

## **Board Diversity and Performance of Companies Listed in Nairobi Stock Exchange**

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### **Abstract**

*This study examined the relationship between Board diversity and financial performance of firms listed in the Nairobi Stock Exchange. Data on Boards' age, gender, educational qualifications, study specialization, and board specialization as well as the companies' financial performance were obtained from 40 companies using a structured questionnaire. Using the Ordinary Least Squares (OLS) regression, the results show that there is a weak positive association between board diversity and financial performance. Overall, the results indicate a statistically not significant effect of board diversity on financial performance except for the independent effect of board study specialization on dividend yield. The results partially concur with agency and resource dependency theories of corporate governance as well as similar empirical studies. Ensuing implications for theory, policy and practice as well as methodology are also discussed.*

**Key Words:** Board of Directors' Diversity, Financial Performance, Listed Firms, Kenya

### **Introduction**

The debate on the impact of board diversity in the corporate world has continued to rage. The influence of the board members' individual gender type and educational qualification on corporate performance is the main issue of discussion. Scholars and practitioners as well as policy makers have for the last two decades debated on the role of boards of directors as one of the key pillars of corporate governance (Malin, 2007; Monks and Minow, 2008; Tricker, 2009). They have asserted that boards of directors' attributes may influence strategic decision-making and subsequently firm performance (Cutting and Kouzmin, 2002; Van den Berghe and Baelden, 2005). Thus, board members as individuals with characteristics or attributes that are unique to them or the organizations that they lead elicits the need to establish the influence of board attributes on corporate performance.

Some scholars have argued that different board of directors' attributes impact organizational performance owing to different orientations. The most common board of directors' attributes include members' age, education, gender, and industry experience. Many studies have attempted to identify the attributes or mechanisms of the boards of directors that lead to improved strategic decision-making and corporate performance (Van den Berghe and Baelden, 2005; Barako et al, 2006; Balta, 2008; Kajola, 2008; Maharaj, 2009). However, the results of these studies have been inconclusive. Based on this observation, this paper examines the relationship between board of directors' diversity and performance of Kenya's listed firms. Numerous studies (Balta, 2008; Kajola, 2008) have revealed significant association between the board of directors' diversity and financial performance.

According to Pfeffer (1983) demography refers to the composition in terms of basic attributes such as age, educational level, race, length of service and social entity. In this study, the key demographic characteristics that were considered are average age, educational and professional qualifications, gender, and industry experience or tenure of the board members.

### ***Literature Review and Conceptual Hypothesis***

Corporate governance relates to the way and manner in which financial resources available to an organization are prudently used to achieve the overall corporate objective of an organization. According to Kajola (2008), good corporate governance keeps the organization in business and guarantees an organization's future success. Jensen and Meckling's (1976) research ignited interest in empirical study on corporate governance as it relates to performance. Much of this research (reviewed extensively by Shleifer and Vishney, 1997), examined whether corporate governance mechanisms or managerial decisions generate predictable stock price impacts.

Shin-Ping and Tsung-Hsien (2009) have analyzed corporate performance data over many years. The data were measured by a single traditional financial index such as return on assets or earnings per share (EPS). Both the finance and economics literature argued that non-market measures of performance are not adequate indicators of true performance given the peculiarities of accounting practices (Shin-Ping and Tsung-Hsien, 2009). From the finance point of view, the stock market provides the best measure of a firm's worth. A firm is worth only what the market is willing to pay for it (Irungu, 2007).

Some scholars had observed that the relationship between board structure (as opposed to board processes) and company performance has been the most-studied aspect among all board investigations (Pearce and Zahra, 1989; Bhagat and Black, 2002). It is often assumed that a company's financial performance is mainly determined by board diversity. Pfeffer (1983) argued that it is not necessary to understand board processes as directors' performance can be inferred from their demographic characteristics. Other scholars have suggested that future research studies on the actual mechanisms and benefits brought by women on boards of directors and board composition would be fruitful extensions of their work (Hillman and Cannella, 2007; Bathula, 2008). Such an assumption requires data-supported justification. Indeed the analysis of the board composition is important as quantification of board structure and company performance is much easier than that of incorporating board attributes, processes and firm performance.

