BOARD CHARACTERISTICS AND PROFITABILITY OF MANUFACTURING AND ALLIED FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

Candy Hellen Mwihaki Kariuki & Dr. Fredrick W. S. Ndede, PhD

Vol. 11, Iss.2, pp 306 – 326, April 18, 2024. www.strategicjournals.com, © Strategic Journals

BOARD CHARACTERISTICS AND PROFITABILITY OF MANUFACTURING AND ALLIED FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

[1] Candy Hellen Mwihaki Kariuki & [2] Dr. Fredrick W. S. Ndede, PhD

[1] Scholar (Finance Option), School of Business, Economics and Tourism, Kenyatta University, Kenya
[2] Lecturer, Department of Accounting and Finance, Kenyatta University, Kenya

Accepted: March 28, 2024

DOI: http://dx.doi.org/10.61426/sjbcm.v11i2.2911

ABSTRACT

This study delved into the effect of board characteristics on the profitability of manufacturing and allied companies listed on the Nairobi Securities Exchange. Guided by stakeholder theory, institutional theory, and stewardship theory, the survey deployed a design that is explanatory and a census approach to unravel these complex relationships. The nine (9) listed manufacturing and allied firms were the intended populace in this investigation and secondary data gathered from audited and published yearly statements of the firms and reports published on NSE websites were gathered and analyzed using correlation analysis, panel analysis along with descriptive statistics. Data obtained was evaluated and accessed using diagrams, figures and table for drawing conclusions and recommendations from the interpreted results. Ethical standards were duly followed during this study. An examination of board independence effect on profitability was performed. The survey unraveled that board independence exerted a positive effect that is statistically significant on profitability. The effect of board activity was determined on profitability. Outcomes uncovered that board activity held a negative but statistically insignificant effect on profitability. The board size effect was also sought on profitability. The output unfolded that board size had an inverse and insignificant effect on the profitability. Further, the moderating effect of firm size on the nexus of board characteristics and profitability was analyzed. The survey unveiled that board characteristic linkage with profitability was insignificantly moderated by firm size. It was concluded that board independence is a major predictor of the NSE listed firms' profitability in Kenya. Conclusively, board activity is not the major determinant of the firms' profitability in Kenya. In conclusion, board size does not play a major role in determining the profitability of the firms in Kenya. It was concluded that firm size moderating role is insignificant on the nexus of board characteristics with profitability of firms in Kenya. The survey recommended that independence of the board should be increased to improve the profitability potentials of the firms in Kenya. The survey advised that board activity should be reduced to curtail the number of resources spent on the meetings held annually.

Key Words: *Manufacturing and Allied Firms, Board Independence, board activity, board size, NSE*

CITATION: Kariuki, C. H. M., & Ndede, F. W. S. (2024). Board characteristics and profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. *The Strategic Journal of Business & Change Management,* 11 (2), 306 – 326. http://dx.doi.org/10.61426/sjbcm.v11i2.2911

INTRODUCTION

Across the globe, features of board have been considered as an effective monitoring mechanism of management and company activities (Singh, Tabassum, Darwish & Batsakis, 2018). In Indonesia, independent board and size of a board have shown a significant positive effect on the profitability of listed Indonesia firms over the years (Handriani and Robiyanto2018). The influence of these board characteristics which also includes board activities is considered an efficient framework for company leadership which protects the interest of shareholders from unethical practices of managers (Gaur, Bathula & Singh, 2015; Shaukat, Qiu & Trojanowski, 2016).

According to Ilaboya, Izevbekhai and Ohiokha (2016), Board of directors with clear procedures and policies can have long term strategy as well as insights which are guided by strong principles which in turn bring about long-term success of business. Additionally, Board activity which entails frequency of meetings by board members enables effective interaction and communication among board members which enhances decision making and profitability. In Nigeria, according to Akpan (2015) and Sabo (2018) in their study opined that publicly traded enterprises on the Nigerian Stock Exchange were influenced by the significant positive nexus amongst board meeting frequency and profitability of the firms. Although, time allocation and frequencies of meetings varies from one firm to another, the impact of board activity demonstrates a great importance in the overall performance of the firms (Bosun-Fakunle & Josiah, 2019).

In the context of Kenya, listed firms are regarded to be among the largest firms in the country and as such contributing significantly to the economy (Osebe, Kirui & Naibei, 2019). Good governance structures implementation within firms brings about responsibility and transparency thereby enabling increased profitability and overall performance. Corporate governance as well as board characteristics which enhances the roles of members in company boards has been regarded as a driving force for improving the finance strength of Kenyan publicly trading firms *(*Mwaura, 2017). The continuous implementation of these board characteristics and corporate governance practices aided transparency among board members and sustainable growth of the firms (Al-Daoud, Saidin & Abidin, 2016). The manufacturing sector of Kenya is marked as a major backbone for the attainment of the country's vision 2030. Hence, this sector remains critical to the economic development of the country.

Aryani, Setiawan, and Rahmawati (2017) states that Board activities are essential for board members to brain storm and provide policies and measures that positively affect the growth of a firm. According to Jensen (1993), board activities strengthen the bond and interaction between board members thereby enabling their effectiveness. Board activities are the duties carried out through the board and committees that the board established for particular tasks. Board's duties include things like tenure, ownership, resources, meetings, committees and salary.

Globally, the contribution of the manufacturing sector has been significant to the globally economy. However, the magnitude of the sector's contribution depends on the viability of the economy. Several firms have recorded success in their line of production. For instance, Apple, Amazon and Unilever have recorded success leading to high profitability of these firms. This is due to the fact that these firms had a keen focus on innovation and design consistently maintaining high profitability by creating premium products and cultivating a loyal customer base (Giménez, 2018). However, other firms around the world have witnessed downward trend in their profitability which has affected their operational stands thus, leading to ejection from the market. Example of such firms include Nokia, Kodak, Nokia and Toys R Us have all been world leaders in their various production lines nonetheless, they have struggled to keep pace with innovation and changing consumer preferences, resulting in declining market share and profitability (Gehani, 2013).

In Kenya, the manufacturing and related sectors have been expanding more slowly than the overall economy. In contrast to a growth of 2.7% in 2016, additional price climbed little by 0.2% in 2017 (KNBS, 2018). This shows the GDP contribution of manufacturing is substantial declining over the years. Recent Economic Survey reports have further shown that the sector's businesses have been struggling with expansion. The survey showed the index work of manufacturers estimated in PPO climbed in the period of 2015 at 3.5%compared to an increase at the period of 2014 at 3.03%, mostly as a result of higher costs associated with importing raw materials. Additionally, according to the Handbook 2018, the majority of the manufacturing as well as related businesses publicly trading on the NSE have kept up to observe a fall at its net earnings. An example is BOC Kenya PLC which saw a 49% reduction from 2016 to 2017, British American Tobacco Kenya PLC experienced a 21% decline from 2016 to 2017, and a 15% fall from 2015 to 2016, and Carbacid Investment PLC experienced an 18.7% decline from 2014 to 2015 and a 6.19% decline from 2016 to 2017. As of right now (NSE, 2019), the corporation has issued a profit warning. Over the past five years, Mumias Sugar has continued to experience losses.

Nairobi Securities Exchange (NSE) was acknowledged before Nairobi Stock Exchange which was confirmed around 1954 under the license of London stock exchange (Mugo, 2016). It has become one of Africa's biggest stock markets in terms of market cap and volume of daily trades (Iraya & Musyoki, 2013). The Capital Markets Authority oversees the NSE, the sole individual trading venue for financial instruments in Kenya (CBK, 2020). There are twelve (12) sectors listed at the NSE namely sectors of exchange-traded investments and residential property investments partnerships, Telecommunication and Technology industry, Manufacturing and related industry, Investment Services industry, sector for investment, sector for agriculture, Automobile and Accessories sector, Banking sector, Commercial and Services sector, Construction and Allied sector, Energy and Petroleum sector, Insurance sector and Investment sector. Additionally, there are a total of 64 firms quoted at the NSE (NSE, 2021).

