www.iiste.org

The Intervening Influence of Enterprise Risk Management on the Relationship between Board Practices and Performance of Government Owned Entities in Kenya

Fredrick Otieno Oyugi, PhD student Department of Finance & Accounting, Faculty of Business and Management Science, Email: fredoyugi.fo@gmail.com, University of Nairobi

> Prof. Cyrus Iraya Chairman, Department of Finance & Accounting, Faculty of Business and Management Science, University of Nairobi

Dr. Zipporah Onsomu Senior Lecturer, Department of Finance & Accounting, Faculty of Business and Management Science, University of Nairobi

Dr. Stephen Odock Senior Lecturer, Department of Management Science and Project Planning, Faculty of Business and Management Science, University of Nairobi

Abstract

The enterprise risk management is an integrated approach of risk management involving the executive management and board of directors including employees in identification, assessment, reporting and monitoring of strategic, operational, and financial risks across the entire organization. This paper seeks to establish intervening influence of enterprise risk management in the relationship between board practices and performance. The data was sought from all 234 government-owned entities operating in Kenya. 153 GOEs returned properly filled up questionnaires. Secondary data on performance were derived from performance contracting reports. The data was analyzed using AMOS graphics to obtain CB-SEM paths with the aid of IBM SPSS version 26. The conceptual model was built on three latent variables, namely board practices, enterprise risk management and performance. The findings indicated that direct impact of board practices was positive and significant at 60%. The study further established that enterprise risk management significantly positively impacted performance by 26.8%. However, presence by enterprise risk management framework as an intervening variable reduces impact of board practices to performance from 0.600 to 0.268, although it remains positive and significant. Hence despite presence of enterprise risk management, indirect influence of board practices on performance remains significant indicating partial intervention. The enterprise risk management was therefore found to have significant effect as an intervenor on the relationship between board practices and performance. It is therefore important for government owned entities to prioritize implementation of an integrated system of oversight that includes board practices and enterprise risk management framework in order to enhance their overall performance.

Keywords: Strategic, Enterprise Risk Management, Conceptual model, Board practices, Performance, Framework DOI: 10.7176/EJBM/15-19-09

Publication date: December 31st 2023

INTRODUCTION

Background to the Study

The performance of government-owned entities (GOEs) has become a matter of public concern, particularly in light of corporate scandals, resource misuse, and corruption, emphasizing the critical role of the board of directors (Oruke, Iraya, Omoro & Otieno, 2021). While some studies suggest that good board practices can significantly enhance oversight and performance in state-owned enterprises (Mongeri, 2021; Heo, 2018), others have highlighted the potential complexities, indicating that the relationship between board practices and performance may not always be straightforward (Andres, Schwartz & Guash, 2013). For instance, Curi, Gedvillas, and Lozanovivas (2016) found that certain board practices, such as the quality of directors and strategic planning, could have a negative impact on performance, while Menozzi, Urtiaga, and Vannoni (2010) observed negative relationships between board composition and performance. These conflicting findings highlight the need for further research in this area. Simultaneously, Enterprise Risk Management (ERM) has been recognized as a comprehensive approach to mitigating risks within organizations, involving the participation of the executive management, board of directors, and employees in identifying, assessing, reporting, and monitoring various risks (Sobel & Reding, 2004).

Although the impact of ERM on firm performance has yielded mixed results, the potential for effective board practices to positively influence ERM and subsequently enhance an entity's performance has been suggested (Tseng, 2007). With limited research on the relationship between ERM and the performance of government-owned entities, particularly in the context of Kenya, there is a clear necessity for a comprehensive study to explore the potential relationships amongst ERM, board practices, and the performance of government-owned entities, thus providing beneficial knowledge for improved risk management strategies and enhanced performance in this sector (Yegon, 2015; Florio & Leoni, 2016).

Statement of the Problem

The government owned entities have been a subject of growing public debate due to their poor performance and corporate scandals. The role of the board has come into sharp focus since they are responsible for governance and oversight of GOEs. Hence their underperformance can be attributed to lack of effective board audit committee, gender equality, accountability, transparency and disclosure practices (GoK, 2013). The conceptual issues of board, internal control, enterprise risk management practices and their effects on firm performance and management have assumed significant importance on discussion of matters on effective corporate governance framework (Nasir, 2017).