Freeman (1984) contends that the network of relationships with many groups can affect decision-making processes. This draws on stakeholder theory whose concern is the nature of the relationships in terms of both processes and outcomes for the firm and its stakeholders. This theory focuses on managerial or strategic decision-making and suggests that the interests of all stakeholders have intrinsic value, and no sets of interests are assumed to dominate others (Abdullah and Valentine, 2009).

The principal theoretical perspective for examining board role in corporate governance has been agency theory (Jensen and Meckling, 1976). Stewardship theory relates to the board's task of providing support and advice to management (Davis, 1991). Resource dependence theorists (Hendry and Kiel, 2004) argue the board is a co-optative mechanism to extract vital resources to company performance, through its members' networks with other organizations and by linking the firm to its overall environment (Pfeffer, 1973; Pfeffer and Salancik, 1978; Pearce and Zahra, 1992; Hillman et al., 2000).

Corporate governance issues gained a worldwide attention in 2001 with the spectacular collapse of Enron, when the boards of directors of many under-performing firms were reluctantly thrust into the spotlight (Tricker, 2009). Corporate governance also received close attention after the entry of professional managers who wielded power over investors' resources (King Commission, 2002). Further, inconsistent accounting practices allowed managers to disclose only minimum financial information to shareholders, boards of directors engaged themselves as vendors to reap unfair profits and manipulated shareholders into approving unworthy investments and compromised auditors at meetings. Ineffective boards, whose incompetence and lack of commitment to values as well as obscurity given to minority shareholders required intervention of governments through corporate governance principles and rules.

The composition and demographic characteristics of the board have been examined in numerous studies as the key attributes of the board of directors (Pettigrew, 1990; Westphal, 1999).

Board composition subsumes the individual director's potential to solve the various tasks (Daily, Johnson and Dalton, 1999) and has generally been analyzed by examining the demographic characteristics of the board (Rindova, 1999). Board size and board composition have long been regarded as important components of the governance process for firms in business as it defines the affiliation of each director as either inside or outside board member (Lawrence and Stapledon, 1999; Boone et al, 2007; Tricker, 2009). They play a significant role in the performance of the firms.

Recent corporate reforms encourage women participation in corporate governance practices. The aim is to promote gender diversity in the boards. Firms have been pressured by institutional investors, shareholder activists and interest groups to appoint directors with different ethnic and gender backgrounds as well as bases of expertise to their boards (Van der Walt et al., 2006). The underlying assumption is that greater diversity should lead to less insular decision-making processes and greater recognition of change (Westphal and Fredrickson, 2001; Bathula, 2008). Bilimoria (1995) argued that women executives bring fresh and well-informed views related to market, environment and ethical issues and have an impact on the decision-making process of corporations and that boards with more than one female director have a greater influence over strategic decisions. Therefore, the diversity in the board of directors, whether viewed from one or a combination of attributes, can directly or indirectly explain company performance. The foregoing leads us to hypothesize thus:

***There is a strong positive relationship between board diversity and corporate performance.***

### ***Methodology***

The study involved a snapshot collection of data from a cross-section of firms listed in the Nairobi Stock Exchange. Consequently, a cross-sectional descriptive design was considered most appropriate. Olsen & George (2004) pointed out that in this type of research design, either the entire population or a subset thereof is selected, and from these individuals, data are collected to help answer research questions of interest. The design made it possible to capture data from respondents and test hypotheses quantitatively for purposes of drawing objective conclusions (Cooper and Schindler, 2003).

The population of the study consisted of firms listed in the Nairobi Stock Exchange (NSE) as at 31<sup>st</sup> December, 2010. As at this date, the number of firms was forty-seven (47), which operate in various sectors of the Kenyan economy. All these firms were included in the study, hence a census survey.

The pertinent data for the study were obtained from both primary and secondary sources. The primary data were collected by a semi-structured questionnaire. The target respondents were the Corporation Secretaries and in their absence, one key board member such as the Board Chairman. The Board Chairman and Corporation Secretary are usually the custodians of board agenda and resolutions respectively. Data on financial performance was readily available in secondary sources. These include the Nairobi Stock Exchange (NSE) annual publication, the NSE Handbook (2009) and the firms' annual reports. Out of the 47 firms, all of which were approached for data, 40 companies responded to the questionnaire resulting to a response rate of 85%.