The profitability of listed manufacturing and allied firms in Kenya has continued to deteriorate overtime portraying a bad image on the performance of the industry. For example, Eveready East Africa restructured its portfolio in 2017 and sold assets totaling 452 million to pay off debt and maintain business operations. Despite adopting a 100% retention rate, the company saw a 24% fall in revenues and losses totaling Ksh.303 million in the 2018/2019 financial quarter (Capital Markets Authority, 2019). Mumias Sugar Company suffered losses of more than Kshs. 6 billion in 2017 and Kshs. 4.8 billion in 2016, which ultimately resulted in the company's placement under receivership in 2019 despite efforts to restructure. 2020 saw a 39% drop in earnings for East African Breweries, from Kshs. 11.5 billion to Kshs. 7 billion. From Ksh. 19 million in profit in 2019, BOC Kenya reported a decrease to Sh. 14,574,000 in 2020. Unga Group Ltd recorded an 88% profit decline from Ksh. 544,814,000 in 2019 to Ksh. 66,161,000 in 2020 (Nairobi Securities Exchange, 2021).

Statement of the Problem

The manufacturing sector is a significant contributor to Kenya's economy, accounting for approximately 10-13% of the country's GDP annually (Mutua, Ngugi, & Otieno, 2018). The sector serves both the local market and exports to the East African region, making it a vital component of Kenya's economic growth and development. The manufacturing sector is also a critical avenue for local job creation, providing employment opportunities for Kenyans and contributing to poverty reduction (Mitullah, Kamau & Kivuva, 2017). However, the manufacturing sector in Kenya faces several challenges that impact its growth and sustainability. Some of these challenges include weak value chains, lack of skilled workforce, high input cost, poor infrastructure, and limited access to finance and regulatory environment which has hindered high level of productivity (Wagana & Karanja, 2017). According to World Bank (2023), the Kenyan manufacturing sector has continued to face challenges such as limited skills development, trade barriers, and informality.

Manufacturing corporations registered at the Nairobi Securities Exchange (NSE) have had an inconsistent business achievement during over time. Despite the fact that some publicly traded companies have realized excellent business achievements, there are also many of others that have seen their revenue growth deteriorate (Irungu, 2019). According to Oeta, Kiai, and Muchiri (2019) underachievement of traded manufacturing and related industries is induced by board members focusing mostly on financial projection and cash flow than that on its company's level of resource efficiency. Due to the ineffectiveness of the board of these firms a number of declines have been witnessed in the profitability of the firms. For instance, in 2017, Eveready East Africa undertook portfolio restructuring by selling assets worth 452 million to settle debts and ensure continuity of operations. In the financial period 2018/2019, the firm adopted a 100% retention rate but still recorded a 24% decline in revenues and losses amounting to Ksh.303 million (Capital Markets Authority, 2019). Mumias Sugar Company recorded losses of Kshs. 4.8 billion in 2016, Kshs. 6.8 billion in 2017 and Kshs. 15.1 billion in 2018, representing as percentage change of 29.41% and 54.97% for the years 2017 and 2018, eventually leading to its placement under receivership in 2019 due to continued losses despite restructuring efforts (Murugi, Atieno & Denis, 2022). East African Breweries experienced a 39% profit decline in 2020 from Kshs. 11.5 billion to Kshs. 7 billion in 2019 which was even lower than Kshs. 7.2 billion recorded in 2018 constituting 2.86% loss (Crowling, 2023). BOC Kenya recorded a declined profit of Kshs. 14,574,000 in 2020 from Kshs. 19 million in 2019 with a further decline of 49.6% in 2018 and 23.29% in 2020. Unga Group Ltd recorded an 88% profit decline from Ksh. 544,814,000 in 2019 to Ksh. 66,161,000 in 2020 as against the 10.4% documented in 2019 (Nairobi Securities Exchange, 2021).

Certain contributions have been made by researchers towards determining the effects of various boards' features and its effect on the profitability of companies. Among such contributions was the research made by Akpam (2015) in establishing the effects of meeting frequency of the boards on the performances of certain enterprises using cross sectional as well as quantitative approach method. Study demonstrated a significant negative effect of meeting frequency boards on the profitability of businesses. Furthermore, Odudu et al. (2016) also carried out an investigation on the effects of definite board features which are board independence, gender diversity, foreign directors, grey directors and proxy by directors on profitability of firms. The results established an insignificant effect of board independence, proxy by directors, and gender diversity on profitability and a positive and negative effect of foreign directors and grey directors on financial profitability respectively. Based on the studies, it was clear that little attention had been paid to board characteristics effect on the Kenyan NSE listed profitability of manufacturing and allied firms.

Objectives of the study

This research primary ascertained how board characteristics affect the profitability of manufacturing and related companies trading on Kenya's NSE. The precise survey objectives included:

- To find out the effect of board independence on profitability of manufacturing and Allied companies quoted at the Kenya's NSE.
- To assess the effects of board activity on profitability of manufacturing and Allied companies quoted at the Kenya's NSE.
- To examine the effect of board size on profitability of manufacturing and Allied

companies quoted at the Kenya's NSE.

- To establish the moderating effect of firm size on the relationship between board characteristics and profitability of manufacturing and Allied companies quoted at the Kenya's NSE.

The subsequent null hypotheses were examined by the survey:

- H_{01}: Board independence has no significant effect on profitability of manufacturing and Allied companies quoted at the Kenya's NSE.
- H_{02}: Board activity has no significant effect on profitability of manufacturing and Allied companies quoted at the Kenya's NSE.
- H_{03}: Board size has no significant effect on profitability of manufacturing and Allied companies quoted at the Kenya's NSE.
- H_{04}: Firm size has no significant effect on the relationship between board characteristics and profitability of manufacturing and Allied companies quoted at the Kenya's NSE.

LITERATURE REVIEW

Theoretical Literature Review

Stakeholders Theory

Stakeholders' theory was advanced by Freeman in 1984. This theory holds that if the nexus existing among organizations and individuals who have influence is analyzed, the demands of the relevant stakeholders will be addressed *(*Walsh 2005*).* This theory stresses about how the organization as a whole relates with external environment to generate more value. To gain more knowledge about business, one must be conversant with how the alliance work, change progress with time and distribution of value *(*Lin, Yeh & Yang, 2014*).* The executive's roles are to maintain the relationship and generate more values for the stakeholders. Stakeholders' theory emphasized on the commitment of all stakeholders involved directly and indirectly in a firm to serve and enhance the firms' growth and profitability *(*Andow & Gambo, 2019*).*

Jenson (2001*)* faults the Stakeholders idea for building an individual core objective (profits accruing to a company's stakeholders). Jensen (2001) argues that a company's effectiveness is really not and it should not be judged just in terms of benefits to its stakeholders. Other significant determinants examined were the sharing of data from top executives to subordinates, inter-personal interactions, workplace conditions, and so on. An informed stakeholder theory was presented as an expansion of the idea. Nevertheless, issues with hypothesis validation of the expansion restricted its use (Sanda etal., 2005). The usefulness of stakeholders' theory in various sizes of board, independent board and activity of the board of firms made it appropriate for this study. Bathulam (2008) analyzed features of the board and company performances in New Zealand using the stakeholder's theory. Ezelibe, Nwosu and Orazulike (2017) investigated Nigerian traded firms' corporate structure and openness about finances using stakeholder's theory and Mulee (2018) observed effect of features of boards and finance performances as guided by this theory. The theory notably underpins the response parameters profitability which is a function of the activities of various stakeholders.

