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Influence of Board Demographics on Performance of Commercial State Enterprises

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Abstract:

This study sought to assess the influence of board demographics on the performance of commercial state owned enterprises in Kenya. The population of the study was 33 commercial state owned enterprises that had participated in performance contracting over the five year period 2010 to 2015 in Kenya. A sample of 24 commercial state owned corporation was selected. The main instrument of primary data collection was self-administered semi-structured questionnaire, administered on a stratified sample comprising senior managers. Secondary data was collected from the Commercial State Corporations Advisory Committee Secretariat as well as from company secretaries of selected corporations. Descriptive statistics of frequency, percentage were calculated. Regression analysis established that education level had statistically significant influence on performance of commercial state owned enterprises in Kenya. However, age, tenure and public service background did not statistically significantly influence performance of commercial state owned enterprises. The study recommends further studies on how education level affects the board decision making and influence on commercial state owned enterprises.

Keywords: Board demographics, performance, age, education level

1. Introduction

Corporate governance has emerged as an area of major focus in research over the last two decades owing to corporate failure and malfeasance that has attracted both national and global attention. This interest in the public sector has been manifested in efforts by governments to develop corporate governance codes and standards for public owned entities (Barako, 2007; Kiseru, 2012; Michira, 2012; Omwenga, 2012). The contribution of state-owned enterprises to the Kenyan economy is significant in terms of both delivering products and services, and creating employment.

The characteristics of the board include size, independence, diligence, diversity (age, gender, nationality, expertise, educational and functional background), and committee structure (Anderson et al., 2004). The share of the corporations in the GDP is well above 10% while they also account for almost 20% in wage employment (KNBS, 2006). Despite this contribution, the performance of the enterprises remains suboptimal (World Bank, 2007; Republic of Kenya, 2013). A World Bank's (2007) study on performance of commercial SOE in sub-Saharan Africa that examined the links between SOE and the rest of the economy applying indicators such as factor productivity growth, growth in utilization of inputs and revenue contribution to government established that the performance of SOE was worse than that of private sector. Such poor performance has led to a drain on the exchequer and perhaps explains the pressure for privatization and replication of corporate governance principles applied in private sector (Center for Governance and Development, 2005).

One of the issues of interest in the governance of state corporations has been composition and functionality of boards. The board of directors, as an internal governance mechanism has been appreciated as one of the pillars of corporate governance (Hermalin & Weisbach, 2003; Namoga, 2011). The structure of the board and demographics of the board have been considered as critical elements in the determination of performance of the boards themselves and the organization as a whole (Ayuso, Rodriguez, Garcia and Arino, 2007). Invariably, these relationships are not simplistic and have attracted studies applying different approaches.

Prior studies on boards demographics have adopted two methodological approaches- direct and process approach (Namoga, 2011). The direct approach assumes that key board demographics such as age and tenure have a direct effect on performance of organizations (Daily & Dalton, 1994) while the process approach proffers the collection and analysis of data on board processes to improve understanding of what boards do and behave and not just how they should look (Balta, 2008, Namoga, 2011; Zahra & Peace, 1989). There is a prevailing assumption that effective board demographic is a requirement for good organizational performance as it positively influences organization performance (Ongore, 2008; Kiel & Nicholson, 2003). The capacity of boards to perform is likely to be influenced by board demographics (Daily & Dalton, 1992; Fama & Jensen, 1983; Hermalin & Weisbach, 2003; Kiel & Nicholson, 2003).

In terms of organizational performance there exist literature on board demographics and performance studies has mainly relied on accounting based financial indicators, market based indicators or a combination of both. Van Ness, Miesing and Kang (2009) in a meta-analytical review found that corporate performance has largely been measured using one category of measurement such as accounting, market or Tobin's q and that an application of two or three measures was seldom. In SOEs studies, performance may be best captured by examination of efficiency and effectiveness indicators (Ochieng, 2016). The main objective of this study was to establish the effect of board demographics on organization performance of state corporations.