In Kenya, GOEs contribution to the economy is immense and currently in terms of internally generated consolidated revenue stands at Kshs.1070 billion in 2019/2020 which is about 11% of GDP. They are also one of the largest employers based on numbers and formal wage employment expenditure (GoK, 2020). To curb loss of resources and improve performance, the government introduced several initiatives which include establishment of mandatory audit committees, introduction of risk management framework, performance contracting and corporate governance code (Mwangi, 2018). Despite the interventions, several GOEs have continued to perform poorly due to poor corporate governance, ineffective internal controls and ERM practices leading to inefficient utilization of resources, high corruption levels and poor performance. Examples include Kenya Meat Commission, South Nyanza Sugar Company, East African Portland Cement and Chemelil Sugar Company Limited, National Social Security Fund (GoK, 2020). The question whether good board practices lead to performance improvement has continued to elicit a lot of interest among academicians and researchers. There is need for studies to be done to establish the relationship between board practices and organizational performance.

Methodologically, majority of studies reviewed focused on direct relationship between board practices and performance. Examples include Nguyen (2015) and Ongore, Peter, Ogutu and Bosire (2015). The studies used regression models and correlation to conduct data analysis. These tools suffer from weaknesses arising from data assumptions. Ariffin and Kassim (2011) employed correlation analysis only to determine relationship between Basel banking supervision code practices and performance. Examples of studies which used multiple regression analysis include Laimaru (2018), Oruke et al (2020), Otieno, Ogutu and Pokhariyal (2019). Kobia and Mohamed (2006) investigated the effects of implementation of performance contracting in Kenyan public service and state corporations using non-quantitative approach. The study to employ covariance-based structural equation modeling (CB-SEM) to conduct data analysis. The tool is more robust, comprehensive, and flexible in testing hypotheses. Based on the studies reviewed and gaps identified, study sought to answer research question: Does enterprise risk management have significant intervening influence on the relationship between board practices and performance.

Purpose of the Study

To find out the intervening influence of enterprise risk management on the relationship between board practices and performance of government owned entities in Kenya

Specific Objectives

To examine the intervening influence of enterprise risk management on the relationship between board practices and performance of government owned entities in Kenya

Significance of the Study

The study's significance lies in its potential to inform policymakers about the benefits of implementing effective board practices and enterprise risk management framework contributing to improved service delivery and performance in government-owned entities (GOEs). The research advances existing theoretical frameworks, affirming and challenging propositions within various governance theories, while establishing connections between board practices, enterprise risk management (ERM) and performance of government owned entities.

The study's implications extend to academia, providing valuable insights for researchers and students in the field of corporate governance. Management practitioners can benefit from the study's recommendations on adopting specific board practices and enterprise risk management to enhance organizational performance within GOEs. The research also identifies areas for further exploration, encouraging scholars to delve deeper into the complexities of corporate governance and performance evaluation. Furthermore, the study's findings have societal

and governmental implications, aiding prospective investors in making informed decisions and empowering the society to scrutinize GOEs' management practices. Additionally, the research can guide governments in identifying key investment sectors and improving governance frameworks in government-owned entities. Its potential for replication in other African countries further underscores its significance in the context of broader corporate governance research.

Scope of the Study

The study focused on examining the intervening influence of enterprise risk management on the relationship between board practices and performance of government owned entities in Kenya. The study targeted 234 government owned entities.

LITERATURE REVIEW

Empirical Literature

Board Practices and Performance

Oruke, Iraya, Omoro and Otieno (2020) examined the relationship between board structure and firm performance in SOEs in Kenya. The study established that board size practices had positive significant positive effect on firm performance. On the contrary board independence was found to affect performance negatively. Firm performance was measured by ROA indicator. The study focused on 25 SOEs in the commercial and manufacturing categories in Kenya covering period 2014 to 2016. It employed panel data regression for analysis. Results for control variables for firm size and age indicated positive significant relationship. The findings on the relationships between board structure practices and performance were contradictory, hence the need for the proposed study to settle the inconsistencies. From the study, methodological and population gaps were identified, and proposed study will seek to address them by employing a more robust data analysis tool including targeting all GOEs.

Ali (2016) found significant positive association between ownership, director's education, experience and company performance. This further buttress resource dependency theory which advocates for board experience and diversity and is good since it avails the company with skills required and helps to attract resources needed. Ongeti, (2014) found no significant relationship among company resources to performance. Company governance standards association with performance was weak. Michelberger (2017) found negative relationship between governance standards with performance of companies. Nguyen (2015) investigated effects of company governance standards on performance using moment's estimator on two samples for Vietnam and Singapore stock market listed companies. Board size, ownership structures and diversity of gender were the indicators for corporate governance standards. Performance was measured using Tobin's Q ratio. In Singapore governance relationship was significantly positive.