Stakeholder theory suggests that firms having greater independence of its board have higher chances of considering the interests of all stakeholders, including shareholders, consumers, creditors, and society, and are consequently more susceptible to stakeholders' needs. The theory argued that board of firm's independent directors monitor effectively other realities from the society and are susceptible to the needs of the stakeholders. They have fewer ties with the CEO and other board executive members, and their backgrounds personally and skills should increase their sensitivity to a broader range of stakeholders' interests.

Institutional Theory

Meyer and Rowan advanced the institutional theory in 1977. This theory lays more emphasis on change that occurs in an organization and how it affects the formal structures. It has to do with legitimization of innovations; innovations that whether or not promote efficiency are legitimized by the organization. The survival of an organization is promoted by legitimacy in the institutional environment. However, the company's efficiency and competitive position can be reduced or hindered in the technical environment and to avoid these negative impacts, the company applies various tactics (Pierson, 2000). The consistency and success of organizational structures in an institutional environment is as a result of institutional pressures. Companies have accepted corresponding structures due to three pressures: coercive pressures, mimetic pressures and normative pressures (Amenta, 2005). Institutional theory relies on partnership and interaction among members of an institution which enhances productivity and profitability (Clemens & Cook, 1999). The link between board activity, board size, profitability, innovation and an interactive environment within a firm outlined in the institutional theory made it appropriate for this study.

It is frequently attacked as philosophically imperialism; in that it claims to cover and describe all aspects of companies. As a result, all key variables are generally recognized as institutional, and all performance management is assumed to be a reflection of institutional factors. In addition, institutions in modern industrialized and globalised civilizations may identify a special sort of cultural growth. As a result, it's hard to tell the difference among a firm's exterior social milieu and its institutional factors. Institutional theory, which includes notions like institutions and logical narrative, has a propensity to escape simple definition and execution of terminology. The theory has anchored board activity and firm size variables of this study. Umanto (2015*)* used this theory to explain corporate governance on regional banks in Indonesia. Waheed (2021*)* also used theory to explain governing board and company performances.

This theory supports the board size. The context of board size and firm profitability, institutional theory suggested that companies tend to adopt similar practices for the number of board members. The theory emphasized that board size may reveal the firm's environment complexity, which can innately impact its financial performance. The theory also highlighted the influence of institutional isomorphism, where organizations within an industry or sector become more similar in terms of their structures and practices. This can lead to a situation where firms within the same institutional environment tend to have similar board sizes, which in turn may impact their financial performance.

Stewardship Theory

Stewardship Theory was first presented in 1991 and 1993 by Donaldson and Davis, which presented a novel standpoint on the link involving business owners and executives. Stewardship theory offers a different perspective on executives, where leaders are perceived as excellent stewards who are going to function in the most beneficial way for the owners (Donaldson& Davis, 1991*)*. The roots of stewardship theory come from behavioral science, which is concerned with how CEOs behave. If left to their individual components, executives, in accordance with the stewardship notion, are going to take proper management of the resources that they are in possession for. According to Siswanto and Fuad, (2017) whenever the proprietor's assets is optimized, so stewardship' commodities are additionally enhanced because institutional performance will typically fulfill standards as well as the managers will have a clear goal. According to stewardship theory, managers possess a substantial impact on enterprises efficiency, hence managers should be held accountable for protecting and maximizing shareholder capital. A steward who successfully raises performance satisfies all of the organization's stakeholder groups (Davis, Schoorman & Donaldson, 1997*)*.

When a company's CEO doubles as its chairman, the decision-making authority and the ability to formulate a plan are placed in the hands of a single person (Kumudini, 2011*).* However, the stewardship approach emphasizes the need for facilitative, rather than directive, institutions (Davis, 1997). Because specialist governing boards are much more probable to get chosen, they are of higher standards for the resources that they manage by nature than non-executives' governors and by comparison, stewardship theory supports the appointment of one person to fill both positions of chairman and CEO. This is seen as a major weakness in the theory (Clarke, 2004*).* Board independence and board size was underpinned with this study. Miano and Gitonga (2020) used stewardship theory to anchor Kiambu County Saccos' business leadership and finances success. In structure of the assessing board as well as company performances by Chiang (2017*),* stewardship theory was utilized. The board of directors is further considered as stewards who are expected to put in their best in view of the responsibilities vested upon them, hence the link between board characteristics and profitability.

This theory supports board activity which emphasizes on the linkage relating to board activity and firm performance, particularly within the purview of how a board supports management's effort to propel firm performance. The theory suggests that board members are shareholder's selection to effectively maximize steward CEO, who is responsible for offering steward managers environment that take advantage on the owners' performance behalf. The board primarily offers benefits that range from legitimacy, advice and counsel, communication channels pertaining to the firm and organizations externally, and access preferred resources externally that the firm may require.

Empirical Literature

Board independence members enhance decision making which affects the ultimate goal of the firms as it pertains to profitability. Independent directors, ideally free from interest conflicts or close management ties, can offer oversight objectively and argue out decision of the management, potentially preventing wasteful spending and promoting ethical business practices (Brown, Kakabadse & Morais, 2020). This contributes to stronger financial performance and increased profitability of the firms. Increased independent representation on boards enhanced investor confidence by signaling adherence to good governance practices and transparency (Ahmad, Rashid, & Gow, 2017). This improved access to capital, lowered the cost of debt, and attracted investors seeking responsible and reliable firms, boosting profitability through cost savings and market access (O'Shannassy, 2020). Several studies explored the board independence impact on firm performance, yielding mixed results and contributing to a nuanced understanding of this association.

Oyewale, Oloko and Olweny (2016) undertook research to ascertain the connection among board independence and finance performance of manufacturing firms quoted at the Nigerian Stock Exchange (NSE). By the means of purposive sampling method, 34 companies were selected for the purpose of the investigation. The investigation adopted data from secondary and primary sources for analysis. The explanatory parameters were board independence while the response parameter was return on equity. It was gathered from the assessment of research that there exists a beneficial nexus amongst independence of the board and finance performances of the manufacturing enterprises. Despite concentrating on board independence and profitability nexus in connection with manufacturing firms, Nigeria was the focus of the aforementioned survey. The present study has concentrated on board independence and other board characteristics in the background considering manufacturing and related enterprises quoted on the Kenya's NSE regarding the moderating impact of company size.

Research on the impacts of meeting of the board number on business performances was done by Akpan (2015). Under the application of a selection at random approach, 79 listed businesses on the Nigeria's NSE marketplace served as the population of interest for the research. The secondary information obtained from the web pages of the enterprises as well as the NSE was put through to descriptive statistics, correlation, alongside multiple regression evaluation utilizing a cross-sectional study design along with quantitative approach technique. Return on Equity (ROE) represented the factor that was dependent in the investigation, whereas the amount of times of Board activity was the variable that was independent. The analysis's outcome demonstrated that Board activity had adverse, considerable impacts on the success of the firms. However, the earlier study focused on a variety of businesses from a variety of industries, but the current study concentrated on Kenya's manufacturing and related industries while examining the moderating impact of company size on their profitability.

Aryani et al. (2017) performed a survey to establish the impacts of meeting of the board regularity on the performance of publicly traded businesses financially recognized with Jarkarta Islamic Index (JII). Using purposive sampling, 175 businesses active from 2006 and 2016 were chosen. By giving out questions to participants and gathering information via the Jarkarta Islamic Index web page, the research used information that was secondary as well as primary. The amount and duration of Board activity was an independent component; return on assets (ROA) was a dependent factor. The investigations' outputs, which combined multiple regressions modeling with descriptive statistics, showed that the regularity of Board activity had no discernible impact on profits of the firms. The prior research, nevertheless, was only able to include businesses that were listed on the Jarkarta Islamic Index (JII). The prior research also did not identify the role of moderation of business size in the linkage among the regularity of Board activity and profitability, which was among the particular goals of the current investigation. Additionally, whereas the last research covered the years 2006 to 2016, the current one covered the years 2015 to 2020.

