Corporate Governance and Profitability of Manufacturing and Allied Firms Listed at the Nairobi Securities Exchange, Kenya

*Malgit Amos Akims*  
Kanang Amos Akims & Oliver Mukweyi Pyoko  
1Kenyatta University, Nairobi Kenya  
2 University of Jos, Jos Nigeria  
3 California Miramar University, San Diego, California  
Email: 1akimskb@gmail.com, 2malgitakims@gmail.com

*Corresponding author*


**Abstract**

The study examined the effect of corporate governance on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The study was anchored by agency theory and stakeholder theory. Nine manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya constituted the target population and a census approach was adopted. The study found that board size had significant implications on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya (p= 0.009, β= -0.023). It was established that board independence is significant in predicting profitability (p= 0.011, β= -0.001). External audit quality had a significant effect on profitability (p= 0.001, β= 0.258). Institutional ownership was significant in determining profitability (p= 0.000, β= 0.002). The study recommends that listed manufacturing and allied firms should ensure that an effective board is constituted which is optimum in size. The study further recommends that a blended board should be ensured comprising of both executive and non-executive directors which reflects the level of independence of the board. It was also recommended that firms should ensure that a highly reputable external auditor is appointed. In addition, firms should strive towards having a higher proportion of institutional shareholding to outstanding shareholdings. Given the 53.53 percent unexplained variation in profitability, further studies on manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya can consider other corporate governance attributes.

**Keywords:** Board Independence, Board Size, External Audit Quality and Institutional Ownership and Profitability

**Introduction**

The global output of the manufacturing sector based on gross added value has witnessed continuous annual growth of 2.7 percent emanating from advanced countries and 7.4 percent from developing economies (Meme, 2017). The profitability of the manufacturing sector significantly contributes to the economic development of both developed and developing countries. Manufacturing accounts for 16 percent of the global Gross Domestic Product (GDP) while a USD 7.5 trillion growth from USD 5.7 trillion is attributed to manufacturing value added over the last decade. The manufacturing sector in Africa accounts for about 13

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percent contribution to the Gross Domestic Product (GDP). This is however smaller in comparison with other regions of the world except North Africa and the Middle East (World Bank, 2012). Notably, the region, however, has witnessed a rise in exports and import-substituting production for over a decade (Meme, 2017).

The manufacturing sector in Eastern Africa has over the years been highly limited in that its GDP and employment contribution remain minimal in the region. The sector’s contribution to GDP is relatively small which cuts across 3.8 to 11 percent. In Eastern Africa, the manufacturing sector of Kenya is considered more efficient than those of other countries. Over the last decade, the contribution of value added per capita of the manufacturing sector had an increase of 2.6 percent. The manufacturing sector in Kenya accounts for 70 percent of the overall contribution to GDP by the industrial sector. The performance of the manufacturing sector of Kenya has been earmarked to contribute significantly towards the realization of Vision 2030 as envisioned by the country (Museumi, 2020).

Poor corporate governance as well as huge unsustainable debts led to the crippling of the manufacturing sector in Kenya (Meme, 2017). Additionally, unsettled claims from suppliers linked with poor decisions relating to financial management practices have seen the growth of the sector to be adversely affected (Njenga & Jagongo 2019). Corporate governance is considered as a structured procedure for managing and directing the affairs of firms which ensures that ethical conduct, rules, and regulations are adhered to (Giriraj, 2019). It involves the procedures of putting in place company objectives while pursuing them in view of profitability and overall financial performance.

Statement of the Problem

Despite the Vision 2030 industrial strategy of Kenya towards increasing the contribution of the manufacturing sector towards GDP to 20 percent, the sector has been characterized by stagnated growth (World Bank, 2014; Manini & Abdillahi, 2018). Notably, the benchmarks for firms’ financial performance as assessed by the Nairobi Securities Exchange revealed that the listed firms in the manufacturing sector on a year-to-year basis declining performance (Meme, 2017). In view of the financial performance analysis by NSE, several firms exhibited negative percentages concerning their profitability as reflected by return on assets and return on equity. The weak performances based on profitability are largely due to weak corporate governance mechanisms in Kenya (CMSC, 2014). Weak corporate governance practices in Kenya have often resulted in corporate failures (Meme, 2017; Bosun-Fakunle, & Josiah, 2019). Almqtari et al. (2022) notably linked corporate governance with the profitability of firms, hence, the need to establish the significance of corporate governance in predicting profitability which in turn serves as the rationale for the current study.

