 11(3), 189-205.
- Kılıç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: evidence from Turkey. *Gender in management: An international journal*.
- Kim, H. A., Jeong, S. W., Kang, T., & Lee, D. (2017). Does the presence of female executives curb earnings management? Evidence from Korea. *Australian Accounting Review*, 27(4), 494-506.
- Kumar, N., & Singh, J. P. (2013). Effect of board size and promoter ownership on firm value: some empirical findings from India. *Corporate Governance: The international journal of business in society*, 13(1), 88-98.
- Kunze, F., Boehm, S., & Bruch, H. (2013). Organizational performance consequences of age diversity: Inspecting the role of diversity-friendly HR policies and top managers' negative age stereotypes. *Journal of Management Studies*, 50(3), 413-442.
- Li, H., & Chen, P. (2018). Board gender diversity and firm performance: The moderating role of firm size. *Business Ethics: A European Review*, 27(4), 294-308.
- Macheroochego, E., Omagwa, J., & Muathe, S. (2020). Corporate Governance Strategy and Firm Value in the Context of Commercial Banks in Kenya. *International Journal of Business, Economics and Management Works ISSN*, 7, 5-07.

- Mashayekhi, B., & Bazaz, M. S. (2008). Corporate governance and firm performance in Iran. *Journal of Contemporary Accounting & Economics*, 4(2), 156-172.
- Mori, N. (2014). Directors' diversity and board performance: Evidence from East African microfinance institutions. *Journal of African Business*, 15(2), 100-113.
- Munga, J. G. (2018). Corporate Governance and Financial Performance of Insurance Firms in Kenya. *An Unpublished Thesis Submitted To The School Of Business In Partial Fulfillment Of The Requirements For The Award Of The Degree Of Master Of Science (Finance) Of Kenyatta University*.
- Muth, M. M., and Donaldson, L. (1998). Stewardship Theory and Board Structure: a Contingency Approach. *Scholarly Research and Theory Papers*, 6 (1), 5-28.
- Nyamongo, E. M., & Temesgen, K. (2013). The effect of governance on performance of commercial banks in Kenya: a panel study. *Corporate Governance: The international journal of business in society*.
- O'connell, V., & Cramer, N. (2010). The relationship between firm performance and board characteristics in Ireland. *European Management Journal*, 28(5), 387-399.
- Olalekan, L. I., Mustapha, L. O., Irom, I. M., & Emily, B. N. (2018). Corporate board size, risk management and financial performance of Listed Deposit Money Banks in Nigeria. *European Journal of Accounting, Auditing and Finance*, 6(1), 01-20.
- Pamburai, H., Chamisa, E., Abdulla, C., & Smith, C. (2015). An analysis of corporate governance and company performance: a South African perspective. *South African Journal of Accounting Research*, 29(2), 115-131.
- Riyadh, H. A., Sukoharsono, E. G., & Alfaiza, S. A. (2019). The impact of corporate social responsibility disclosure and board characteristics on corporate performance. *Cogent Business & Management*, 6(1), 1647917.
- Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance: The international journal of business in society*, 12(5), 656-674.
- Wanyama, D. W., & Olweny, T. (2013). Effects of corporate governance on financial performance of listed insurance firms in Kenya. *Public policy and administration research*, 3(4), 96-120.
- Wepukhulu, J. M. (2016). *Relationship between corporate governance and performance of commercial banks in Kenya* (Doctoral dissertation).
- 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.
- World Bank. (2020). *Agriculture and Food*. World Bank. <https://www.worldbank.org/en/topic/agriculture/overview>
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics*, 40(2), 185-211.