Board size is a significant determinant of how the activities of the firms are been conducted as the board contribution affected firms' performance. Different scholars have argued as to the board members number that are expected to influence the firm's profitability as there is no one-size-fits-all answer to the question of board size. Jaskyte (2018) observed that smaller boards, typically with 7-10 members, are thought to foster better communication and collaboration among directors, leading to quicker decision-making and more focused discussions. Additionally, with fewer directors, individual accountability is heightened, potentially enhancing their oversight role and monitoring of management which the board members may be more willing to prioritize skills, experience, and perspectives, ensuring a well-rounded set of voices at the table that could enhance profitability of the firms (Heemskerk, Heemskerk & Wats, 2017). However, other scholars have noted that larger boards, with up to 15 members, can offer wider representation from various stakeholder groups, potentially leading to more inclusive decision-making that would improve the profitability of the firms (Kirsch, 2018). The linkage relating to board size and firm profitability has been a topic of extensive survey, with findings that have contributed to a nuanced understanding of this association.

Tanna, Pasiouras and Nnadi (2013) looked into how the size of the governing body of directors affected the effectiveness of UK banking institutions. The seventeen banking institutions that were in operation from 2001 to 2006 were chosen as the population of interest for the investigation, while public accounting records as well as facts booklets were used to collect secondary information on them. Data Envelopment Analysis (DEA) was utilized to quantify effectiveness, whereas a panel technique was applied to ascertain how the independent variables affected the variables that were dependent. The size of the board was the determining factor, while profit-oriented effectiveness, cost-oriented productivity, efficient allocation of resources, scaling effectiveness as well as technical efficacy were the dependent factors. It was concluded from the examination that size of board has favorable impact on specialized, financially motivated, expense, magnitude, as well as allocation effectiveness. It was concluded that the size of the governing body has a large influence on how profitable as well as effective an enterprise is. Though the previous study's emphasis being on figuring out how the size of boards affects productivity, that involves profitability, it overlooked the existence of a moderating component. The goals of the investigation for this current research, nevertheless, took the existence of a moderating influence into account. In the work, two analytical methods were applied; this survey particularly used panel regression analysis.

Oyelade (2019) performed a comparative examination of a few businesses in Nigeria's construction industry utilizing yearly information from 2004 to 2017 towards ascertaining the impact of company size on performances. The study approach used was panel analytics. According to the financial evaluation of performance utilizing a composite of return on assets (ROA) and return on equity (ROE), 2 among the four parameters employed as measurements of size in calculating return on assets, respectively the overall sales as well as the duration of the business from incorporating were substantially in statistical terms. Return on assets is influenced positively by total revenues, while negatively by the firm's age from formation. It was also demonstrated which leverage had a discernible impact on return on equity. Two of the four dimensions' metrics were utilized, the total amount sold as well as the duration of the company since founding, appeared statistically substantial when measuring earnings per labor as well as the overall number of workers determined by efficiency measures of the efficiency of the companies chosen in Nigeria's construction sector employing the two metrics of output per labor alongside output per capital, while leverage had a substantial adverse effect on output. The research utilized yearly data from the years 2004 to 2007; the current study has employed yearly information from the years 2015 to 2020.

To arrive at capital framework effect on an organization's performance financially, Meiryan, Olivia, Sudrajat, and Daud (2020) conducted an investigation on 55 manufacturing-based companies traded on the Indonesia Stock Exchange. Random regression panel effect model was utilized. According to the investigation's conclusions, (1) the firm size has no effect on a business's financial performance as assessed using return on assets, while (2) the size of the firm has no effect on the performance financially of a company as evaluated by market-to-book values. In contrast to the previous study, which primarily focused on business size on performance financially, the current survey used the size of the company as a moderating factor.

Mulma (2020) embarks on a quest to unravel the intricate relationship between organizational size and the financial well-being of Kenyan deposit-taking microfinance institutions. Employing both static and dynamic panel data models, the study delved into a wealth of secondary data spanning from 2011 to 2018, focusing on six carefully selected organizations. The study found that while deposits from customers have minimal effect on financial performance on the dynamic approach, the overall assets do. In accordance with a dynamic model, the study discovered that the financial success of deposit-taking microfinance companies over a year in the past had a considerable beneficial influence on their current financial performance. This research concentrated on deposit-taking micro financing institutions in Kenya, as against the study's concentration on manufacturing and allied firms in Kenya.

Conceptual Framework

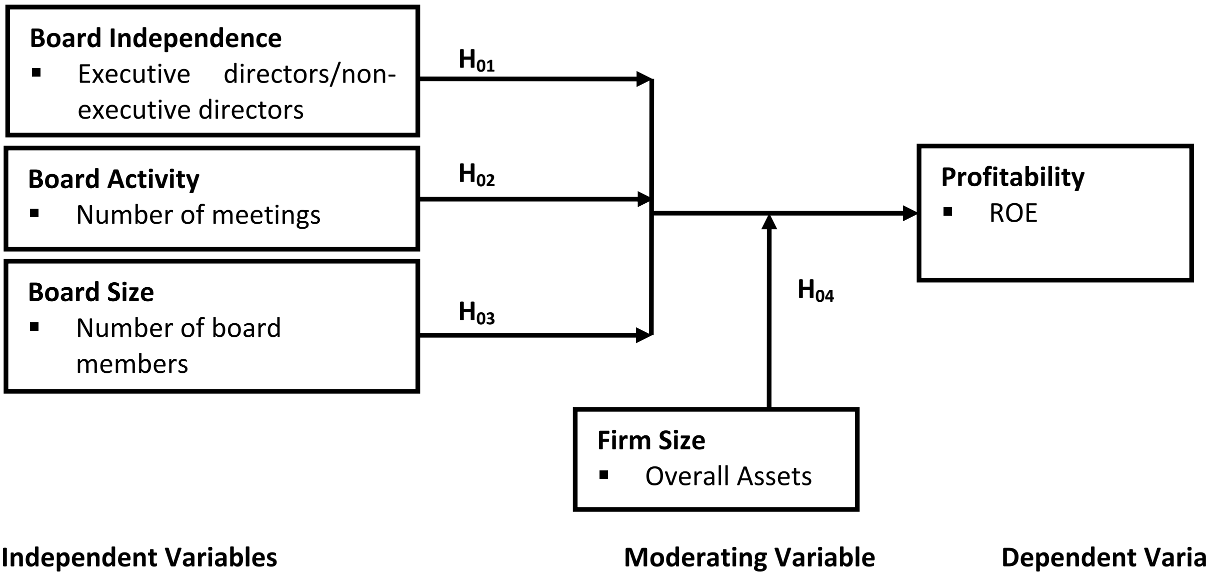

Figure 1: Conceptual Framework

Source: Researcher (2024)

METHODOLOGY

This investigation utilized an explanatory research approach. The 9 listed Kenyan manufacturing and allied NSE, Kenya, from 2015 to 2020 were therefore the research's population of interest. The sampling design used was census sampling design considering the small unit of analysis used for the study as census sampling is the most suitable sampling method for a small sample size (Cooper &Schindler, 2013). A document called a study review-guide was utilized to gather and organize the financial data for assessment. For the purpose of collecting information from the Nairobi Securities Exchange's publicly available statements finances and the company's annual reports, study permission from the National Commission for Science, Technology, and Innovation (NACOSTI) was collected. This research employed time and cross-sectional quantitative information from the quoted manufacturing and related firms (from 2015-2020). The diagnostic test adopted for testing the null hypothesis was normality, multicollinearity and heteroskedasticity tests.