Various studies have been conducted on corporate governance and profitability relationships. Manini and Abdillahi (2018) reported that board size and board independence had significant effects on financial performance. Despite examining manufacturing and allied firms, the focus was on board characteristics. Al-ahdal and Hashim (2022) indicated that external audit quality had a significant positive impact on the financial performance of non-financial public limited firms listed on the National Stock Exchange in India. Other vital corporate governance attributes (such as board size, board independence, and institutional ownership) and their relationship with profitability were however isolated. Shakri et al. (2022)
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documented that increased compliance with corporate governance leads to higher performance of firms, however at higher compliance costs. The study was notably carried out in the context of Pakistan. The existence of these study gaps alongside the significance of the manufacturing sector to the economic growth of Kenya and its realization of Vision 2030 makes it imperative to establish whether corporate governance significantly increases the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.

**Literature Review**

**Theoretical Review**

Agency theory as propounded by Jensen and Meckling (1976). The theory which has largely been adopted in the field of corporate governance has over time been applied to narrow down firms and their underlying activities into two key components. These components are the agents (serving as the managers) and principals (regarded as the owners) where the latter engages the former to handle the daily affairs of the firm. Board members are expected to act in the interest of the principal. However, large boards often bring about less effective coordination, and communication and a slow decision-making process. Larger boards are often characterized by less cohesiveness since there may be large interaction activities and conflicts between members.

Stakeholder theory was introduced by Freeman (1984) and is based on a wider view of governance rather than focusing on just two parties as in the case of agency theory. Rather than narrow down the affairs of firms to largely principal and agent, this theory advocates for a wider and more comprehensive approach that considers several stakeholders within and outside the firm. Firms must therefore ensure proper stakeholder management which can be through activities of corporate social responsibility as this serves as an effective way of giving attention to the interests of stakeholders (especially community stakeholders) and in turn earning their support. Notably, the stakeholder and profitability linkages are based on the symbiotic relationship between firms and the host community.

**Empirical Review**

Oguda (2015) examined the relationship between board independence and the performance of firms listed at the NSE, Kenya. The variables considered were board independence, female representation, and nationality which formed the independent variables while firm performance was the dependent variable as measured by return on equity. A descriptive research design was adopted and all the 64 listed firms were targeted. The multiple regression analysis revealed that board independence had a positive significant effect on firm performance. Rather than focus on all listed firms which cut across different sectors which was the case in the previous study, manufacturing and allied firms were considered. This further ensured the documentation of unique and sector-specific findings and policy recommendations.

Meme (2017) analyzed board characteristics and firm financial performance relationship in the context of manufacturing firms listed at the NSE, Kenya. Board characteristics were considered in terms of board size, board independence, and board diversity. Positivism philosophy and descriptive research design were adopted. The study targeted 13
manufacturing firms covering the period 2009-2013. Descriptive, correlation, and regression analyses were used. The results of the study indicated that board size and board independence had significant effects on the financial performance of listed manufacturing companies in Kenya. The previous study largely focused on board characteristics which is a narrow aspect of corporate governance. The current study further examined institutional ownership and profitability relationships.

Meah and Chaudhory (2019) examined corporate governance and profitability nexus for manufacturing firms listed at the Dhaka Stock Exchange, Bangladesh. The corporate governance variables considered were female directors, the board size, director ownership, and family duality. 110 manufacturing firms listed in the Dhaka Stock Exchange were included and a multivariate pooled Ordinary Least Square (OLS) regression technique was employed based on 512 sample-year observations spanning the period 2013 to 2017. Based on the empirical findings, it was reported that larger board size and profitability had a positive relationship. Board size and director ownership had an insignificant relationship with profitability. Despite the study focusing on manufacturing firms, the context of the Dhaka Stock Exchange, Bangladesh varies with that of the Nairobi Securities Exchange, Kenya as the two notably operate under different regulatory guidelines.

Taufiq and Fadila (2021) analyzed audit quality and profitability relationships for companies listed on the Indonesia Stock Exchange. Stewardship theory was adopted to explain the effectiveness of the fiduciary relationship between governance and stakeholders. Panel data was obtained for the period 2015 to 2019 from companies listed on the Indonesia Stock Exchange. The empirical analysis indicates that audit quality had adverse implications on profitability as measured by return on assets. Unlike the previous study which was based on firms listed on the Indonesia Stock Exchange, manufacturing and allied firms listed at the Nairobi Securities Exchange constituted the unit of analysis of this study where other corporate governance components which include board independence, institutional ownership, and board size were also considered.