Heo (2018) examined the effect of board size, non-executive directors, and CEO duality role on performance of state-owned enterprises in the Republic of South Korea. The study established board practices on transparency and disclosure significantly positively affected performance as measured by ROA. The study employed census survey research design and included all 320 SOEs. The data was analyzed using multiple regression. The board practices on independent directors were found to negatively affect performance indicators of customer satisfaction levels contrary to theoretical prediction. The study covered one-year period which may not be adequate since board governance practices take time to have any effect. The proposed study focused on state-owned enterprises (SOEs) in Kenya, thereby closing the contextual gap. The study employed the use of the CB-SEM tool for data analysis to address the methodological gap. Additionally, the proposed study sought to close the conceptual and conflicting gaps that had been identified.

Board Practices, Enterprise Risk Management and Performance

Otieno, Ogutu and Pokhariyal (2019) examined the relationship amongst ERM, executive management composition, environment and firm performance in government owned entities. The study found that ERM practices significantly affected organizational performance in GOEs of Kenya. Multiple regression was used for data analysis. Sample comprised of 92 GOEs. The data was collected through questionnaires. The study was based on sample of total population of 187 entities. The faced limitation due to slow adoption of ERM in government owned entities. The proposed study will address the research gaps by targeting the entire population of GOEs and employing the use of a more robust CB-SEM tool to conduct data analysis.

Nocco and Stulz (2006) established ERM practices enables the business to foresee threats, avoiding risks and taking advantage of opportunities. The company comes up with risk appetite which stipulates the maximum exposure its ready to take in pursuit of its business objectives. With the risk management framework in place the company is able to mobilize capital and resources required to implement its strategy and achieve its business plan. Kinyua (2016) found management of risk positively related with performance. Indicators of company performance were Net profit, EPS and ROE. This agrees with proposition advanced by agency theory which stipulates managers

will work to create value for the owners when they are forced and monitored. ERM is part of the monitoring mechanism and extra cost incurred by the owners to ensure that the managers take decisions that will create value for the owners. Ariffin and Kassim, (2011) concluded that financial institutions with effective risks management policies reported higher performance. Study used risk measurement, risk mitigation, monitoring and management environment as indicators of risk management practices. ROA and ROE were the financial performance indicators. Study focused on 8 Islamic banks covering 3 years period. Primary data sourced through survey questionnaire. Secondary data from annual reports utilized in study. Sample is small and not representative of population of banking sector in Malaysia.

Girangwa, Rono and Mose (2020) investigated influence by ERM practices to performance in government owned entities operating in Kenya. The study established that ERM practices positively influenced organizational performance. The independent variables comprised of ERM structure, processes, and practices. Organizational performance was measured using single composite index. Study employed cross sectional survey targeting all GOEs in Kenya. Multiple regression analysis was utilized to analyze the data. It considered only ERM practices variables and operationalized performance using composite index score. The study considered board practices and performance as the latent variables. Current study examined the impact of intervening internal control and ERM practices variables.

Aebi, Sabato and Schmid (2012) established that ERM practices negatively affected performance. The study found firms where CRO reports directly to board, risk management practices positively significantly affected performance. Sample comprised of all the banks whose information was available in Compustat North America database during the year 2006. The study used multiple regression model to conduct data analysis. The study considered only secondary data collected over one year which has some limitations hence making it difficult to generalize findings. The study considered intervening variables of internal controls and ERM practices.

Theoretical Framework

Agency Theory

The theory originally suggested by Ross (1973) relates to interaction amongst two parties, one party known as an agent while the other principal. Jensen and Meckling (1976) argued that there is existence of principal to agent relationship where the shareholders engage managers to manage their investments professionally and eventually create wealth for them. The company ownership is separated from control which brings about the problem of conflict of interest. The theory advocates the introduction of good board practices to ensure managers act in line with owner's interest. In the study, the government are the owners of the entities, hence the principals, while the board and management constitute the agents. The theory has been criticized for leaving out other players in the running and control of the company. The decisions made may therefore create wealth for owners but leave out other stakeholder's interests (Grundei, 2008). Agency theory is relevant since it predicts enhanced firm performance if good board practices are adopted through effective board oversight that ensures accountability, transparency and disclosure mechanism, gender equality and audit committee.

