Corporate Governance and Firm Value: A Comparative Study of Companies Listed on the Nairobi and Uganda Securities Exchange

Veronica Mukyala, Dr. Lucy Rono & Prof. Charles Lagat

Corporate Governance and Firm Value: A Comparative Study of Companies Listed on the Nairobi and Uganda Securities Exchange

Veronica Mukyala[1], Dr. Lucy Rono[2] & Prof. Charles Lagat[3]

[1]Phd Student, Department of Finance, School of Business and Economics,

Moi University

[2] Senior lecturer, Department of Finance, School of Business and Economics,

Moi University

[3]Associate Professor, Department of Marketing & Logistics, School of Business and

Economics; Moi University

* Corresponding author: vero.mukyala@gmail.com

Abstract

Purpose: The purpose of this study was to determine the effect of corporate governance on firm value among firms listed on the Nairobi and Uganda Securities Exchange. Agency and Resource-Based theories guided the study. The positivism research paradigm was adopted. **Methodology:** The study used panel research design and the data was obtained through content analysis from audited financial statements spanning from 2012 to 2019 and only 48 firms from NSE and 12 firms from USE met the inclusion and exclusion criteria. Stationarity was checked using panel unit root tests and the data were stationary at levels. Hausman test was used for model selection and the fixed effect model was selected over random effects. **Results:** from the direct effect analysis revealed that in securities exchange, the board size, board independence, and board expertise as proxies of corporate governance affected the firm value. In contrary to this, board diversity in both cases did not significantly affect the firm value. However, in USE board independence negatively affect firm value. **Conclusion/implication:** The study shows that corporate governance determines the value of the firm. As the practical contribution, there is a need to increase board size and board diversity to enhance firm value in listed firms.

Keywords: *Firm Value, Corporate Governance, Board Size, Board Independence, Board Expertise, Board Diversity*

1.1 Introduction

The fundamental goal of a firm is to attain high firm value to increase welfare by increasing the wealth of shareholders. Maximizing firm value means increasing the prosperity of shareholders and the company is also able to attract other parties' interests to join it (Shuaibu, Ali & Moh'd Amin, 2019). Firm value is about company wealth and is shown by the firm's ability to maximize shareholders' wealth (Bistrova & Lace, 2012). The value of the company is reflected in the market value of equity, liquidity value of the preferred stock, debt, and total assets. Hence the bargaining power of the stock or the book value of the company from its equity (Hirdinis, 2019). Investors focus on the firms that bring them value (Lonkani, 2018). However, Due to the declining firm value of many corporations in the Western world ostensibly because of corporate scandals particularly in the USA (Cheffins, 2015), corporate governance emerged. According to Cheffins, corporate governance emerged in the 1970s as a reaction to, and an analysis of corporate scandals that led to the loss of firm value.

Corporate governance is a system of governance that is measured in terms of board expertise, board diversity, the board size, and board independence; and sets rules, protocol, as well as management of the company's contracts, held with involved partners. According to Lakshan and Wijekoon, (2012), the Government is legally commissioned in a board of directors who have a credible responsibility to act in the best interests of the establishment as opposed to their concerns or those of the company's management. it appears that corporate scandals remain high with limited improvement or even declining firm value in different countries. Shocking corporate scandals include the bank Barings Plc in the UK in 1995, Enron Scandal in 2001 (an Energy and Service Corporation based in the USA), American Insurance Group in 2005, Bernie Madoff Scandal and Lehman Brothers Holdings Inc. global financial services firms in 2008 in the USA, and Satyam a software company in India in 2008 (Maulidi, 2016; Panfilii& Popa, 2011).

In this context, corporate governance structures (board expertise, board diversity, the board size, and board independence) are pertinent because they can minimize the magnitude of information asymmetry that exists between stakeholders and administration as stipulated by the agency theory (Jensen and Meckling, 1976). From an economic viewpoint, a successful governance system should be within the capabilities to ensure that the agent will explore the higher investment level and reduce the degree of rent-seeking tendency. As asserted by Shleifer and Vishny (1997), corporate governance is a collection of approaches to achieving economic efficiency owing to the impact it bears on the choice of benefactors to fund the firms. In efficient markets, when a firm improves its quality of governance, investors observe the improvement, attribute value to that and reflect it in the price of the stock.

Thus, to improve firm value companies listed on stock markets are required to implement mechanisms that will promote firm value (CMA, 2002). For instance, for any company to list on the Nairobi Stock Exchange Market (NSE) and Uganda Securities Exchange it must implement corporate governance as a measure for ensuring firm value. The company is required to have a board, a corporate structure, and a constitution and pre-initial public offering (IPO) structuring matters for consideration include a review of the board composition (NSE Listing Profile, 2016).