FINDINGS

Descriptive Analysis

Descriptive analysis is a clear exploration that utilizes both past and present data to uncover emerging patterns and interconnections concerning studied factors. It serves as a crucial basis in statistical data analysis, enabling the depicting, condense, and unveiling of the factor's information. The study performed a descriptive analysis on the factors to determine the intricate numerical landscape of the variables, uncovering their central tendencies, dispersions, and extremes values thereby, providing a comprehensive overview of their statistical characteristics. As a result, board independence, board activity, and board size were performed against profitability of the firms while firm size was the moderating factor to the existing relations between the explanatory factors and the explained factor. The outcomes of this descriptive assessment are presented in Table 1.

Table 1: Descriptive Statistics Results

Variable	Obs	Mean	Std. Dev	Min	Max
Profitability	51	4.619855	5.440634	-.3665728	31.3317
Board Independence	53	1.359623	6.110577	.3	45
Board activity	53	4.150943	.7441109	3	5
Board Size	53	8.433962	2.797729	5	15
Firm Size	51	7.347719	1.038424	5.30338	9.264646

Source: Study Data (2023)

The outcome displayed the outcome obtained with respect to profitability, board independence, board activity, board size and firm size. The outcome showed that profitability had mean value of 4.619855 while having a deviation of 5.440634 on standard. The recorded least and optimum values documented for profitability were -0.3665728 and 31.3317. This implied that profitability averaged Ksh 4.619855 million which changed across different firms at Ksh 5.440634 million but however, falls within the range of Ksh 0.3665728 million losses and Ksh 31.3317 million profits. A mean value of 1.359623 was associated to board independence having 6.110577 as deviation from the standard value. The board independence has 0.3 and 45 as minima and maxima values. This illustrates that board independence averaged 1.3596% with the variance across the firms at 6.1105% implying that the independence of the board varies across the studied firms with 0.3 as the lowest value of independence and 45 as the maximum value of the board independence.

The value of mean 4.150943 was linked to board activity with 0.7441109 as the standard value for deviation. The observation unfolded 3 and 5 as least and optimal values for annual board activity. Board activity varied with a range of 0.7441 with the 4.1509 being the average value demonstrating that at least board activities are held once per annum depending on the urgency of the decision to be taken by the board. Board size as uncovered by the descriptive assessment demonstrated a mean score of 8.433962 and a value that deviate on a standard of 2.797729. The outcome further unraveled a minimum score value of 5 which is extremely highest at 15. Notably, it is explained that board size of the studied firms varies relatively from each other as the rate of standard variation is put at 2.7977 members given a standard average score of 8.4339 members.

Firm size displayed score average of Ksh 7.347719 million exposing the deviation of Ksh 1.038424 million from the standard. Ksh 5.30338 million and Ksh 9.264646 million were exposed as least and optimum values. Firm size is at variance with each other at Ksh 1.038424 million averaging Ksh 7.347719 million. The standard value that deviates indicated that the studied firms' size differed significantly across the firms investigated as the firms have different level of total assets that is engaged to produce higher profitability in Kenya. The survey concludes that the size of the firm differs based on the asset based of the firms studied. This outcome is consistent with Mishra and Kapil (2017) who unfolded that the size of the firm differs significantly as older firms could be more efficient than the younger ones.

Correlation Analysis

Correlation analysis is a statistical method used to determine the relationship between two variables and the strength of that relationship. It helps identify patterns, trends, and connections within datasets. This segment presented the outcomes of the correlation assessment to designate the direction and strength of the association relating to the factors in the survey. This outcome is to show the relationship that exists between the explanatory factors with the explained factor in the investigation. The outcome is accessible in Table2.

Table 2: Correlation results

	Profitability	Board Independence	Board Activity	Board Size	Firm Size
Profitability	1.0000				
Board Independence	0.1067	1.0000			
Board Activity	-0.1356	-0.0713	1.0000		
Board Size	-0.1316	0.1120	0.2385	1.0000	
Firm Size	-0.0461	0.0601	-0.3383*	-0.0825	

Source: Study Data (2023)

As revealed by the conclusion obtained from the correlation analysis, board independence has a positive (0.1067) association with NSE firms listed profitability in Kenya. The association is said to be insignificant in relation to profitability of the firms. The outcome is similar to that obtained by Oyewale, Oloko and Olweny (2016). Board activity was said to reveal negative (-0.1356) as it associates with profitability. The connection is said to be insignificant with the profitability of the firms as the outcome corroborates with Akpan (2015). Board size was noted to have negative (-0.1316) connection with profitability of the firms. The connection as displayed is said insignificant with profitability of the firms. The outcome aligned with Eyenubo (2013). The size of the firm had inverse (-0.0461) connection with profitability of the firms. This outcome was noted to be insignificant pertaining to profitability of the Kenyan firms. The outcome of the investigation aligned with Mulma (2020).

Regression Analysis

Regression analysis is a powerful statistical tool used to evaluate relationships between variables. It helps in understanding how one variable influence another, like studying hours affecting test scores. Regression analysis simplifies complex data relationships, allowing predictions and insights on certain factors. An examination of the regression model's assumptions was conducted through a series of diagnostic tests to ensure regression model validity and reliability. This proactive approach, by identifying and addressing potential inconsistencies and inefficiencies in the estimated parameters, safeguarded the integrity of the regression model and its outcomes.

Diagnostic Test

Diagnostic tests encompassed the homoscedasticity, autocorrelation, multicollinearity, stationarity and specification tests, in ensuring the model's robustness.

Normality Test

To determine if the study data adhered to the bell-shaped curve of normality, Shapiro-Wilk test was applied. The null hypothesis noted that the investigation's data followed a normal distribution. This hypothesis was rigorously scrutinized at 0.05 threshold significance. The results of this normality test are tabulated in 3:

Table 3: Normality Test Results

Variable	Obs	W	V	z	Prob>z
Profitability	51	0.72893	12.949	5.468	0.00000
Board Independence	53	0.13835	42.431	8.020	0.00000
Board activity	53	0.99456	0.268	-2.820	0.99760
Board Size	53	0.94187	2.862	2.250	0.01221
Firm Size	51	0.96095	1.866	1.331	0.09153

Source: Study Data (2023)

The outcome of the Shapiro-Wilk assessment demonstrated the existence of the residuals' non-normality for profitability, board independence and board size. This supports the rejection of the null proposition at 0.05 level of the asymptotic threshold. This means that the errors or deviations from the predicted values of the dependent variable do not adhere to a normal distribution. This entails that the data obtained for the investigation does not emanates from an adequate sample size that represent the population of the investigation. With all the p-values of the factors which are lower than 0.05 level of significance, the residuals are not normally distributed for such factors. However, in line with the central limiting theorem, a study with more than 30 observations is said to be normally distributed hence, regression analysis can be proceeded (Akims, 2016).

Heteroscedasticity Test

The survey conducted a Breusch-Pagan test to investigate the presence of heteroscedasticity in the regression model. This test helps determine if the variances remained alike during observational errors. The outcomes, along with other related analyses, are presented in Table 4.

Table 4: Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of ROE
chi2(1) = 9.13
Prob > chi2 = 0.0025

Source: Study Data (2023)

The outcome that emerged from the heteroscedasticity had p-value that is lower compared to the 0.05 threshold of significance employed in the investigation. The outcome indicated that the model suffered from heteroscedasticity issue thus implying the absence of constant variance in the survey. This is a pointer to the null statement rejection hence resulting to the conclusion of heteroscedasticity's existence in the model which was corrected using robust standard errors estimation to allow for the estimation of regression models that are less sensitive to violations of the OLS classical assumptions.