Data analysis involved application of both multi-variate regression and descriptive univariate analyses. Regression analysis was applied to establish the relationship between the board of directors' attributes and firm performance. Regression analysis was used to examine the relationship between variables especially the extent to which a dependent variable is a function of one or several independent variables (Hair et al., 1998; Saunders et al., 2007). Descriptive statistics was used to profile the board of directors of the target firms. The data analysis used a sample of 160 observations for the 40 firms between 2006 and 2009, meaning that four observations were made for each company.

A financial year unit of analysis was used to examine the influence of board attributes on firm performance. With four firm-year records, Ordinary Least Square (OLS) Random-Effects models were applied to test the hypotheses due to the important assumptions of homoscedasticity and no serial correlation in pooled data. An OLS regression was suitable since it corrects for omitted variable bias, and presence of auto-correlation and heteroskedasticity in pooled time series data. This methodology allows researchers to examine variations among cross-sectional units simultaneously with variations within individual units over time (Bathula, 2008). It assumes that regression parameters do not change over time and do not differ between various cross-sectional units, enhancing the reliability of the coefficient estimates.

An important assumption for choosing random-effect estimation is that the unobserved heterogeneity should not be correlated with the independent variables.

Before performing the regression analyses, the variables were tested for multi-collinearity following the procedure in Hair et al., (1998). The method was appropriate for the study because it had one independent variable (board attributes) and one dependent variable (financial performance). Other scholars have used similar methods in their studies on corporate governance and performance. Those scholars had developed a system of simultaneous equations where performance measured by Tobin’s Q and is related to corporate governance practices (Bathula, 2008). In the current research, firm performance was regressed on board attributes’ variables. The general form of the regression model to be used in the analysis is in the form of:

$$FP_{it} = \beta_{it} + \beta_2 \text{board attributes}_{it} + e_{it} \dots\dots\dots \text{Equation 1}$$

Where:

FP = Firm Performance (dependent/response variable)

$\beta_1, \beta_2, \dots, \beta_5$  (Beta coefficients) represent the independent/predictor variables of interest (board attributes).

$\epsilon$  = Error,  $\alpha$  = Intercept or constant

**Results**

Before presenting results of tests of the study hypothesis, we first present preliminary findings based on the descriptive analyzes of firm demographics and board attributes. In terms of firm age, the results show that the oldest company among the listed firms was 114 years while the youngest was only four years old as at the time of the study. The companies got listed in different times after being in operation for some time (Table 1).

**Table 1: Age of Company since Incorporation and Listing**

Company age	Age since incorporation		Duration since listing		
	Age bracket in years	Number of companies	Per cent	Number of companies	Per cent
1- 10		1	2.5	10	25.0
11- 20		3	7.5	15	37.5
21- 30		1	2.5	3	7.5
31- 40		4	10.0	3	7.5
41-50		12	30.0	6	15.0
Over 51		19	47.5	3	7.5
<b>Total</b>		<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>

Results in Table 1 show that with regard to the ages of the companies, a majority of them (47.5 per cent) were incorporated over fifty years ago. This means that firms that have been in existence for long are stable enough and have survived cyclical life cycles. The results also indicate that a majority of the firms (37.5 per cent) have been listed for between 11 to 20 years. This means that most of the listed firms have been in the Nairobi Stock Exchange for a shorter time although they have been in existence for a long time. It also means that over the last twenty years, many firms have opted to get listed at the stock exchange in order to raise funds to finance their operations.

**Table 2: Distribution of Respondents per Sector**

Sector	Population	Response	Percent
Agriculture	3	3	7.5
Commercial Services	12	9	22.5
Finance and Investment	15	12	30.0
Industrial and Allied	17	16	40.0
Total	47	40	100

As shown on Table 2, majority of the respondents were from the industrial and allied sector (40 per cent).The high representation of the industrial and allied sector among the listed companies was presumed to be due to the nature of their operating environment that requires them to raise huge capital for investments in machines and equipment in order improve their productivity and efficiencies.

The sector may then sale shares to the public to raise the needed capital, hence the need for listing. On the other hand, the low representation of the agricultural sector on the NSE may be attributed to the uncertainty of the vagaries of weather that makes it unpredictable to remain in business during dry seasons and prolonged droughts. This may discourage potential investors in the sector despite the fact that Kenya has been said to be an agricultural economy.