Both the NSE and USE have in place rules and guidelines that listed companies must adhere to. For instance, a listed company must publish the annual financial reports; must institute a board of directors comprising of both non-executive and executive directors, have an audit committee, put in place well-thought-out strategies and protocol for opportune and equivocal

disclosure of all primary information as stipulated by all rules, standards, and guidelines as well as the NSE and USE codes of corporate governance (NSE & USE annual reports, 2017). Despite all these guidelines, some listed companies have reported negative share prices and low market capitalization (Listed Companies Annual Reports, NSE, 2017), bringing into question the impact of corporate governance on firm value. Thus, the study hypothesized that;

H_{O2}: There is no significant effect of board diversity on firm value in NSE and USE

H_{O3}: There is no significant effect of board independence on firm value in NSE and USE

H_{O4}: There is no significant effect of board expertise on firm value in NSE and USE

2.1 Theoretical Review

The study was anchored on Agency theory (Eisenhardt (1985, 1989). The agency relationship has been most frequently cited between shareholders and corporate management. The shareholder objective is to maximize wealth by ensuring the increase in firm value whereas, on the contrary, the manager's objective is to increase personal wealth and benefits from the firm. Such a difference in objectives is the one that produces the agency problem giving rise to agency costs. And the agency costs are met by the principal owing to the requirement to audit the tendency of the agent who is being tasked with the duty of handling the company's assets and whose predispositions are not congruent to that of the principal (Gaffikin, 2008). In an agency theory context, corporate governance structures are techniques employed to deal with agency issues and discourage opportunistic tendencies.

According to Burton (2000), agency costs are best regulated through the restriction of administration concealment by putting up systems that will audit and regulate management culture. Such systems entail having a self-governed board of directors who are diverse and with professional financial expertise (Dalton *et al.,* 1999). The characteristics of the Board based on the agency theory argument is that it could affect the efficiency and effectiveness of the board and so affect the value of the firm. A greater number of directors for example is positively associated with a high firm value (Dalton *et al*., 1999). The rationale of having independent and women on the board is to reduce agency costs, to gain access to the capital markets (Brenman & McDermott, 2004). The agency perspective in which firms used governance mechanisms to align the interests of both the shareholder and corporate management to mitigate agency conflicts in firms motivated researchers to conduct corporate governance studies. Scientific analyses proved that good governance within a company is significant in minimizing the conflict of agency and administration opportunistic behavior in addition to moderating threats and thereby raising the value of the company. Thus, the Agency Theory formed the basis for relating the corporate governance and financial reporting quality to firm value

2.2 Review of Empirical Literature (hypothesis development)

Nguyen and Faff (2007) provided an initial examination of the relationship between firm market value and the size and gender diversity of a board of directors for a sample of publicly listed firms in Australia. The study findings indicated that smaller boards are effective and efficient in place of the shareholders as smaller boards are associated with higher firm value. As board size upsurges firm value deteriorates, though at a shrinking rate proposing that the relationship between board size and firm value is not strictly linear. Furthermore, the study

results indicated that gender diversity enhances the value of shareholders because the presence of women directors is linked with higher firm value.

Kumar and Singh (2013) evaluated the effect of corporate board size and promoter ownership on firm value for selected companies in India. The study analyzed the corporate governance structure of a sample of one hundred and seventy-six firms listed on the Bombay Stock Exchange and used linear regression analysis methodology. The study found that the size of the board is positively related to the value of the firm. The study proposed that strictly above a significant propriety degree of 40 percent do promoter's concerns corresponds with that of the firm, thereby culminating in a positive impact on the value of the company.

Akileng and Kobumanzi, (2019) examined the relationship between the Board of Directors attributes and financial performance of quoted firms in Uganda. Board characteristics of board size, Non-executive directors (board independence), and directors' shareholding were evaluated whereas controlling for firm size and leverage. The study used a cross-sectional research design, engaging panel data of listed firms in Uganda for four years. Financial and board characteristics information was sourced from the annual reports of each firm. The study findings document that nonexecutive director's independence on board and large boards increase the value of the firm.

Tarus (2020) conducted a study on the effect of board size and firm size on environmental accounting disclosure in the Nairobi Securities Exchange, Kenya. The specific objectives of the study were to investigate the impact of board size and firm size on environmental accounting disclosure. The study was guided by the stakeholder's theory and a longitudinal research design was adopted. The study targeted 27 selected listed firms from 2008 to 2017. The findings showed that board size had a significant and negative impact on environmental accounting disclosure while firm size had a significant and positive impact on environmental accounting disclosure. This implied that firms with larger boards are less possible to reveal accounting information on the environment while large firms have a high probability of giving out reports on the information of the environment. Handriani and Robiyanto, (2019) examined the effect of institutional ownership, independent board, and the board size to firm performance. The study used fixed-effect data panel regression, the study investigated 293 firms that are listed in the Indonesian Stock Exchange during 2010-2015. Firm performance was proxied by market measure (Tobin's Q). The study outcomes suggested that the institutional ownership, the board of Independence positively influences only Tobin's Q value, while the board size can increase both Tobin's Q. Thus, based on the above studies this study argues that;

H$_1$:   Board size has a significant effect on firm value in NSE and USE

Agyemang *et al.,* (2019) sought to empirically examine if the appointment of females (Board Gender Diversity) onto the corporate boards of UK financial institutions on the value of the firm. The other objective was to evaluate if having females on the boards of UK financial institutions can influence the value of the firm during the pre/post-global financial crisis. The study used secondary data sourced from DataStream covering 63 financial institutions over twelve years. To test for the robustness of the results, the study conducted the random effect and fixed-effect models. The results of the empirical study showed that the inclusion of women on the corporate boards of UK financial institutions has a positive and statistically significant relationship to the value of the firm.