Budiandriani (2021) investigated the influence of institutional ownership on profitability and firm value for listed companies on the Indonesia Stock Exchange. Secondary data was applied as sourced from the Indonesian Capital Market Directory (ICMD) 2013 based on listed companies on the Indonesia Stock Exchange. A purposive sampling technique was used and path analysis was applied to the collected data. It was reported that institutional ownership has a positive effect on profitability. Institutional ownership further had a positive direct or indirect effect on the value of the firm. The study concluded that profitability is increased by having higher institutional ownership. The Nairobi Securities Exchange and Indonesia Stock Exchange are notably unique to their various contexts, hence the uniqueness of the current and previous studies.

**Methodology**

The explanatory research design was adopted as it is underpinned by theory and/or hypotheses while focusing on cause-effect relationships among study variables, in this case, corporate governance and profitability. The target population comprises the nine (9) manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. Given this small number of firms, the study consequently adopted a census approach where all the
targeted firms were considered for the period 2010 to 2019. Secondary panel data was used as extracted from the audited financial statements of the listed manufacturing and allied firms. In turn, panel regression analysis was applied where profitability was expressed as a function of corporate governance attributes and firm size (control variable).

\[ PR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BI_{it} + \beta_3 EA_{it} + \beta_4 IO_{it} + \beta_5 FS_{it} + \epsilon \]

Where:

- \( PR \) = Profitability
- \( BS \) = Board Size
- \( BI \) = Board Independence
- \( EA \) = External Audit Quality
- \( IO \) = Institutional Ownership
- \( FS \) = Firm Size (Control Variable)
- \( i \) = Firm
- \( t \) = Time period
- \( \epsilon \) = Error term
- \( \beta_1 - \beta_5 \) = Coefficients

Data Analysis and Discussions

Descriptive Analysis

The descriptive statistics were used in providing the basic features of the variables of the study based on the study data. The descriptive statistics are documented in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>85</td>
<td>0.087</td>
<td>0.188</td>
<td>-0.643</td>
<td>0.562</td>
</tr>
<tr>
<td>Board Size</td>
<td>90</td>
<td>8.444</td>
<td>2.653</td>
<td>4.000</td>
<td>15.000</td>
</tr>
<tr>
<td>Board Independence</td>
<td>90</td>
<td>1.018</td>
<td>4.689</td>
<td>0.300</td>
<td>45.000</td>
</tr>
<tr>
<td>External Audit Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>90</td>
<td>0.589</td>
<td>0.495</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Firm Size</td>
<td>85</td>
<td>7.109</td>
<td>0.899</td>
<td>5.395</td>
<td>9.358</td>
</tr>
</tbody>
</table>

Source: Field Data (2021)
The discussions on the descriptive analysis are based on the statistics contained in Table 1. Profitability and firm size had 85 as the total number of observations while the remaining variables board size, board independence, external audit quality, and institutional ownership each had a total number of observations of 90. This therefore indicates a situation of unbalanced panel data. The existence of an unbalanced data set was notably not an issue of concern since the data analysis of the study was carried out through the use of STATA which is not impaired by such situations.

Profitability had mean and standard deviation values of 0.087 and 0.188 respectively. The minimum value for profitability was -0.643 while the maximum value was 0.562. The negative minimum value and low average of profitability indicate that over the study period (2010 to 2019), some of the manufacturing and allied firms listed at the Nairobi Securities Exchange had years of low return on assets.

Board size was characterized by a mean value of 8.444, standard deviation of 2.653, minimum value of 4.000, and maximum value of 15.000. An indication that over the study period, one or more firms had a small board size and similarly one or more firms had a large board size in at least a single period. This is somewhat contrary to the guideline by the Capital Market Authority (CMA) of sufficient board size. The CMA Cap. 485A indicates that the size of the board shall not be too large to undermine an effective interactive discussion during board meetings or too small such that the inclusion of wider expertise and skills to improve the effectiveness of the board and the formation of its committees is compromised.

Board independence had a mean of 1.018 and a standard deviation of 4.689. Board independence in this study was considered in terms of the proportion of non-executive directors to the total number of board members. The mean and standard deviation of board size indicate that the proportion of non-executive directors to several board members largely varied across boards. This is further supported by a minimum value of 0.300 and a maximum value of 45.000. This may be a move towards meeting the stipulations of the Capital Market Act of having a balanced board membership of executive and non-executive directors, with a majority of non-executive directors.