Under gender diversity, membership of women in the board was considered both as a board composition as well as board demographic characteristic issue and was treated as such in the analysis. Table 3 shows a summary of the board composition variables among the respondent firms. On the first column is the number of companies with each row indicating the relationship with the various variables listed on the first row. The other rows show percentages of the board composition variables. Results in Table 3 reveal that the board size ranges from 4 to 12 members. Most of the companies (25 per cent) have 7 board members with the average being 9 members. This means that the board size among the listed firms in Kenya consist of an average of 9 board members. In other countries the board sizes vary. For example in Zimbabwe, by law, every company should have a minimum of two directors. According to a survey conducted by the World Bank, most companies have six or seven directors (Nganga et al, 2003). In Spain, the board size seems to be higher with an average of 12 board members among the listed firms (Castro, La Concha, Gravel, and Periñan, 2009).

**Table 3: Frequency of Board Attributes (Composition)**

Number of firms/ Board Members	Board Size	Women on Board
0		57.5
1		25.0
2		15.0
3		2.5
4	2.5	
5	7.5	
6		
7	25.0	
8	5.0	
9	17.5	
10	20.0	
11	12.5	
12	10.0	
13		
Total	100	100

On gender diversity perspective, a majority of firms (57.5 per cent) had no female board member. Only 25 per cent of the firms had one women board member with 15 percent of the surveyed companies having two board members. Thus, on average only 7 percent of all the board members were women among the Kenyan listed companies. This is way below the recommended threshold of at least a third of either gender to be included in public organizations.

The results in Table 4 show that there is an average of one (1) woman board member per listed company. This means that most boards have one or no woman board member at all. Therefore, gender parity is an issue of concern among Kenya's listed firms. This however is comparable with other countries in the third world that boast of rather low composition, especially in the Middle East and North Africa region: Kuwait is one of the regional leaders with 2.7 percent of women directors, followed by Oman 2.3 percent, Bahrain 1 percent, United Arab Emirates (UAE) 0.8 percent, Qatar 0.3 percent, and Saudi Arabia 0.1 percent (Shkolnikov, 2011). Only 11 of companies listed on the Johannesburg Securities Exchange have 25 or more of their director positions occupied by women (Luhabe, 2010).

**Table 4: Descriptive Statistics for Board of Directors' Gender Diversity**

Variable	Sample size	Female	Male	TOTAL
Gender	40	7%	93%	100

Table 4 further shows that majority of the board members were male board members at ninety-three (93) percent while a paltry seven (7) percent were women.

This means that the women folk did not make serious contributions in the boardroom in Kenya

### Board of Directors' Attributes and Corporate Performance

While there are many measures of firm performance such as stakeholder satisfaction, market share, new product development among others (Clarkson, 1995), we followed the predominant approach and used four financial measures of firm performance, namely Return on Assets (ROA), Return on Equity (ROE), Price-Earnings (PE) ratio and Dividends Yields (DY). The analysis was based on information from annual reports over the four year from. An average of the four years (2006 to 2009) was computed for all the companies. Data on performance were obtained from listed firms' annual reports as published by the Nairobi Stock Exchange.

Table 5 explains the performance measures used in computing the profitability of companies. It details what consists of the selected dependent variables used in the current study.

**Table 5: Descriptive Statistics for Firm Performance Measures**

Performance Indicator	N	Minimum	Maximum	Mean	Standard Deviation
Return on Assets (ROA)	39	-5.35	46.05	18.5971	11.18092
Dividend Yield (DY)	39	0.00	18.75	3.3692	3.46033
Return on Equity (ROE)	40	-18.13	41.43	16.4827	10.36776
Price Earnings (PE)	40	-63.64	99.68	13.2513	20.56788

From Table 5, we observed that over a four year period, the measures of performance such as the return on assets (ROA) had a mean of 18.60 and standard deviation of 11.18 for most of the listed companies. The standard deviation of 11.18 in ROA suggests that there is rather a wide dispersion in terms of Price-Earnings ratio as a means of performance.