1.1. Statement of the Problem

Board demographics have been considered to have a significant influence on performance of organizations (Koech, 2018). Commercial State owned enterprises contribute significantly to the Kenyan economy in terms of not only offering products and service to the citizens of Kenya but also by offering employment (Koigi, 2011). These enterprises account for about 15% of the wage employment in the public sector (Kenya National Bureau of Statistics, 2006) and approximately 11% of the Kenya's GDP (Centre for Governance and Development, 2005). Despite these critical investments, the commercial state of governance of state owned enterprises and their performance has been decried as suboptimal (Mwaura, 2007; World Bank, 2007). There have been attempts to reform the state corporations with a focus on changing the structure and composition of the boards and indeed prescribing certain demographic composition aspects in codes. It is crucial that the impacts of such changes in performance of the state corporations is studied.

1.2. Research Questions

- To find out the effect of age diversity on performance of Commercial State Owned Enterprises (SOEs) in Kenya
- To establish the effect of education diversity on performance of Commercial State Owned Enterprises in Kenya
- To determine the effect of board tenure on performance of Commercial state owned enterprises in Kenya
- To find out the effect of directors background in public service on performance of Commercial state owned enterprises in Kenya

2. Literature Review

This study considered the following theories agency, stakeholder and managerial hegemony. Agency theory (Berle & Means, 1932; Jensen & Meckling, 1976; Fama & Jensen, 1983) stresses on the board's monitoring and control function. Agency relates to the relationship between principals and agents, and specifically how the principals (owners) ensure that agents (management) act in the best interests of the principals bearing in mind that principals and agents might have incongruous goals and that ordinarily agents will possess more information than the principals. The agency theory asserts that most businesses operate under conditions of incomplete information and uncertainty. Such conditions give rise to two agency problems- adverse selection and moral hazard.

Stakeholder theory argues that management has duties and responsibilities to constituencies other than shareholders, which include duties to employees, suppliers, customers, local community and general public (Donaldson, 1990; Donaldson & Davis, 1991; Hills & Jones, 1992). As such management has organization objectives to pursue beyond the owners main interest of generation of maximum returns and increasing the value of the firm. The main difficulties with this perspective is the challenge in balancing stakeholders objectives and making the necessary trade-offs in practice and thus granting management excuses to justify self-interests. Indeed, according to Jensen (2001), these could have been the causes of the early demise of corporate governance philosophy of state owned enterprises and the failure of the socialist and communist experiment in the last century. In terms of board of directors, the stakeholder theory views boards as the means through which organizations are able to take into account the legitimate interests of various individuals and groups of stakeholders who can affect (or be affected by) the undertakings of the organization (Donaldson & Preston, 1995; Freeman, 1999).

Proponents of the managerial hegemony theory perceive boards of directors as mere statutory additions with minimal / passive role in the process of directing corporations (Kosnik, 1987). As such they consider boards to be management dominated (Pfeffer, 1972, p. 219) and ineffective in dealing with the agency problems arising from conflicting interests between owners and management of organizations. This theory views boards of directors as just rubber stamps of management decisions and argues that management carefully select directors, who are inferior to them in skills and expertise and can rubber stamp their decisions (Herman, 1981). The preference of management in this case is external directors who devote limited time to the organization and thus have little knowledge on the activities of the organization and can hardly challenge management decisions.

Recent studies have shown varying result on the relationship between board demographics and performance. Oluoch (2014) studied demographic diversity in top management team, corporate voluntary disclosure, discretionary accounting choices and financial reporting quality in commercial state corporations in Kenya. Utilizing secondary data for a ten year period and longitudinal analysis, the study examined demographics of gender, education, tenure, functional background and age. The results revealed demographic diversity of TMTs in commercial corporations in Kenya influenced the level of financial reporting quality, while education and gender were inversely related to financial reporting quality. In an earlier study by Hillman and Cannella (2007) on the contribution of women in corporate boards, it was established that organization size, industry type, firm diversification strategy and linkages through networks had a significant effect on the likelihood of women representation on boards of directors. Similarly, Bathula (2008) in a study focused on board characteristics such as women in boards, directors with PhDs, directors ownership and CEO duality and their effects on