Greene *et al.,* (2020) assessed stock market reactions, directs expenses of compliance as well as board adjustments to California Senate Bill No. 826 (SB 826), the first commissioned board gender diversity quota in the United States of America. Announcement returns

average-1.2% and is strong to the use of diverse strategies. Returns are found to be more negative when the gap between the pre-SB 826 number and the instructed number of female managers is greater. These negative implications are less brutal for companies that report a larger group of female contenders, additionally for those that can more promptly make replacements for male managers to female ones. When it comes to small companies, the yearly direct cost related to compliance through a board augmentation is inconsequential, accruing approximately 0.76% of the market value. Per SB 826, companies considerably expand female board representation, and the expansion is larger for companies found in California as opposed to limited companies in other states.

Inua *et al.,* (2019) sought to provide insights into the relationship between gender diversity in the boardroom and Enterprise Value Added (EVA) of quoted firms in Nigeria. The study used time-series data that was collected for the period between 2007 and 2016. Because of the problem of endogeneity gender diversity and performance of the firm, the study employed contributory variables with Two-Stage Least Square regression analysis methods to facilitate more consistent estimates that are not biased. The findings of the study indicated that corporate boards of these companies are dominated by male and gender diversity showed a weak impact on firm value. Precisely, gender diversity as measured with Blau Index has a significant negative impact on the value of the firm signifying that a rise in female representation on the board decreases the firm value of selected companies in the Nigerian economy.

Tyrowicz *et al.,* (2020) examined the field's national and sectorial institution motivators of the emergence of women managers on administrative as well as superintendence boards in both private and public companies from 41 developed and growing European economies. The research made use of a particular database of more than 20 million companies within a period of 20years. The research showed that gender board diversity has increased as a whole, all though women persist I being infrequent in boards of companies within Europe approximately 70% lack women managers on their superintendence boards, while 60% lack women leaders on their management boards. They influence institutional as well as resource reliance systems to determine that few systematic elements are linked with broader gender diversity for both management and supervisory boards among public and private institutions. The same aspect may demonstrate a positive link to a management board or even the reverse. They translated these results as a sign that national-level gender equality in addition to cultural organizations demonstrates varied correlations with the availability of women administrators in management and supervisory boards. The research additionally discovered that competition on the sector level as well as ingenuity is structurally linked with the availability of women on either board in any set of companies. Thus, from the reviewed studies there is a possible link between board diversity and firm value, though the above studies did not clearly show board diversity and firm. We hypothesized that:

H_2: *Board diversity has a significant effect on firm value in NSE and USE*

Zhu *et al.*, (2016) carried out a study on board hierarchy, independent directors, and the value of the firm in China. The study interpreted the entry formula of Chinese directors as board hierarchy, showing power allocation within the board. Owing to existing evidence that independent directors add a lot to firm value and that authorized persons have additional effect in collective decision making, the study expected independent director classifications to be concomitant with firm value and find evidence consistent with this prediction. From the analysis, the study found out that independent directors who are ranked higher are more possible to vote in contrast to the management, particularly on issues of financial reporting.

Additionally, higher independent ranked directors are related to fewer incomes in management. Jenwittayaroje et al., (2019) did a study wanting to know whether the independent firm directors improve the value of financial firms. The argument was that, at very difficult moments, firms may require more and recovering advice to help sought the crisis. Independent directors outside the firm can provide such solutions. The study employed the random effect model during the analysis and confirm from the findings that independent directors are really helpful in providing solutions and remedies at times of crisis in firms.

Bhat *et al.*, (2018) investigated how corporate governance instruments impact firm value in the context of Pakistan. The study considered state- and non-state-owned enterprises and examined whether the impact of corporate governance on firm value differs across firms that have different nature of ownership. The study used a longitudinal research design and employed the panel regression model. To know whether to use a fixed or random-effect model, the study conducted the Hausman test. From the Hausman test, the fixed effect model was selected. The study results discovered that board independence had a positive and significant association with firm value strictly for state-run corporations. In addition to that, the results reiterated that market capitalization as well as return on asset bore a significant and positive association with firm value for both the state and non-state-owned enterprises.

Tarus and Ayabei (2016) examined the effect of the composition of the board on the capital structure of a firm in Kenya. The study utilized time-series data that were sourced from firms quoted in Nairobi Securities Exchange from the year 2004 to 2012. The study utilized a fixed effect regression model to test the effect of board composition on capital structure and how the chief executive officer term moderates the relationship. The study findings suggested that board composition has important implications on capital structure decisions. Precisely, director independence was to be positively connected to leverage, while chief executive officer duality and tenure had a negative and significant effect on leverage. Furthermore, the collaboration effect of Chief Executive Officer Tenure shows that when the tenure of the chief executive officer is long, the power of independent directors to impact capital structure decisions reduces. Additionally, the studies establish that under long chief executive officer tenure, long-tenured boards employ smaller amounts of leverage in their structure of capital.

H3: Board independence has a significant effect on firm value in NSE and USE

Meng and Tian (2020) investigated how board expertise affects executive incentives and the value of the firm in a project investment setting. To upsurge the likelihood of project accomplishment, the CEO engages in a sequence of tasks: first acquiring information to evaluate a potential project, then reporting his valuation of the project to the board, and in conclusion executing the project if invested. The study showed that the CEO will get higher compensation if the board and the CEO agree. Such a compensation arrangement is purely an outcome of optimal contracting, even though the managerial power view may interpret it as evidence that more powerful CEOs get more pay. Besides, board expertise in evaluating the project helps motivate the CEO to acquire information but may hurt the CEO's incentives to properly implement the project. Consequently, higher board expertise can improve or negatively affect firm value. The study also showed that when board expertise is high enough, the CEO has incentives to underreport his assessment of the project to the board.