External audit quality had a mean of 0.589 and a standard deviation of 0.495. Minimum and maximum values of 0.000 and 1.000 respectively were expected considering the study adopted 1 for the case where the external auditor falls under the big 4 category and 0 if otherwise as the indicator for external audit quality. Hence, a mean value of 0.589 indicates that a slight majority of manufacturing and allied firms within the period 2010 to 2019 were being audited by either Deloitte & Touche, Ernst & Young, KPMG, or PricewaterhouseCoopers which are categorized under the big 4.

Institutional ownership was characterized by a mean of 4.103 and a standard deviation of 8.041 which indicates large variation in the level of institutional investment. This is further supported by a minimum value of 1.000 and a distant maximum value of 53.462. The study measured institutional ownership based on the proportion of total shares of institutional owners to the outstanding shareholdings, hence the large variation in institutional ownership notably may not allow the institutional investors to effectively perform their stewardship role as the representatives of their clients or investors in listed companies as contained in the Capital Market Act.
Firm size had a mean of 7.109, standard deviation of 0.899, minimum value of 5.395, and maximum value of 9.358. The inclusion of firm size was because it accounts for economies and diseconomies of scale. The descriptive statistics for firm size reflect the existence of varying degrees of economies of scale for manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya across the period of the study. The economies of scale and diseconomies of scale of firms have implications for profitability, hence the rationale for the adoption of firm size as a control variable.

Diagnostic Tests

Multicollinearity Test

Multicollinearity relates to a situation whereby the predictors in a study are to a high extent correlated. The test for multicollinearity was undertaken within the framework of Variance Inflation Factor and the results are presented in Table 2.

Table 2. Multicollineary Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>1.24</td>
<td>0.805</td>
</tr>
<tr>
<td>Board Independence</td>
<td>1.03</td>
<td>0.974</td>
</tr>
<tr>
<td>External Audit Quality</td>
<td>1.38</td>
<td>0.725</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>1.09</td>
<td>0.916</td>
</tr>
<tr>
<td>Firm Size</td>
<td>1.08</td>
<td>0.927</td>
</tr>
</tbody>
</table>

Source: Field Data (2021)

The threshold for the multicollinearity test was 2 and the results in Table 2 indicate that all the predictors had VIF values below 2. Specifically, board size was 1.24, board independence was 1.03, external audit quality was 1.38, institutional ownership was 1.09 and firm size had 1.08 as VIF values. These therefore indicate that a high collinearity level is absent among the predictor variables.

Normality Test

To assess whether the data set is normally distributed, a normality test was conducted. This was based on the Shapiro-wilk test for normal data as contained in Table 3.

Table 3. Normality Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>W</th>
<th>V</th>
<th>z</th>
<th>Prob&gt;z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>85</td>
<td>0.912</td>
<td>6.385</td>
<td>4.076</td>
<td>0.000</td>
</tr>
<tr>
<td>Board Size</td>
<td>90</td>
<td>0.962</td>
<td>2.874</td>
<td>2.328</td>
<td>0.009</td>
</tr>
<tr>
<td>Board Independence</td>
<td>90</td>
<td>0.097</td>
<td>68.298</td>
<td>9.316</td>
<td>0.000</td>
</tr>
<tr>
<td>External Audit Quality</td>
<td>90</td>
<td>0.997</td>
<td>0.213</td>
<td>-3.407</td>
<td>0.999</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>90</td>
<td>0.403</td>
<td>45.132</td>
<td>8.402</td>
<td>0.000</td>
</tr>
<tr>
<td>Firm Size</td>
<td>85</td>
<td>0.936</td>
<td>4.652</td>
<td>3.380</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Field Data (2021)
Based on the findings in Table 3, it was found that apart from external audit quality, all the other variables are not normally distributed based on the output of the Shapiro-Wilk test for normal data. However, considering the number of firms used (9) and the period of the study 2010 to 2019, the issue of non-normal distribution does not arise irrespective of the established distribution of data which is in view of the central limit theorem.

**Heteroskedasticity Test**

Heteroskedasticity relates to a situation whereby non-constant variance exists which is the absence of homoskedasticity. Breusch-Pagan / Cook-Weisberg test for heteroskedasticity was used and the results presented in Table 4.