performance of listed companies in New Zealand established that there were significant effects but highlighted the need to examine the effects in developing countries set up Prior empirical studies on women participation in boards and firm performance have shown varying results with some such as Siciliano (1996) showing positive relationship while Rose (2007) and Balta (2008) showed no significant relationship and Letting (2011) revealing a negative relationship. Other directors' characteristics of interest are their knowledge and education, with a lot of prior studies focusing on the contribution of financial knowledge (Agrawal & Chandha, 2005). The contribution of board members is through committees and the audit committee is considered one of the most critical committees in shaping financial planning and keeping a check on internal controls.

2.1. Conceptual Framework

The relationship between the independent variables (Age, Tenure, Education level and political background) and the dependent variable (performance) is explained by the conceptual framework (Figure 1) below.

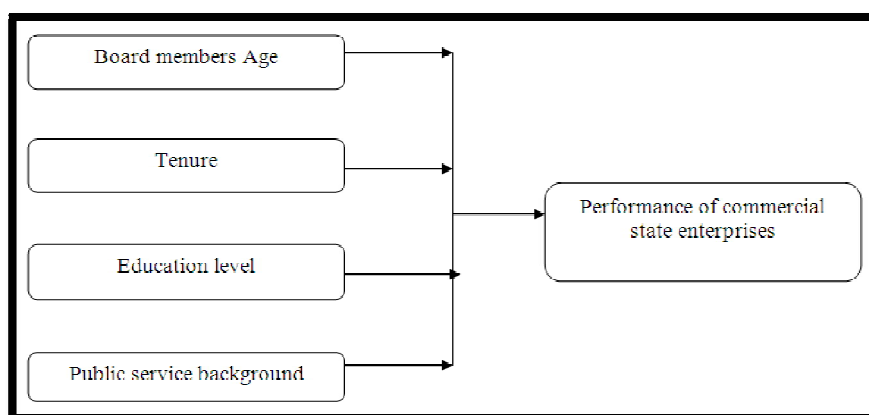


Figure 1

3. Methodology

The study utilized descriptive cross sectional survey design. Cross sectional design takes a snapshot of a population at a point in time and thus allowing conclusions about phenomena across a wide population to be drawn through data collection and testing of relationships (Cooper & Schindler, 2010). There are 33 state corporations in commercial (Taskforce on Corporations Reforms 2013). The sample size was determined using Mugenda & Mugenda (2003) sampling frame which recommends the appropriate sample for any given population. Given the population above and in accordance with Mugenda & Mugenda (2003), formula the sample size of the study was 24.

The following formula was used to calculate the sample size:

$$n = (z^2 p q) / d^2$$

Where:

n = is the desired sample size when the target population is > 10,000.

z = standardized normal deviations at a confidence level of 95% which is 1.96.

p = the proportion in the target population that assumes the characteristics being sought.

q = 1-P, which in this case will be 1- 50% (0.5).

d = Significance level of the measure, that is at 92.15% confidence level the significance level is 0.1021 Using the above formulae, the number of companies to be sampled was calculated as below.

$$n = (1.96^2 \times 0.5 \times 0.5) / (0.1021)^2 = 92$$

Target population in this study is less than 10,000, thus the sample of 92 was adjusted using the formula below (Mugenda & Mugenda, 2003).

$nf = n / (1 + n/N)$ where nf is the desired sample size when sample size is less than 10,000 and n is the sample size when the target population is more than 10,000.

N is the target population size.

$$nf = n / (1 + n/N) = 92 / (1 + 92/33) = 24$$

Category	Sampling Frame	Sample
Commercial /Manufacturing	33	24

Table 1: Sample Size

3.1. Data Collection Procedure

The study utilized both primary and secondary data. Primary data based on issues derived from review of extant literature as well interviews with experts, was collected using a semi structured questionnaire. The questionnaire was structured to gather information on board demographics and performance of commercial state enterprises. Data collected was sorted, coded then entered and analyzed using IBM Statistical Package for the Social Sciences (SPSS) version 23.