Schmidt (2019) Sought to examine the main relationship including the influence of two additional factors: the educational level of female directors and mandatory board gender quotas. During the analysis, a sample of 454 European firms was used. The data for the study was gathered over the period 2007 to 2017. From the examination, a positive relationship between board gender diversity and firm performance was established. Moreover, the outcomes suggested that educational levels or board gender quotas do not affect this

relationship. The effects on firm performance vary subject to whether jurisdictive procedures or intentional creativities are in place, that is. Indifference to legislative quotas, charitable creativities promote the performances of the firm.

Faleye *et al*., (2018) studied whether, how, and when related industry experience enhances board effectiveness. The study found out that board industry expertise was strongly connected with a significant escalation in the value of the firm. The study examined possible conduits for this effect by investigating the influence of industry expertise on internal modernization and attainments as alternate approaches for maximizing the value. The study findings suggest that industry experts contribute to the value addition of the firm by enabling investments in improvement. To begin with, board industry expertise has a positive effect on innovation but is not associated with acquisition performance. Secondly, board industry expertise is significantly associated with Chief Executive Officer termination and compensation incentives that encourage innovation investments. Lastly, the magnitude to which board industry know-how produces higher firm value relies on the significance of corporate innovation in the value chain of the firm.

Fauver *et al.,* (2017) examined the influence of corporate board reforms on firm value in 41 countries. The study used the difference-in-differences strategy and confirm that the value of the firm increases after the endorsement of the changes. The valuation expanse is linked with both the intensity as well as the key elements that constitute the reform, these entail audit committee, board independence in addition to the distinction of the responsibilities of the chairman, and that of the chief executive officer. The study also discovered that the impact of those changes majorly is existing in nations with less incompetent institutions of law. Joined together, the study results concluded that exogenous governance introduces reforms that are helpful to shareholders, majorly in countries with the weak institutional quality and for reforms with a comply-or-explain methodology.

H₄: Board expertise has a significant effect on firm value in NSE and USE

3.1 Methods

Sample

The sampling frame for this study includes all the companies listed at the NSE (64) and USE (17) and has been consistently trading between 2012 and 2019. There are initially 64 firms listed in Nairobi Security Exchange and 17 companies listed in Uganda Securities Exchange. The considered firms are listed firms with audited financial statements over the study period. The inclusion criteria in this research are firms listed and have been trading over the entire study period from 2012 to 2019. Firms that have been suspended and not trading over the study period were excluded.

Measurement of Variables

Firm Value

The Tobin's Q measure of firm value that conceives firm in terms of market-to-book value ratio, net market value, net assets replacement value, economic value-added, and market value-added is the most commonly used measure of firm value (Al-Awawdeh& Al-Sakini, 2018).

This study used the approximation of Q-Ratio as a proxy of firm value. Approximate Q is introduced by Chung & Pruitt (1994) and derived from the formula as follows.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 4||Issue 6||Page 1-17 ||December||2020|
Email: info@stratfordjournals.org ISSN: 2616-4965

Approximate $Q = \frac{MVE + DEBT}{TA}$……………………………………………………...3.1

Where MVE = the product of a firm's share price and the number of common stock shares outstanding, $DEBT$ = the value of the firm's short-term liabilities net of its short-term assets plus the book value of the firm's long-term debt and TA = the book value of the total assets of the firm.

Corporate Governance Measurement

This study measured corporate governance through one of its most important indicators that are the structure of the board of directors. For this purpose, four elements were used to measure as explained in table 1. The level of these elements' existence in the board was tested via studying the annual reports of the companies listed on the Nairobi Securities Exchange and Uganda Securities Exchange under investigation and for an eight-year period which starts in 2012 and ends in 2019. It is worth to mention that there are 51 indicators to measure the level of corporate governance (Brown & Caylor, 2004), but the study used 4 indicators only that are associated with the structure of the board of directors because of the following reasons: Novelty of the issued legislation related to corporate governance in Kenya and Uganda and their optional application. The existence of many corporate governance standards that some listed companies like banks consider confidential and unable to be published. There are quite a several authorities guiding corporate governance, for example, the individual company's articles of Association and memorandums, NSE Board charter, USE Board charter, and Capital markets regulations.

Table 1: Elements of Corporate Governance Measurement –Structure of the Board of Directors

Variable	Description	Measurement	Author
Board Size	Board members	Total number of inside and outside directors on the board	Ilaboya & Lodikero (2017)
Board Diversity	Female board members	The proportion of women board members to the total number of board members.	Ilaboya & Lodikero (2017)
Board Independence	Majority of the members of the board who do not have a relationship with the company	The proportion of non-executive directors to the total number of directors.	Ilaboya & Lodikero (2017)
Board Expertise	Board members with financial professional competence and knowledge.	The proportion of the board members with financial professional knowledge to the total number of board members.	Kankanamage (2015)

Data Collection

For this study, the secondary method of data collection was utilized. The study utilized panel data. The data for all the research variables were obtained from the published year in reviews as well as financial statements of the firms enumerated in the NSE and USE detailing the years 2012 to 2019 reference. The financial statements from which the data was sourced consist of notes to the accounts, the income statement, and statements of financial position. The data sourcing was contingent on a document report guide. The researcher visited the websites of the individual selected companies to download their audited financial statements from which the required figures were extracted and processed for further analysis. The information obtained from the audited financial statement of the quoted companies were compared with the figures in the NSE and USE handbooks to ensure accuracy in data collection. Therefore, the study involved the usage of only secondary data from sampled quoted company's financial statements covering the period January 2012 to December 2019(8 years period).