### Board of Directors' Demographic Characteristics and Financial Performance

Board characteristics such as age of board members, women on boards, education levels of directors and areas of specialization were also analyzed and related to firm financial performance. Based on evidence from literature, we hypothesized that there is a strong positive relationship between board diversity and corporate performance. Table 6 shows that the results of estimation in column 1 indicate a positive relationship between performance, measured as ROA and age of board members, women on the board, educational qualifications and board member professional specialization. The results in column 2 show a positive relationship between performance, measured as DY and age of board members and educational qualifications. There was no statistically significant relationship between DY and women in the board and board study specialization. Using ROE, there was a positive relationship with age of board members and board study specialization and there was no significant relationship with the women on board and educational qualifications. In column 4, the use of PE as a measure of performance the results estimation shows a positive relationship with all the parameters except the level of education.

With regard to the effect of board demographics on Return on Equity (ROE), the study reports positive effect for age of directors and board members' study specialization while negative effect was reported for the women on board, educational qualifications. Relatively high negative impact is reported for women directors on the board (Beta=-6.329) while a low positive impact is reported for the board members' specialization (Beta = 1.019). Overall, statistically not significant findings are reported for the independent effect of Board of Directors' demographic characteristics on ROE (low t-values,  $p > 0.05$ ) (Table 6).

**Table 6: Independent Effect of Directors' Demographic Characteristics on Return on Equity (ROE)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.169	44.202		-.140	.890
	Age	1.716	3.141	.112	.547	.590
	Women on Board	-6.329	23.492	-.056	-.269	.790
	Educational Qualifications	-.188	5.325	-.008	-.035	.972
	Board Study Specialization	1.019	1.635	.137	.623	.539
	Board Specialization	-1.265	1.077	-.283	-1.175	.252

Regarding the effect of board demographics on Return on Assets (ROA), the study reports positive effect for age of directors, educational qualifications and board members' study specialization while negative effect was reported for the women on board and board functional specialization. Relatively high negative impact is reported for women directors on the board (Beta = - 6.272) while a high positive impact is reported for the board members' educational qualifications (Beta = 6.772). Overall, statistically not significant findings are reported for the independent effect of board of directors' demographic characteristics on ROA (low t-values,  $p > 0.05$ ) (Table 7).

**Table 7: Independent Effect of Directors' Demographic Characteristics on Return on Assets (ROA)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value Sig.
		B	Std. Error	Beta		
1	(Constant)	-.002	44.650		.000	1.000
	Age	.811	3.169	.053	.256	.800
	Women on Board	-6.272	25.263	-.053	-.248	.806
	Educational Qualifications	6.772	5.560	.283	1.218	.236
	Board Study Specialization	1.471	1.635	.199	.900	.378
	Board Specialization	-1.297	1.113	-.289	-1.165	.256

The results on the effect of board demographics on Dividend Yield (DY) show positive effect for age of directors, the women on board and educational qualifications while negative effect was reported for, educational qualifications, board members' study specialization, and board specialization post qualifications. Relatively high impact is reported for women directors on the board (Beta = 8.727) while a low negative impact is reported for the board members' study specialization (Beta = - 1.100). There is a statistically significant negative relationship between board study specialization and DY. Overall, statistically not significant findings are reported for the independent effect of the rest of board of directors' demographic characteristics on DY (low t-values,  $p > 0.05$ ) (Table 8).

**Table 8: Independent Effect of Directors' Demographic Characteristics on Dividend Yield (DY)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value Sig.
		B	Std. Error	Beta		
1	(Constant)	-10.239	13.706		-.747	.463
	Age	1.102	.972	.192	1.134	.269
	Women on Board	8.727	7.315	.205	1.193	.245
	Educational Qualifications	3.089	1.690	.331	1.827	.081
	Board Study Specialization	-1.100	.509	-.394	-2.159	.042
	Board Specialization	-.561	.334	-.330	-1.681	.106

With regard to the effect of board demographics on Price-Earnings (P/E) ratio, the study reports positive effect for age of directors and board members' study specialization while negative effect was reported for the women on board, educational qualifications. Relatively high negative impact is reported for women directors on the board (Beta = - 6.329) while a low positive impact is reported for the board members' specialization (Beta = 1.019). Overall, statistically not significant findings are reported for the independent effect of Board of Directors' demographic characteristics on PE Ratio (low t-values,  $p > 0.05$ ) (Table 9).