4. Findings and Discussions

The study examined data on board demographic characteristics including age, tenure, education and public service background. The study revealed that the age of most board members of the commercial state corporations surveyed was between 40-50 years (37.3%). Followed by 23.6% of the board members who were between 30-49 years, 25.1% of the board members were between 50- 60 years, 11% of the board members were between 60- 70 years, 1.9% were above 70 years and lastly, 1.1% were below 30 years.

The findings of the study revealed that 58.4% of the board members had served for tenure of between 2 and 3 years, 30.6% of the board members had tenure of less than 1 year while 11% of the board members had served for over 3 years. The results on education background indicate that only a paltry 7.7 % of the board members had PhD qualifications with most board members 58.0% having at least a Bachelor and 34.3% having a Master degree qualification. The study noted that majority of the board members that is 56.2% had public service background while 43.8% did not have public service background.

4.1. Model Summary

The study findings revealed that the model summary that for demographic on performance in the commercial state enterprises had R2 value of 0.289 which indicates that 28.9% of performance is attributed to combination of the independent factors that relate to age, tenure, education and political background investigated in this study.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.537 ^a	.289	.139	5.06132

Table 2: Sample Size

a. Predictors: (Constant), Public Service Background, Tenure, Education, Age

4.2. Analysis for Variance

The ANOVA analysis is intended to investigate whether the variation in the independent variables explains the observed variance in the outcome in this study. The ANOVA results indicate that the independent variables was insignificant since the (F=1.927) had a p value of 0.147 which was more than 0.05. The analysis in the table below shows that the coefficient of determination is the percentage variation in the dependent variable being explained by the changes in the independent variables.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	197.491	4	49.373	1.927	.147 ^b
	Residual	486.722	19	25.617		
	Total	684.213	23			

Table 3

a. Dependent Variable: Performance

b. Predictors: (Constant), Public service background, Tenure, Education, Age

4.3. Regression Analysis

The study reports not statistically significant for board demographics and performance as indicated by low t values. From the table it can be observed that the demographic factors (age, education political background) were statistically insignificant in determining the performance of commercial state-owned enterprises with the p values less than 0.05. From the regression equation, holding (Age, resource Tenure, Education and Public service background) constant at zero, the performance of will be 77.696. A one unit change in age results to 0.602 units increase in performance, a one unit change in tenure results to 0.197 units increase in performance. A one unit change in education results to 2.657 units increase in performance. A one unit change in public service background results to 0.267 units increase in performance. This shows that there is a positive relationship between (age, tenure, education and public service background) and performance.

The result indicates that education had the highest beta of 2.657 has the largest influence on performance. The second most important variable was age with a beta of 0.602. The third important predictor is public service background with a beta of 0.267. The least important predictor is tenure with a beta of 0.197. The t-test statistic shows that all the B coefficients of are not significant (since $p > 0.05$).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	77.696	7.328		10.603	.000
	Age	.602	1.906	.069	.316	.756
	Tenure	.197	.959	.041	.206	.839
	Education	2.657	1.141	0.496	2.329	.031
	Public service Background	.267	.737	.072	.362	.722

Table 4

a. Dependent Variable: Performance

5. Conclusion

From the findings of the study, it can be concluded that age of the board members does not significantly influence the performance of commercial state owned enterprises. The study concludes that tenure of board members does not significantly influence performance of state commercial state enterprises. The study concludes that the level of education significantly influence the performance of commercial state owned enterprises. Lastly the study concludes that the prior public service background does not significantly influence the performance of commercial state enterprises. This implied that the fact most of the board members were career public servants, did not affect the performance of the commercial state enterprises

6. Recommendations

Based on the findings, the recommends that the commercial state enterprises should appoint board members with a high education level. Appointing board members with a higher level of education was important as it will influence the decisions making and thus can have a significant influence on performance. The commercial state enterprises can look onto other factors such as management background to influence on the performance of commercial state enterprises. Future research can delve into the modalities in which education level influences the decision making processes at the boards and therefore better appreciate the influence of education on driving superior performance of state corporations.

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