Model specification

The model considers a multiple linear regression for individual $i = 1...N$ which is observed at several time periods $i = 1...T$

$$y_{it} = \alpha + x'_{it}\beta + c_i + u_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 1$$

Where y_{it} is the dependent variable, x'_{it} is a *K*-dimensional row vector of time-varying explanatory variables, α is the intercept, β is a *K*-dimensional column vector of parameters, c_i is an individual-specific effect and u_{it} is an idiosyncratic error term. It is assumed that each individual i is observed in all time periods t. In the random-effects model, the individual-specific effect is a random variable that is uncorrelated with the explanatory variables.

RE1: Unrelated effects

$$SE(c_i|X_i, z_i) = 0 \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 2$$

RE1 assumes that the individual-specific effect is a random variable that is uncorrelated with the explanatory variables of all past, current, and future time periods of the same person. In the fixed-effects model, the individual-centered impact is a random variable that is permitted to correlate with the explanatory variables To decide between fixed or random effects, the Hausman test is needed (Green, 2008). It tests whether the unique errors (μ_i) are correlated with the regressor. Hausman test null hypothesis is that the random effect is appropriate versus the alternative that a fixed effect is appropriate. If the probability of the Hausman test is more than a 5 percent significance level, the random effect is used otherwise fixed effect is used. To carry out the Hausman test, the following estimators are calculated.

$\hat{\beta}_{RE} - \hat{\beta}_{FE}$ and its covariance. The covariance of an efficient estimator with its difference from an inefficient estimator should be zero. Under the null hypothesis, the following is tested

$W = (\beta_{RE} - \beta_{FE})'\hat{\Sigma}^{-1}(\beta_{RE} - \beta_{FE})$ follows a chi-square distribution with k degrees of freedom. If W is significant, random effects estimator should be used.

4.1 Results

The section presents the results. Before the initial data analysis, the data sets were tested for the classical linear regression model assumptions before running the model. Brooks (2008) suggests five critical assumptions that must be met before utilizing OLS estimation to validly test the hypothesis and estimate the coefficient. Multicollinearity can be detected using Variance Inflation Factors (VIF). VIF values greater than 10 confirm the presence of a collinear relationship (Nachtscheim, 2004). Results indicated values less than 10 confirming no multicollinearity among the independent variables. Further, it was also observed that Durbin–Watson statistic is 1.95 for data concerning the NSE and 2.05 for data on USE. This study used the Breusch-Pagan test to check for the presence of heteroscedasticity according to Gujarati, 2012). the results of F-statistics will have to be significant critical values below 0.05 in the different regression models. The variance, in this case, was homoscedastic because the F-statistic for the data across the two securities was significant.

4.2 Univariate Analysis

This part of the analysis presents Summary statistics done to have some understandings concerning a set of observations on the data. From the results firm value on NSE, firms are distributed far below their means unlike those on USE. This also indicates that the mean of the firms' value is greater than the yearly firm value. From the results, there is evidence that an indication that the Uganda Securities Exchange considers more female compared to NSE as part of the board. The board of directors on NSE is likely to be independent members of each of the NSE and USE. Results showed that at least every firm has at least one member on the board with financial expertise and this is a good indication for both NSE and USE. The table in table 2 that controlling for country, firm value on NSE is strongly positive (0.8450) and significant ($p = 0.000$) with the size of the board. This signifies that leaving other factors constant such as board diversity, board independence, and board expertise, board size relatively affects the firm value by 84.50. The other significant factors that correlate with firm value as far as NSE is concerned are board independence and board expertise. These simply indicate that though the correlation is negative with 25.55 and 13.90 percent of board independence and expertise respectively, Board independence and board expertise each directly influence the value of the firm. Their significance implies that firms in NSE should focus more on their board members being independent as well as having the members with financial expertise. When considering USE, board size again has a higher correlation of 98.11 percent with the firm value given other factors constant. The difference between the two securities exchange is that all the variables have a positive correlation to firm value on USE than it is on NSE where it is only Board size and diversity that have a positive correlation on firm value. Board diversity and board independence in the Uganda Securities Exchange do not significantly affect the value of the firm.

Table 2: Correlation Analysis

NSE (Obs =384)	N	Mean	SD	Firm Value	Board Size	Board Diversity	Board Independent	Board Expertise
Firm value	384	0.52	0.27	1				
board size	384	9.98	3.28	0.845*	1			
Board Diversity	384	0.18	0.15	0.0963	-0.025	1		
Board Independent	384	0.78	0.16	-0.2555	.089*	.256**	1	
Board Expertise	384	0.68	0.17	-0.139	-.173**	-.338**	.337**	1
USE (Obs = 96)								
Firm value	96	0.2	0.26	1				
Board Size	96	9.78	1.92	0.9811	1			
Board Diversity	96	0.25	0.17	0.1489	0.077	1		
Board Independent	96	0.77	0.16	0.1958	.266**	-0.015	1	
Board Expertise	96	0.53	0.17	0.2561	0.039	-0.063	.267**	1

**p<.01, *p.05

Hypothesis Testing (Fixed Effect)