**Table 9: Independent Effect of Directors' Demographic Characteristics on Price-Earnings (P/E) Ratio**

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value Sig.
		B	Std. Error	Beta		
1	(Constant)	-83.759	74.365		-1.126	.271
	Age	6.633	5.284	.240	1.255	.221
	Women on Board	19.615	39.523	.096	.496	.624
	Educational Qualifications	-9.066	8.958	-.210	-1.012	.322
	Board Study Specialization	3.924	2.751	.294	1.426	.167
	Board Specialization	.774	1.812	.096	.427	.673

## Discussion

The findings of this study posted mixed results compared to other empirical studies that have considered Board of Directors' diversity as part of the study variables in relation to corporate performance elsewhere.

Boards of Directors' attributes were hypothesized to influence corporate performance. Research on the impact of agency theory on Board of Directors' attributes is predominant with studies that have examined the influence of board composition on firm performance. The study reports positive effect for age of directors, educational qualifications and board members' study specialization while negative effect was reported for the women on board and board functional specialization.

Existing literature examining board teams and knowledge-based work groups demonstrates a causal link between team practices or attributes, effectiveness, and outcomes (Payne, et al, 2009). The findings on women as board members compare well with the findings in other countries in the world. In 2010 women made up only 12.5 percent of the members of the corporate boards of FTSE 100 companies in The United Kingdom. This was up from 9.4 percent in 2004 (Davies, 2011). The situation varies from one country to another. In Norway, women represent 32 percent of the board members whereas in the United States of America (USA) they are 15 percent. In Germany women are 13 percent on the corporate boards and in India 5 per cent of the board members are women (McKinsey and Company, 2010).

Australian research into boards of directors is less developed than that in the US and the UK (Kiel and Nicholson, 2003). The Australian literature on corporate governance has been primarily descriptive, with an emphasis on describing the size and composition of boards and the extent to which board interlocks occur. Only Stapledon and Lawrence (1996), and Muth and Donaldson (1998) have attempted to examine the board demographics-firm performance link. From an agency perspective, it can be argued that a larger board is more likely to be vigilant for agency problems simply because a greater number of people will be reviewing management actions (Kiel and Nicholson, 2003). However, agency theorists recognize that there is an upper limit to boards. Jensen (1993) suggests this limit at around eight directors, as any greater number will interfere with group dynamics and inhibit board performance. Alternatively, it can be argued that it is not the size of the board, per se, that is critical, but rather the number of outside members on the board (Dalton, et al., 1999).

A large proportion of the regulatory changes globally have focused on boards of directors. This is not surprising given the critical functions performed by the board and its key committees namely audit, compensation and nominating/governance (Young, 2003). In Kenya the CMA Guidelines (2002) stipulate among others the need for a balance of or mix of skills in the composition of the corporate boards. This includes gender balance because women bring different skills to the boards. Further, according to CMA Act (2002), independent non-executive directors must make up a least one third of corporate boards. The boards are required to establish 'appropriate board committees' including an audit committee. Directors may not hold more than five directorships and must regularly offer themselves up for re-election at annual general meetings (Nganga, Jain and Artivor, 2003).

In a previous study conducted by Balta (2008) on the listed firms in Greece, the average age of board members of quoted firms on Athen Stock Exchange (ASE) was 45.94 years old. The youngest director was 26 years old while the oldest was 72 years old. The mode identified in the age of board members is 33 years old with a standard deviation of 11.81 years. European and American executives seem to be quite a lot older compared to their Greek counterparts. From a resource dependence theory perspective, it can similarly be argued that a larger board brings greater opportunity for more links and hence access to resources. Resource dependence theory maintains that the board is an essential link between the firm and the external resources that it needs to maximise performance (Pfeffer, 1972, 1973; Pfeffer and Salancik, 1978; Zald, 1969). From a stewardship theory perspective, it is the ratio of inside to outside directors that is of relevance, since inside directors can bring superior information to the board on decisions.