Autocorrelation Test

To scrutinize the existence of autocorrelation in the model, Breusch test was meticulously adopted. Guided by the null claim, that asserted non-existence first-order autocorrelation; this test utilized 0.05 threshold significance. The study's outcomes, meticulously unraveled through this test, are comprehensively offered in Table 5.

Table 5: Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.258646	Prob. F (2,44	0.7733
Obs*R-squared	0.592620	Prob. Chi-Square (2)	0.7436

Source: Study Data (2023)

The emerging output of the evaluation of autocorrelation signaled the non-occurrence of autocorrelation. This is revealed by the p-value of 0.7733 which is above the threshold of 0.05 significance employed in the study. Relying on this output demonstrates the non-existence of autocorrelation which goes in line with the acceptance of the null hypothesis of non-existence of autocorrelation. With this outcome therefore, it is concluded that autocorrelation does not exist in the regression model hence, the estimated parameters are efficient in the model. In view of the outcome, test for multicollinearity was performed to determine the degree of collinearity among the explanatory factors.

Multicollinearity Test

To unravel the threat of multicollinearity, the variance inflation factor (VIF) was wielded as a discerning tool. This vigilant examination aimed to ensure that no explanatory factor within the model harbored an unduly strong collinearity with another. A verge of 2, deemed the critical point, was employed to gauge the model's susceptibility to collinearity. The outcomes are meticulously illustrated Table 6.

Table 6: Multicollinearity Test Results

Variable	VIF	1/VIF
Profitability	1.03	0.974294
Board Independence	1.02	0.985065
Board activity	1.05	0.949155
Board Size	1.06	0.947830
Mean VIF	1.04	

Source: Study Data (2023)

One of the axioms associated with the explanatory factors of the regression model is that collinearity between the variables should be low, as high collinearity would affect the estimated parameters of the model thus making it difficult to separate the individual effects of the factors on the explained factor. Therefore, owing to the outcome of the investigation, none of the factors displayed high collinearity with the VIF values lower than a threshold of 5. The confirmation of the low VIF recorded in the model is noted by the mean VIF of 1.04 with all the tolerance level less than 1 as noted by 1/VIF values. Therefore, the study concluded that all the VIFs recorded in the Table 6 are less than the threshold of 10 hence there is no severe collinearity among the explanatory factors. The outcomes led to the conduct of stationarity to the factors employed in the survey to avoid the tendency spurious outcomes from the regression estimation.

Regression Results

Employing panel analysis, the study delved into the intricate linkage pertaining to board characteristics and the financial well-being of manufacturing and allied listed firms on the NSE. Table 7 unveils the direct effect model, providing a clear picture of the findings.

Table 7: Direct Effect Model Results

Profitability	**Coef.**	**Robust Std. Err.**	**Z**	**P>z**	**[95% Conf.**	**Interval]**
Board Independence	.1131141	.0109459	10.33	0.000	.0916604	.1345677
Board activity	-1.756917	1.091994	-1.61	0.108	-3.897187	.3833516
Board Size	-.5222163	.3612578	-1.45	0.148	-1.230268	.1858359
_cons	16.13992	7.015419	2.30	0.021	2.389948	29.88988
Wald Chi2 (3)	135.07					
Prob > Chi2	0.0000					
R-Square	0.0854					

Source: Study Data (2023)

The output unveiled a model explanation that is significant in explaining profitability as confirmed by Wald Chi-square of 135.07 and 0.0000 p-value. The goodness of fit illustrated by R-square depicted

0.0854 implying all explanatory factors explains 8.54% variations in the profitability of the manufacturing and allied firms listed in Kenya. By addition, 91.46% changes in profitability are elucidated by excluded factors in the model. The output uncovered an intercept that is positive due to 16.13992 value that is significant at 0.005 level of threshold.

Utilizing the threshold of 0.05, board independence has a positively direct (β = 0.1131141) and significantly (ρ = 0.000) affected NSE firms traded profitability in Kenya. The outcome implies that profitability would improve significantly when board independence is increased by a percentage as quantified by 0.1131%. Board independence is a crucial aspect of corporate governance. This is linked to the fact that independent directors are individuals who do not have any significant financial or personal ties to the company, allowing them to provide unbiased perspectives and make decisions in the best interest of the organization and its stakeholders. This outcome aligned with Eyenubo (2013).

Board activity was noted to have negative (β = -0.5222163) and insignificant (ρ = 0.108) effect on Kenyan firms traded profitability. Going by this outcome, increasing the board activity by a percentage would be at the detriment of profitability to the tune of 1.7569%. The output demonstrates that the level of board activity does not have a significant impact on the profitability of these firms. The outcome could be linked to external factors such as market conditions, industry dynamics, and economic fluctuations that influenced the profitability of the firms. These factors overshadow the impact of board activity on profitability, making it statistically insignificant. The output agrees with Akpan (2015) and Aryani et al. (2017).

Board size negatively (β = -0.5222163) and insignificantly (ρ = 0.108) affected profitability. The output relating to board size entails that profitability would improve by 0.5222% as the size of the board is reduced by a percentage. In other words, the size of the board of directors does not significantly impact the profitability of the analyzed firms. The outcome could be credited to the composition of the board, including the expertise, diversity, and independence of the directors which may have a more significant impact on profitability than board size. The skills and experience of individual directors, as well as their ability to work together effectively, can play a crucial role in driving financial performance. The outcome concurred with Eyenubo (2013). Having conducted the direct regression analysis, the first step of the moderating effect was conducted.

Discussion of Findings

Board Independence and Profitability of Manufacturing and Allied Firms Listed at the Nairobi Securities Exchange, Kenya

The investigation embarked on a quest to unravel the effect of board independence on well-being of these firms listed on the NSE financially. The outcome demonstrated that board independence has a positively (0.1131141) and significantly (0.000) effect on profitability of the firms traded in Kenya. The outcome implies that profitability would improve significantly when board independence is increased by a percentage as quantified by 0.1131%. In alignment with this outcome, the study affirmed, at a significance level of 0.05, that board independence exerts a significant influence on profitability, compelling the rejection of the null hypothesis. This outcome can be ascribed to the autonomy granted to board members, empowering them to make independent decisions that positively steer the firms' profitability. The outcome aligned with Oyewale, Oloko and Olweny (2016) who established a beneficial nexus amongst independence of the board and finance performances of the manufacturing enterprises. Mwaura (2017) uncovered that board independence showed a substantial favorable association among board’s qualities and the company's profit. Ayodeji et al. (2019) unraveled that independence of boards has a very good impact on deposit-making institutions' financial health. Andow et al. (2019) equally found that independence of boards has an insignificantly favorable impact on the institutions' financial performance. The outcome contradicted Odudu et al. (2016) who found that board independence, proxy by directors and equality between men and women has no impact on the banking institutions financial performances. The variation in the outcome of the investigation could be linked to the contextual difference used by the various studies.

Board Activity and Profitability of Manufacturing and Allied Firms Listed at the Nairobi Securities Exchange, Kenya

The survey delved into the board activity effect on well-being of these firms financially. The output uncovered that board activity was noted to have negative (-0.5222163) and insignificant effect on these listed NSE profitability in Kenya. Going by this outcome, increasing the board activity by a percentage would be at the detriment of profitability to the tune of 1.7569%. The null hypothesis, which asserted that board activity holds no sway over profitability, was ultimately upheld, demonstrating that board activity plays an indirect role in influencing the firm's performance financially. This means that at 0.05 level of significance, board activity insignificantly affects the profitability. The insignificance of Board activity can be accredited to the various meetings held by the board thus taking more time that erode the profit potentials of these firms in Kenya. The output is consistent with Akpan (2015) who concluded that Board activity had adverse, considerable impacts on the success of the firms. Aryani et al. (2017) showed that the regularity of Board activity had no discernible impact on profits of the firms. Araoye and Olatunji (2019) established a strong inverse association between Board activity and company profitability. Sabo (2018) revealed contradicting outcome that increased meetings of boards as a means to increase businesses' profitability since the results showed an advantageous connection between Board activity and the earnings of the chosen traded construction materials company. Hanh *et al* (2018) unfolded that frequent Board activity amongst members of the board because it improves business profitability, which was inferred from the data that show a favorable association between Board activity regularity as well as the businesses' financial success. The differences in the outcome could be as a result of the different measures utilized in the studies.