Based on the Hausman test results presented in table 3 above, the study used fixed effects panel regression. This is because the prob > chi2 in table 3 was found to be significant at a 5 percent level of significance. Therefore, this study considers fixed effects regression coefficients in testing the hypothesis of the direct effect of corporate governance on firm value of the firms listed on NSE and USE. Comparing for two countries' securities exchange, table 3 presents results for the direct effect of corporate governance on firm value. The table shows that the overall R squared is 0.6956 for NSE and 0.9563 for USE. This signifies that corporate governance explained 69.56 and 95.63 percent variation of firm value for the firms listed on the NSE and USE, respectively. The value for F-statistic 387.68 on NSE and 301.53 on USE was significant at probabilities 0.000 in each case. F statistic tests the coefficients on the regressors (Baltagi (2008), Wooldridge (2009), and Allison (2009)). This significance implies that the fixed effect panel regression model was fit to explain the relationship between board size, board diversity, board independence, and board expertise on the Firm value in regards to the two security exchange markets. The value 0.1412 and 0.0606 in respective to the NSE and USE results ($sigma\_u$) are the standard deviations of residuals within groups (i.e. the group variable here is the firms listed in each country), $sigma\_e$ is the standard deviation of residuals or the overall error terms and it was found to be 0.0768 for firms listed on NSE and 0.0306 for firms listed on USE. Rho which is the intraclass correlation within the groups (firms) was 0.7717 and 0.7966 for firms on NSE and USE, respectively.

The first hypothesis stated that board size does not significantly affect the firm value of firms listed on NSE and USE securities. From the results presented in table 3, board size in the two

securities significantly affected the firm value with respective coefficients 0.0782 and 0.0879 for NSE and USE. Since the probabilities were 0.000 and significant at a 5 percent level, this hypothesis was rejected and concluded that board size does affect the firm value. The significance implies that the number of board size has an impact on firm value and so the board should be of sufficient size that the balance of skills and experience is appropriate for the requirements (Jumuheki, 2007; Mak & Kunadi, 2005).

The second hypothesis tested was that board diversity does not have a significant effect on the firm value of firms listed on NSE and USE. The study found that in both the securities exchange, board diversity which was measured by the number of females on the board does not significantly influence firm value. In Uganda, the chief executive officer at capital markets authority while giving remarks during the "Ring bell" for gender equality ceremony highlighted that the number of women in the boards of listed companies is disproportionately lower than that of men (Senyonyi. W, 2018). Similarly in Kenya, it has been reported that women are under-represented on corporate boards, and in response, Kenya is on the list to join the enactment of the gender quota legislation to require a representation of women on corporate boards (Reddy, S., & Jadhav, A.M. 2019).

In the Nairobi Stock Exchange, and a significant coefficient of -0.1042 (p-value $0.033 < 0.05$) at five levels of significance. This implies that a unit increase in the level of board independence causes a 0.1042-unit decrease. This resonates with the doctrines of the urgency theory that managers work for themselves for personal gains hence they are opportunistic. The inclusion of insiders in a firms' boards may conflict with the decision control of the function of the board. The inclusion of independent boards in firms' management may harm firm value since they are employed on a part-time basis and therefore they may have other commitments and lack the requisite experience on technical issues and lack sufficient information when they are required to make technical decisions. In Uganda. This indicates that a unit increase in board independence causes a 0.1720684-unit increase in firm value. The positive relationship between board independence and firm value in USE can be explained by the benefits accruing from monitoring and the boards will perform better through a reduction in outside members. It is further suggested that outside directors are a potential source of new business contacts and networks to the firms thus this creates new opportunities for the firm and consequently increases firm performance.

This positive and significant relationship between board expertise and firm value means that a board whose directors have an understanding of the generally accepted accounting principles, financial statements, internal controls will bring competitive advantages to the firm like the international networks, commitment to shareholder rights, and managerial entrenchment avoidance which will yield a high firm value (Masakari & Ombaba, 2018).

Table 3: Fixed Effect Results

	Fixed Effect if country=="NSE", FE			Fixed Effect if Country=="USE", EE		
R-squared: Within	0.824			0.938		
: Between	0.637			0.969		
: Overall	0.696			0.956		
No. Obs.	384			96		
No. of groups	48			12		
Obs. per group	8			8		
F(4,332	387.68			301.53		
Prob > F	0.000			0.000		
Corr (u_i, Xb)	-0.3535			0.6126		
Firm Value	**Coef.**	**Std. Error**	**P|t|**	**Coef.**	**Std. Error**	**P|t|**
Board Size	0.078	0.002	0.000	0.088	0.003	0.000
Board Diversity	0.034	0.054	0.528	0.013	0.031	0.665
Board Independence	-0.104	0.049	0.033	0.172	0.048	0.001
Board Expertise	0.175	0.038	0.000	0.123	0.029	0.000
Constant	0.062	0.051	0.223	-0.174	0.044	0.000
Sigma_u	0.141			0.061		
Sigma_e	0.077			0.031		
Rho	0.772			0.797		

Hausman Test

Test: H0: Difference in coefficients not systematic

$Chi2(4) = (b-B)'[V\_b-V\_B)^{(-1)}](b-B)$

$=15.55$

Prob>Chi2=0.0037

5.1 Discussion

Findings showed that the larger the board the more the value of the firm. This finding is supported by the work of Kiel and Nicholson (2003), Henry (2008), and Pham et al. (2011) who found that board size positively affects firm value (Tobin's Q). This positive significance as per Coles et al. (2008); Kalsie & Shrivastar (2016) could be associated with the fact that large board sizes have optimal value-maximizing outcomes for large firms. The agency theory alludes to the enhancement of firm value by a larger board size through better monitoring and control by a large group of people and in addition, the resource-based view theory postulates that when a board is large, it brings in a wide variety of expertise and knowledge (strategic resources) that can be exploited to increase firm value. Taken together both the resource-based view theory and agency theory signifies the presence of a positive relationship between board size and firm value favoring the large board size.