In measuring corporate performance, accounting based measures of performance were used. Developed as a reporting mechanism, they represent the impact of many factors including the past successes of advice given from the board to the management team and are the traditional mainstay of corporate performance measures. Examples used in the governance literature include return on assets (Kiel and Nicholson, 2003), earnings per share (Pearce and Zahra, 1991), and return on equity (Baysinger and Butler, 1985). In general, the major concern with accounting measures is that they are historical and so lag the actual actions that bring about the results. ROA, ROE, PE and DY were included as measures of corporate performance as this is a common measure used in the literature. Contrary to expectations, the board size had a positive effect on both performance variables. While it is statistically insignificant in the case of Dividends Yield (DY) and Price-Earnings (PE) ratio, it is significant for Return on Assets (ROA) and Return on Equity (ROE).

The results corroborate other studies that suggest that having a larger board size that consist of women board members enhances the performance of a firm because they have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate. In this context, we could presume that in the wake of privatization, political appointments to corporate boards (in some firms) making them large may be waning and that board members are largely appointed on the basis of merit and therefore bring their expertise on board to enhance firm performance.

### ***Conclusion***

This study's main focus was to examine the relationships between board of directors' diversity and corporate performance. Findings show that statistically significant positive relationship exists between: ROA and age of board members, women on the board, educational qualifications and board member professional specialization; DY and age of board members and educational qualifications; ROE and age of board members and board study specialization; PE and age, gender, board member study specialization. The findings further show that statistically significant negative relationship exists between: DY and women on the board and board study specialization; ROE and women on board and educational qualifications.

In conclusion, it can be stated that board attributes show a relationship with firm performance. This relationship is moderated by board involvement in strategic decision-making and firm characteristics and so the context of the firms plays an important role in deciding whether a particular characteristic is beneficial to firms in the selection or nomination of board members to provide strategic leadership to the organizations. Therefore, the study indicates the critical importance of the constitution of boards of directors through appointments for the effective performance of firms.

### ***Implications***

This study's findings have theoretical, managerial as well as methodological implications. Some theoretical implications emerge from this research. First, the study contributes to understanding of board attributes and corporate performance link by examining both the traditional variables such as board size, board meetings and other organizational attributes such as gender diversity and competence variables represented by women. Second, to the best of the current researchers' knowledge, this is the first study to examine the impact of women board members on firm performance in Kenya. The findings provide evidence that gender diversity in Kenyan boards does contribute to firm performance, though it is negated as the board size increases. Perhaps women directors can bring their view points more effectively in a smaller board, thereby making effective contribution, rather than in a larger board. It seems that in larger boards, women are inhibited or made ineffective by members of other gender. This may be explained by the fact that in larger boards, it is likely that there is variety of skills which the women folk making their contributions like anyone else not be recognized.

For practitioners, the study highlights that the need for more balanced boards consisting of women as they are likely to bring in more experiences for the benefit of firms they represent. Another important factor is the number of board members contributions in decision-making and policy formulation. The need to hold meetings should be informed by the importance of the agenda and the urgency of dispensing with it.

Methodologically, this study should serve as a foundation for future research concerning these intermediate links and encourage other researchers to explore other possible intermediate links to firm performance.

### ***Limitations and Suggestions for Further Research***

Notwithstanding of the above findings, the study has some limitations. No research can be comprehensive and this research addresses only some elements of corporate governance and is restricted to listed firms in Kenya. Some of the limitations of this study are presented here. First, the main limitation of the study is that the data was collected through publicly available data sources such as annual reports another databases. If there were any problems relating to data disclosures or professional accounting practices, then that would limit the validity of the findings.

Second, the entire population comprised of only 47 firms, which is relatively small. Due to data problems, the final set comprised of 160 firm-year observations for 40 firms. Nonetheless, the size of the sample was limited by the number of firms listed on the Nairobi Stock Exchange by year 2010.

Also the external validity of the current study may be in question, since the data belongs to only Kenyan firms which are few compared to those listed in other stock exchanges in the world.

Future research should address the limitations of this study. Several extensions to this study are possible. First, the study focused only on certain set of board attributes for their impact on firm performance. The starting point is to consider directors' functional area knowledge. Finally, the study has examined the impact of board variables on firm performance, as measured by return on assets, return on equity, dividend yield and Price-Earnings. It may be useful to re-examine this further using other market based performance variables such as Tobin's  $Q$  and compare the relationship (Bathula, 2008). This may be particularly useful in a fluctuating market and how firms change the board characteristics in response to change in firm performance.

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