Board Size and Profitability of Manufacturing and Allied Firms Listed at the Nairobi Securities Exchange, Kenya

To shed light on the connection pertaining to board size and the financial well-being of manufacturing and allied firms listed on the NSE, the study also analyzed the effect of board size on profitability. The outcomes unraveled that board size negatively (-0.5222163) and insignificantly (0.108) affected profitability. The output relating to board size entails that profitability would improve by 0.5222% as the size of the board is reduced by a percentage. Consequently, the null hypothesis, which asserted the absence of a significant linkages relating to board size and profitability, was upheld. The insignificance could be attributed to large size of the board which slows down decisions that could lead to the profitability of the firms as well as costing these firms more which reduced the profitability of the firms. The outcome is consistent with Eyenubo (2013) who noted that a large size of a board has a detrimental influence on the businesses' profit growth. The outcome is at variance with Tanna, Pasiouras, & Nnadi (2013) who concluded that the size of the governing body has a large influence on how profitable as well as effective an enterprise is. Oyerogba, Memba, and Riro (2016) demonstrated that the profitability of the traded firms is substantially influenced by the size of the board. Tulung et al. (2018) showed that the size of the board as well as independence have a beneficial impact on the performance of a banking institution. The deviation in the outcomes could be linked to the different study areas which could have different attributes that affected the outcomes.

Firm Size moderating effect on the connection between board characteristics and profitability of Manufacturing and Allied Firms Listed at the Nairobi Securities Exchange, Kenya

Embarking on a quest to unravel the influence of firm size moderating on the intricate interplay regarding board characteristics and profitability, the study meticulously examined NSE listed firms that are manufacturing. The outputs unveiled that the interaction of board characteristics with firm size has non-significant (0.144) positive (1.157301) effect on profitability. Therefore, an increasing profitability of 1.1573% would be occasioned by an increasing interaction of board characteristic with firm size. Therefore, firm size played an insignificant moderating role, suggesting that its impact on the association relating to board characteristics and profitability was negligible. The outcome led to the conclusion that the null hypothesis is accepted. The output aligned with Meiryan, Olivia, Sudrajat, and Daud (2020) the firm's size has no effect on performance of the business financially.

SUMMARY

The first objective of the study was to find out the effect of board independence on profitability of manufacturing and allied companies quoted at the Kenya's NSE. The study hypothesized that board independence has non-significant effect on NSE listed firms' profitability in Kenya. The survey revealed that board independence exerted a positive (0.1131141) p-value of significant (0.000) effect on the NSE listed manufacturing and allied firms' profitability. The outcome aligned with Oyewale, Oloko and Olweny (2016); Mwaura (2017) but contradicted the outcome from Odudu et al. (2016)

The second objective of the study was to assess the effects of board activity on profitability of manufacturing and allied companies quoted at the Kenya's NSE. Hypothetically stating, board activity has no significant effect on the firms listed profitability in Kenya. The survey yielded evidence that board activity held a negative (-1.756917) but p-value of insignificant (0.108) on the NSE listed firms' profitability. The output is consistent with Akpan (2015) and Aryani et al. (2017) but at variance with Sabo (2018) and Hanh *et al* (2018).

The third objective of the study was to examine the effect of board size on profitability of manufacturing and allied companies quoted at the Kenya's NSE. The claim was that board size has insignificant profitability effect on among the listed firms of Kenya. As exposed by the outcome, it was observed that board size had a negative (-0.5222163) and p-value of insignificant (0.148) effect on the listed firms' profitability in Kenya. The outcome is consistent with Eyenubo (2013), however, the outcome is at variance with Tanna, Pasiouras, & Nnadi (2013); Oyerogba, Memba, and Riro (2016) and Tulung et al. (2018).

The fourth objective was to evaluate the moderating effect of firm size on the relationship between board characteristics and profitability of manufacturing and allied companies quoted at the Kenya's NSE. The survey hypothesized that firm size has non-significant effect on the nexus pertaining to board characteristics and profitability of manufacturing and Allied companies quoted at the Kenya's NSE. The study revealed that the affiliation concerning board characteristics and the listed firms' profitability was p-value insignificant (0.144) and positive (1.157301). The output aligned with Meiryan, Olivia, Sudrajat, and Daud (2020).

CONCLUSION

Based on the findings of the study, a number of conclusions were drawn. For objective one, the finding was that board independence had positive and significant effect. Based on this outcome, the study concluded that board independence affect profitability of the manufacturing and allied Firms listed at the Nairobi Securities Exchange, Kenya.

In line with the second specific objective which sought to determine board activity effect on the firms' profitability, the study finding was that board activity has negative but insignificant effect on the firm's listed profitability. In view of this outcome, the study concluded board activity is not a major determinant of these firms' profitability in Kenya.

Board size effect was evaluated on the firm's listed profitability. The outcome of the third objective pointed to the fact that board size had inversely insignificantly affected the firms' profitability. With this outcome, the study concluded that board size does not play a major role in determining the profitability of these firms in Kenya.

The effect of firm size moderation on the connection of board characteristics with the listed firms' profitability was investigated. With respect to the fourth objective, the study finding was that firm size had a positive and insignificant effect on the association concerning board characteristics and profitability of these firms. In relation to this output, firm size does not moderate on the linkage of board characteristics and the firms' profitability.

Contribution to Body of Knowledge

Firstly, the study findings contributed to the already existing literature on the basis of board characteristics on profitability of the firms. Evidence was reported by the survey on the effect of moderation on size of firm on the connection concerning board characteristics and profitability of the firms that are traded. Theoretical build up, policy and practice were also contributed upon by the study. The applicability of theories linking board characteristics and profitability of firms' manufacturing and allied was expanded.

Conceptual framework on board characteristics and profitability of the firms was provided by the study thereby providing empirical confirmation on the course of the associations between the study variables. Knowledge was contributed upon by the study results in that, hypotheses were formulated and tested successfully regarding the effect of each factor. More so, the null claim which considered firm size non-significant moderating effect on the connection between board characteristics and profitability was successfully tested. A workable empirical model was also instituted by the study concerning the survey's factors.

RECOMMENDATIONS

On objective one, the effect of board independence on profitability of manufacturing and Allied companies listed at the Nairobi Securities Exchange, the study concluded that board independence affect profitability of the manufacturing and allied Firms listed at the Nairobi Securities Exchange, Kenya. The study recommends that management board should ensure compliance the policy on board independence to maximize on profitability of the firms.

On objective one, the effect of board independence on profitability of manufacturing and Allied companies listed at the Nairobi Securities Exchange, the study concluded that board independence affect profitability of the manufacturing and allied Firms listed at the Nairobi Securities Exchange, Kenya. The management board must ensure board independence to enhance profitability of the firms.

Limitations of the Study and Suggestions for Further Research

The study utilized only secondary data and for only firms that are listed at the securities exchange and not any other firms outside the securities exchange. This could have effect on the findings. Secondary data decreases the originality of the information gathered as secondary data are liable to errors and manipulation unlike the use of primary data.