**Table 4. Heteroskedasticity Test Results**

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg test for heteroskedasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀: Constant variance</td>
</tr>
<tr>
<td>Variable: fitted values</td>
</tr>
<tr>
<td>chi2(1) = 26.46</td>
</tr>
<tr>
<td>Prob&gt; chi2 = 0.0000</td>
</tr>
</tbody>
</table>

**Source:** Field Data (2021)

The test for heteroskedasticity was based on a threshold of 0.05 significance level. Table 4 contains a p-value of 0.0000 which implies the existence of heteroskedasticity in the model. This led to the application of robust standard estimators in the model since this is not affected by the problem of heteroskedasticity.

**Stationarity Test**

The test for stationarity was carried out within the framework of a fisher-type unit root test based on an augmented Dickey-Fuller test. The findings from the stationarity test are documented in Table 5.

**Table 5. Stationarity Test Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-Statistic(adjusted)</th>
<th>P-value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>4.602</td>
<td>0.000</td>
<td>Stationary</td>
</tr>
<tr>
<td>Board Size</td>
<td>6.200</td>
<td>0.000</td>
<td>Stationary</td>
</tr>
<tr>
<td>Board Independence</td>
<td>4.230</td>
<td>0.000</td>
<td>Stationary</td>
</tr>
<tr>
<td>External Audit Quality</td>
<td>-2.896</td>
<td>0.998</td>
<td>Non Stationary</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>2.836</td>
<td>0.002</td>
<td>Stationary</td>
</tr>
<tr>
<td>Firm Size</td>
<td>3.367</td>
<td>0.000</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

**Source:** Field Data (2021)

~ 300 ~
The threshold for the stationarity test was 0.05 based on the null hypothesis that all panels contain unit roots. With the exception of external audit quality, all the other variables are characterized by unit roots.

**Model Specification Test**

Considering the study was based on panel regression analysis, a Hausman specification test was conducted to select the best model for estimation between fixed effect and random effect models. The outcome is contained in Table 6.

**Table 6. Model Specification Test Result**

<table>
<thead>
<tr>
<th></th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>Sqrt (diag(V_b-V_B))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>-0.0107773</td>
<td>-0.022751</td>
<td>0.0119737</td>
<td>0.0095385</td>
</tr>
<tr>
<td>Board Independence</td>
<td>-0.0005263</td>
<td>-0.0007131</td>
<td>0.0001868</td>
<td>-</td>
</tr>
<tr>
<td>External Audit Quality</td>
<td>0.2665707</td>
<td>0.2577114</td>
<td>0.0088592</td>
<td>0.0393415</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>-0.000073</td>
<td>0.0016106</td>
<td>-0.0016836</td>
<td>0.000708</td>
</tr>
<tr>
<td>Firm Size</td>
<td>0.0579813</td>
<td>0.0401847</td>
<td>0.0177966</td>
<td>0.0931272</td>
</tr>
</tbody>
</table>

**Source: Field Data (2021)**

Based on the panel regression analysis contained in Table 7, an R² of 0.4647 and a probability value of 0.0000 were obtained. This implies that corporate governance as captured by board size, board independence, external audit quality, and institutional ownership account for

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46.47 percent of the movements in the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.

Hypotheses Testing

**H$_01$: Board size has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.**

The study tested the null hypothesis which stated that board size has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The findings in Table 7 indicate a p-value of 0.009<0.05, hence, the null hypothesis was rejected. This outcome implies that board size had a significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The negative coefficient indicates a negative relationship between board size and profitability. Hence, a unit increase in board size leads to a 0.023 corresponding decrease in profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. An indication that large board membership is associated with adverse effects, apart from high costs emanating from remunerations of directors, it can be characterized by a slow decision-making process. Limiting board size to a particular level is generally believed to have improvements in the profitability of firms because the benefits attributed to larger boards through increased monitoring are outweighed by poor communication and slow decision-making processes of larger groups. The CMA Cap 485A advocates for the board size of firms not to be too large as this can potentially undermine the conduct of interactive discussions during board meetings. The study findings based on board size and profitability relationship concur with those of previous studies. Manini and Abdillahi (2018) reported that board size had a significant effect on financial performance. Meme (2017) similarly established that board size had significant effects on the financial performance of listed manufacturing companies in Kenya.

**H$_02$: Board independence has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.**

The null hypothesis which stated that board independence has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya was tested. The findings in Table 7 indicate a p-value of 0.011<0.05, consequently, the null hypothesis was rejected. Board independence therefore had a significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The negative coefficient indicates an inverse board independence and profitability relationship. Hence, a unit increase in board independence leads to a 0.001 corresponding decrease in profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The study findings on board independence and profitability nexus correspond with the literature as it is supported by previous studies. Oguda (2015) revealed that board independence had a significant effect on the performance of firms listed at the NSE, Kenya. Similarly, Manini and Abdillahi (2018) reported that board independence had a significant effect on the financial performance of listed manufacturing and allied firms in Kenya.