However, Though board size is positive and significant in this study, some of the researchers have found that firms with large board size directly lower firm value as they exhibit lower operating performance and higher operating costs like increased remuneration for the directors (Nguyen *et al., 2016*). Singh and Davidson (2003), and Yermack (1996) argued that

firms with a large board are associated with significantly lower firm values. Cooper *et al.,* (2008) and Watanabe *et al*. (2013) explained that a large board size offer CEO compensation that is unrelated to performance but rather depends on the size of the firm's balance sheet, and this likely to encourage the accumulation of assets at the expense of creating value and so reducing firm value.

It is an indication that on the NSE and USE, board diversity about the number of females on the board does not influence the increase in firm value. However, this finding contradicts the findings of Nguyen and Faff (2007) which when studying the effect of gender diversity on the firm value of publicly listed Australian firms found out that gender diversity promotes shareholders' value as the presence of women directors is associated with higher firm value. Comparing to study in Indonesia and Malaysia, the representation of women on board also agrees on the importance of gender diversity on the board. The increasing percentage of women on board in Indonesia (Putri, 2016) and the development of the Women Director's Registry (Deloitte, 2013) support the positive impact of women on board.

Board independence negatively affects firm value at NSE while it positively affects firm value in Stock Exchange (USE). The positive relationship between board independence and firm value can be explained by the fact that an independent executive provides independent thinking, and this reduces the chances of mass thinking that could be detrimental to the firm(s). The positive relation relationship between board independence and firm values measured using Tobin's Q can also be explained by the fact that directors who are sitting as independent directors are likely to face fewer obstacles such as pursuance to personal interests hence they are likely to perform better hence increased firm value. According to Ramdani and Witteloostuijn (2010), argues that independent boards can perform their functions effectively. this negative relationship between board independence and the firm value was inconsistent with previous studies by (Vintila & Gherghina, 2013), (Zattoni *et al.,* 2017), Chi & Lee (2010), Singh, & Davidson (2003) who found a positive association between board independence and firm value while the findings of (Abdullah, 2004) showed that insignificant and negative relationship between total firm value and board independence.

The study found that board expertise had a positive and significant effect on firm value at NSE and USE. This finding supports previous findings of (Yasser, Al Mamun & Rodrigs, 2017). Since the board is in charge of corporate governance of the organization and are mandated to supervise the activities of the organization it is required that they have the requisite knowledge and skills such as marketing, business strategy, accounting, information technology, legal aspects, and any other related business relates competencies depending on the mother activities to enable them to run the organization effectively according to Vo & Phan (2013). Hambrick & Manson (1984) argued that there are two types of competencies; functional knowledge which covers areas such as finance, legal issues accounting, legal, marketing, and economics while firm-specific deals relate with specific firm operations.

6.1 Conclusions

In general, the board size, board independence, and board expertise as proxies of corporate governance affected the firm value in the two securities exchange. In contrary to this, board diversity in both cases did not significantly affect the firm value. It can be concluded that corporate governance positively affects firm value. The argument concerning the board independence effect on firm value can be linked and concluded that high fixed costs of complying with the rules are likely to benefit large firms than small firms, small firms are less likely to benefit from the rules (Holmstrom and Kaplan, 2003). In addition, small firms are likely to incur higher costs of finding qualified independent directors to their boards, and thus are likely to bear higher costs of complying with the director independence requirements. Imposing a common set of internal controls and board independence requirements on all firms is likely to have a different effect across firm size.

7.1 Implications

The regulators in place like the Capital markets authority, the central banks and other regulators in the industries in which the listed companies fall should design standard operating procedures to guide companies in their industries and those listed in building high firm value This study to agency theory by empirically showing validating the theoretical explanation that corporate governance aspects such board diversity, board expertise, and board indolence play an important role in reducing the agency problem by representing managements' transparency and accountability in conducting a business.

This study can highlight the importance of efficiency and effectiveness of corporate governance in improving, measuring, and performing the value of companies through the performance. As the practical contribution to enhance the usefulness of this study, hopefully, it can give more deep understanding to both management of the companies and the investors. Management might use variables used in this study as the further consideration to increasing the company's performance in terms of attaining high value, while the investor can see the real impact of those variables, which can be traced on companies annual reports and take it as consideration regarding where to invest in.

From the scope and limitations of the study, the following areas are suggested for future research: first, this study suggests that there is a need for future researches to incorporate other variables such for instance CEO duality. That is if; the CEO has multiple duties and assumes double positions such as being a CEO and at the same time being a chairperson of a firm and the same time being CEO to find out their relationship with firm value. This research used Tobin's Q ratio as a measure of firm value, this study suggests other measures of firm value such as the use of total assets, return on assets, return on investment, earnings per share, growth in sales, return on capital employed and expense to assets to be used by future researches.