Considering the above limitations, the study recommends the following for future research:

- A study to be carried also for the firms not listed at the Nairobi Securities Exchange;
  Further studies be carried out on non-manufacturing firms listed at the securities exchange and;
- Other than board characteristics, further studies could be done on other factors which could affect profitability of manufacturing and allied Firms listed at the Nairobi Securities Exchange, Kenya.

REFERENCES

Aifuwa, H. O., &EmbeleK. (2019). Board Characteristics and Financial Reporting Quality. *Journal of Accounting and Financial Management*, 5(1), 30 – 49.

Akpan, E. O. (2015). Corporate Board activity and Company Performance: Empirical Evidence from Nigerian Quoted Companies. *Global Journal of Commerce and Management* Perspective, G.J.C.M.P, Vol 4(1): 75 - 92

Al-Daoud, K. I, Saidin, S. Z & Abidin, S (2016). Board Meeting and Firm Performance: Evidence from the Amman Stock Exchange. *Corporate Board: Role, Duties & Composition,* 12 (2), 6-11.

Amenta, E. (2005). "State-Centered and Political Institutionalist Theory: Retrospect and Prospect." Pp. 96 – 114 in Handbook of Political Sociology: States, Civil Societies, and Globalization Edited by T. Janoski, R. Alford, A. Hicks and M. A. Schwartz, New York, NY: Cambridge University Press.

Andow, H. A., Gambo, N. (2019). Effect of Board Composition and Independence on Financial performance of Deposit Money Banks in Nigeria. *Journal of Mgt. Science & Entrepreneurship*, Vol 19, No 7, 2019.

Araoye, F. E., Olatunji, T. E. (2019). Board Meeting and Financial Performance of Insurance Companies in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, Vol 7, No 9, pp. 1-16, November 2019.

Aryani, Y., Setiawan, D., Rahmawati, I. P. (2017). Board Meeting and Firm Performance. Proceedings of International Conference on Economics 2017 (ICE) 2017.

Ayodeji, A., & Okunade, R. A. (2019). Board Independence and Financial Performance of Deposit Money Banks in Nigeria and Canada. *Asian Journal of Economics, Business and Accounting*, 11(3): 1 -9, 2019.

Bosun-Fakunle, Y.F. and Josiah, M. (2019) Board of Directors Characteristics and Tax Aggressiveness. *International Journal of Management Science Research,* 5, 133-152.

Clemens, E, S. & Cook, J. M. (1999). "Politics and Institutionalism: Explaining Durability and Change". Annual Review of Sociology 25: 441 – 466.

Cooper, D. & Schindler, P. (2009). Business Research Methods (9thed.). Boston: McGraw- Hill.

Eyenubo, A. S. (2013). The Impact of Bigger Board Size on Financial Performance of Firms: The Nigerian Experience. *Journal of Research in International Business and Management,* Vol 3(3), pp. 85 – 90, March 2013.

Freeman, R. E., Phillips, R. & Sisodia, R. (2020). "Tensions in Stakeholders Theory", *Business & Society,* Vol 59, No 2, pp. 213 - 231

Gaur, S.S., Bathula, H. and Singh, D. (2015). Ownership Concentration, Board Characteristics and Firm Performance: A Contingency Framework. Management Decision, 53, 911-931. https://doi.org/10.1108/MD-08-2014-0519

Handriani, E., & Robiyanto, R. (2018). Investment Opportunity and Industrial Growth in Indonesia. *International Journal of Business and Society,* 19(2), 295 – 312.

Hanh, L. T., Ting, I. W., Kweh, Q. L. & Hoanh, L. T. (2018). Board Meeting Frequency and Financial Performance: A Case of Listed Firms in Vietnam. *International Journal of Business and Society*, Vol 19, No 2, 2018, 464 - 472

Ilaboya, O. J., Izevbekhai, M. O. & Ohiokha, F. I. (2016). "Tax Planning and Firm Value: A Review of Literature', *Business and Management Research*, 5(2), 81–91.

Indonesia Stock Exchange. (2019). Financial and Annual Report Retrieved October-November-December 2019, from the Indonesia Stock Exchange.

Iraya, C. N. & Musyoki, L. (2013*).* Performance of Socially Screened Portfolio at the Nairobi Securities Exchange. *International Journal of Humanities Social Sciences,* Vol 3(6).

Isa, M. A., & Muhammad, S. (2015). The Impact of Board Characteristics on Corporate Social Responsibility Disclosure: Evidence from Nigerian Food Product Firms. *International Journal of Management Science and Business Administration,* 1 (12), 34 – 45.

Jensen, M. C. (1993). The Modern Industrial Revolution, Exit and the Failure of Internal Control System. *Journal of Finance* 48: pp. 831 - 880

Mugo, M. K. (2016). Effect of Trade Receivables on the Profitability of Manufacturing Firms Listed on the Nairobi Securities Exchange. Unpublished Msc. Thesis. University of Nairobi.

Mwaura, M. M. (2017). Relationship between Board Characteristics and Profitability of Commercial Banks in Kenya. Unpublished Msc Thesis, University of Nairobi.

Odudu, A. S., James, O. A. & James, O. U. (2016*).* Board Characteristics and Financial Performance of Deposit Money Banks in Nigeria. *International Journal off Business and Social Science* Vol 7, No 9, September 2016.

Osebe, P. R., Kirui, J, K. & Naibei, I, K. (2019). Impact of Corporate Governance on Effective Corporate Tax Rates among Listed Firms in Kenya. *Research Journal of Finance and Accounting*, 10 (18), 23-33

Oyelade, A. O. (2019). The Impact of Firm Size on Firms Performance in Nigeria: A Comparative Study of Selected Firms in the Building Industry in Nigeria*. Asian Development Policy Review, 7(1), 1–11.*

Oyerogba, E. O., Memba, F., & Riro, G. K. (2016). Impact of Board Size and Firms' Characteristics on the Profitability of Listed Companies in Nigeria. Research *Journal of Finance and Accounting*, Vol 7, No 4, 2016.

Oyewale, I. O., Oloko, M. A., & Olweny T. (2016). The Relationship between Board Independence and Financial Performance of Listed Manufacturing Companies in Nigeria. *European Journal of Business, Economics and Accountancy,* 4(9).

Pierson, P. (2000*).* "Increasing Returns, Path Independence, and the Study of Politics." *American Political Science Review* 94(2): 251 - 267

Sabo, U. (2018*)*. Corporate Board Meeting Frequency and Financial Performance of Listed Building Materials Companies in Nigeria. *International Journal of Research and Innovation in Social Sciences* (IJRISS) Volume II, Issue V, May 2018.

Shaukat, A., Qiu, Y. and Trojanowski, G. (2016). Board Attributes, Corporate Social Responsibility Strategy, and Corporate Environmental and Social Performance. Journal of Business Ethics, 135, 569-585.

Singh, S., Tabassum, N., Darwish, T.K. and Batsakis, G. (2018). Corporate Governance and Tobin's Q as a Measure of Organizational Performance. *British Journal of Managemen*t, 29, 171-190

Tanna, S., Pasiouras, F. & Nnadi, M. (2013). The Effect of Board Size and Composition on the Efficiency of UK Banks. *International Journal of the Economics of Business, Volume* 18(3): 441 - 462

Tulung, J. E. & Ramdani, D. (2018*)*. Independence, Size and Performance of the Board: An Emerging Market Research. *Corporate Ownership & Control*/ Volume 15, Issue 2, Winter 2018.

Wagana, D., & Karanja, K. (2015*)*. The Influence of Corporate Governance on Corporate Performance among Manufacturing Firms in Kenya: A Theoretical Model. *International Journal of Academic Research in Business and Social Sciences,* 5(4), 258 - 272

World Bank (2014). Annual Report for the International Finance Corporation (Vol 1)