**H$_03$: External audit quality has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.**
The study tested the null hypothesis which stated that external audit quality has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The findings in Table 7 indicate a p-value of 0.001<0.05, as such, the null hypothesis was rejected. The outcome implies that external audit quality has a significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. A coefficient of 0.258 was obtained which implies that external audit quality and profitability had a positive relationship in the context of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The appointment of an external (independent) auditor forms a key part of the structure put in place to ensure the truthful and factual presentation of the financial position of a firm. The competence and reputation of the external auditor therefore affects the profitability of firms as investor confidence is increased as a result of the perceived credible financial statements. The higher the reputation of the external auditor, the higher the level of investor confidence in the firm of interest, hence higher audit external quality leads to increased profitability. This evidence is supported by the findings of Al-ahdal and Hashim (2022) who documented that external audit quality had a significant positive impact on financial performance.

$H_04$: Institutional ownership has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya.

The null hypothesis which stated that institutional ownership has no significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya was tested. The findings in Table 7 indicate a p-value of 0.000<0.05, hence, the null hypothesis was rejected. This consequently implies that institutional ownership had a significant effect on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The study further established a coefficient of 0.002 which indicates that institutional ownership positively affects profitability. The significant and positive effect is supported by the notion that increasing the level of institutional ownership leads to a more efficient stewardship role by institutional investors. Institutional ownership provides an alternative to addressing the gap existing between the principal and the agent which is usually due to a conflict of interest which in turn can result in agency costs in view of agency theory. Empirically, Li and Ji (2021) documented that institutional ownership increases the profitability of insider purchases. Similarly, Budiandriani (2021) reported that profitability is increased by having higher institutional ownership.

Conclusion and Recommendations

The study concluded that board size had significant implications on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. The study recommends that manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya should ensure that an effective board that is sufficient in size is put in place. The board size should not be too small and also not too large. The constitution of the board of directors given its size should be in tune with the specific context and nature of firms. The size of the board should uphold effective oversight while ensuring that the core business activities of the firm are efficiently carried out to achieve the aims and objectives of its establishment. Notably, the issue of small or large board size is relative to firms, hence an optimum board size should be ensured by the principal (owners).
It was concluded that the proportion of non-executive directors to the total number of directors is an important predictor of profitability. The study therefore recommends that a blended board be put in place comprising both executive and non-executive directors which reflects the level of independence of the board. Non-executive directors notably bring their wealth of knowledge and experience into the decision-making of company boards. Hence, given the significant relationship between board independence and profitability, the study further recommends that the boards of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya should comprise at least half of non-executive directors. The selection of non-executive directors should be done given the experience, skills, and knowledge of an individual who has extensive linkages that will enable firms to easily benefit from external resources.

The study concluded that the reputation and credibility of the external auditor of a firm significantly affect its profitability level. It is therefore recommended that firms should ensure that a highly reputable external auditor is appointed to carry out the audit function of ensuring truthful and factual presentation of the financial position of firms based on financial statements. This is because investor confidence is influenced by the reputation and ranking of the external auditor. Hence, an external auditor with high credibility is likely to attract more investors and patronage to a firm especially when its financial statements reflect high investment returns.

It concluded that the level of institutional investment of a firm is paramount to its profitability. Institutional investors perform the role of stewardship; hence they are in direct contact with the management and boards of firms for purposes of discussing corporate governance and performance issues. The study recommends that firms should strive towards having a higher proportion of institutional shareholdings to outstanding shareholdings. This in turn will cushion against potential principal agent conflict.

**Contribution to Knowledge**

The study contributes to knowledge in different ways. Theoretical literature has been documented supporting the nexus between corporate governance and profitability. An empirical model depicting the relationship between corporate governance and profitability is documented in this study. Given the importance of corporate governance as a structured procedure for managing and directing the affairs of firms which ensures that ethical conduct, rules, and regulations are adhered to, empirical evidence has been documented on its significance in predicting the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya. This in turn provides adequate statistical knowledge on the effect of corporate governance on the profitability of manufacturing and allied firms listed at the Nairobi Securities Exchange, Kenya based on robust empirical procedures.

**References**


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