References

Abdullah, S. N. (2004). Board composition, CEO duality, and performance among Malaysian listed companies. *Corporate Governance: The international journal of business in society*.

Akileng, G., Ogwang, A. A., &Ssendyona, C. (2019). Determinants of performance of securities exchanges in East Africa. *Journal of Finance and Investment Analysis*, *7*(3), 1-3.

Al-Awawdeh, H. A., & Al-Sakini, S. A. K. (2018). The impact of economic value-added, market value-added, and traditional accounting measures on shareholders' value: Evidence from Jordanian commercial banks. *International Journal of Economics and Finance, 10*(10), 40-51.

Allison, P. D. 2009. Fixed Effects Regression Models. Newbury Park, CA: Sage.

Baltagi, B. H. 2008. Econometric Analysis of Panel Data. 4th ed. New York: Wiley.

Bhat, K. U., Chen, Y., Jebran, K., & Bhutto, N. A. (2018). Corporate governance and firm value: a comparative analysis of state and non-state-owned companies in the context of Pakistan. *Corporate Governance: The International Journal of Business in Society*, *18*(6), 1196-1206.

Bistrova, J., & Lace, N. (2012). Defining key factors to sustain maximum shareholder value. *Journal of Financial Studies & Research*, *1*, 1-14.

Cheffins, B. R. (2015). Corporate governance since the managerial capitalism era. *Business History Review, 89*(4), 717-744.

Cooper, M., Gulen, H., & Schill, M. (2008). Asset growth and the cross-section of stock returns. *Journal of Finance*, 63, 1609–1651.

Dalton, D. R., & Daily, C. M. (1999). Board and Financial Performance, the Bigger is Better (Non-Empirical Study). *http:/www. the corporate library. com/study*.

Deloitte. (2013, March). Women in the Boardroom: A Global Perspective.

Gujarati, D. N., & Porter, D. C. (2012). *Essentials of econometrics* (Vol. 2). Singapore: Irwin/McGraw-Hill.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of management review*, *9*(2), 193-206.

Henry, D. (2008). Corporate governance structure and the valuation of Australian firms: Is there value in ticking the boxes? *Journal of Business Finance and Accounting* 35, 912– 942.

Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability. *International Journal of Economics and Business Administration, 7*(1), 174-191.

Jensen, M. C., &Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs, and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: an International Review*, 11, 189–205.

Lakshan, A. M. I., &Wijekoon, W. M. H. N. (2012). Corporate governance and corporate failure. *Procedia Economics and Finance*, *2*, 191-198.

Lonkani, R. (2018). Firm value. In P. S. Hoffmann [Ed.). 2018. *Firm value: Theory and empirical evidence*. London, UK: IntechOpen.

Mak, Y., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific Basin Finance Journal*, 13, 301–318.

Maulidi, A. (2016, August 15-18). *Analysing the worst corporate accounting scandals: Theoretical framework perspective.* International Conference on Accounting Studies (ICAS) Langkawi, Kedah, Malaysia.

Nguyen, H., & Faff, R. (2007). Impact of board size and board diversity on firm value: Australian evidence. *Corporate ownership and control*, *4*(2), 24-32.

Nguyen, P., Rahman, N., Tong, A., & Zhao, R. (2016). Board size and firm value: Evidence from Australia. *Journal of Management & Governance*, *20*(4), 851-873.

Pham, P. K., Suchard, J. A., & Zein, J. (2011). Corporate governance and alternative performance measures: evidence from Australian firms. *Australian Journal of Management*, *36*(3), 371-386.

Putri, A. (2016, April 13-26). Rahasia Sukses Bos-Bos Wanita Pilihan. SWA Magazine 08 XXXIII, 22-27. Jakarta, Indonesia: PT. Swasembada Media Bisnis

Ramdani, D., & Witteloostuijn, A. V. (2010). The impact of board independence and CEO duality on firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea, and Thailand. *British Journal of Management*, *21*(3), 607-627.

Shuaibu, K., Ali, I., &Moh'd Amin, I. (2019). Company attributes and firm value of listed consumer goods companies in Nigeria. *Journal of Research in Humanities and Social, 7*(5), 40-49.

Singh, M., & Davidson III, W. N. (2003). Agency costs, ownership structure, and corporate governance mechanisms. *Journal of Banking & Finance*, *27*(5), 793-816.

Vintila, G., & Gherghina, S. C. (2013). Board of director's independence and firm value: empirical evidence based on the bucharest stock exchange-listed companies. *International Journal of Economics and Financial Issues*, *3*(4), 885.

Watanabe, A., Xu, Y., Yao, T., & Yu, T. (2013). The asset growth effect: Insights from international equity markets. *Journal of Financial Economics*, 108, 529–563.

Wooldridge, J. M. 2009. Introductory Econometrics: A Modern Approach. 4th ed. Cincinnati, OH: South-Western.

Yasser, Q. R., Al Mamun, A., & Rodrigs, M. (2017). Impact of board structure on firm performance: evidence from an emerging economy. *Journal of Asia Business Studies*.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40, 185–211.

Zattoni, A., Witt, M. A., Judge, W. Q., Talaulicar, T., Chen, J. J., Lewellyn, K., & Shukla, D. (2017). Does board independence influence financial performance in IPO firms? The moderating role of the national business system. *Journal of World Business*, *52*(5), 628-639.