Resource Dependency Theory

The resource dependency theory was established by Pfeffer (1972) suggests that a firm is an entity which has close interconnections with the environmental conditions and factors such as human, capital and information resources to sustain its operations. The theory therefore implies that directors play a linking role between the company to much needed resources from outside (Pfeffer, 1973). The directors bring with them resources that are necessary for a firm's success which include skills, information, independence, valuable business contacts, credibility, funds, and good reputation (Hillman, Withers & Collins, 2009). Boards of directors are instruments upon which a company's exchange information and acquires resources from other companies. Firms depend on each other and surrounding economies to sustain their operations and survival (Ornstein, 1984). The theory has a narrow focus on organizational power, structures, and processes in an entity with the soul aim of gaining control of resources. It fails to consider other power structures related to resources and only focusses on major resources ignoring smaller critical ones like human skills. The theory completely ignores values and interests of management and owners (Zajac, 1988). The resource dependency theory is relevant since it deals with the critical linking role of the board to the environment and community. Therefore, the theory predicts improved performance if board practices are geared towards ensuring accountability, gender equality, audit committee effectiveness, transparency and disclosure. The theory favors independent board members who are key in providing the linkage to various stakeholders including the society. The implementation of effective internal controls and ERM practices, the board will ensure the various stakeholders including the society will receive timely and reliable information about the company operations.



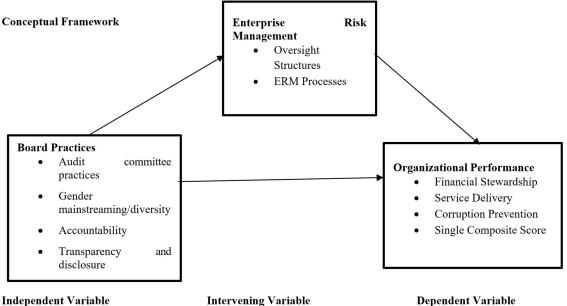


Figure 1 Conceptual Framework

Intervening Variable

Dependent Variable

RESEARCH METHODOLOGY

Research Design

The research design includes the conceptual structure detailing how the study is to be conducted. The research designs are broadly classified as exploratory, descriptive, and explanatory. Exploratory research design is applied in new inquiry to find magnitude of a certain phenomenon, problem or behavior (Battarcherjee, 2012). Descriptive research is mainly based on seeking to provide an accurate picture of persons, situations or events during a certain period. Explanatory research designs relate to studies that seek to determine causal effects amongst variables (Saunders, Lewis & Thornhill, 2009). The research adopted descriptive cross-sectional survey design. The design was suited due to purpose, time for data collection and scope of the study

Location of the Study

The location of this study is Kenya and targeted the Government Owned Enterprises. The population of the study was 234 Government Owned Enterprises.

Size and Sampling Frame

All the 234 Government Owned Enterprises were used as sample for the purpose of this study. To avoid sampling error, the researcher used census for this study since it provides a true measure of the population.

Study Variables

Board practices had a total of four sub constructs each measured with 4 practices hence totaling to sixteen practices categorized under audit committee practices; gender mainstreaming, accountability as well as transparency and disclosure. Enterprise Risk Management had two subconstructs; ERM oversight structures and ERM Processes. Organizational performance had four sub constructs categorized into financial stewardship, service delivery, corruption prevention and composite score. The study therefore had 10 sub constructs in total.

Reliability Tests

Data reliability refers to the extent of consistency of the variables' indicators to their measurement internally (Koufteros, 1999). The test of reliability was done using Cronbach's alpha with measures of reliability ranging from 0 to 1. Computed values of 0.6 to 0.7 and above, shows internal consistency of the constructs used together with the instrument is deemed reliable (Tavakol & Dennick, 2011).

Cronbach's Alpha was used to test the reliability of the proposed constructs. The findings indicated that, board audit practices had a coefficient of 0.833, gender mainstreaming practices had a coefficient of 0.690, board accountability had a coefficient of 0.841, transparency and disclosure had a coefficient of 0.867, ERM structures had a coefficient of 0.915 and ERM processes had a coefficient of 0.912. All constructs depicted that the value of Cronbach's Alpha was approximately equal to or greater than 0.700 and thus, the study constructs were reliable. This is presented in the table 1 below.

Table 1 Reliability Test

Construct	Cronbach's Alpha	Comments
Board Audit Practices	0.833	Reliable
Gender Mainstreaming Practices	0.690	Reliable
Board Accountability	0.841	Reliable
Transparency and Disclosure	0.867	Reliable
ERM Structures	0.915	Reliable
ERM Processes	0.912	Reliable

Validity Tests

As suggested by Streiner (2003), the item to total correlation values for the indicators were all greater than 0.3, hence the indicators were retained for further study. The p-values for Bartlett's test were assessed in the test to confirm sphericity, which is estimated whether the items are uncorrelated. Kaiser (1974) advised that KMO values be greater than 0.6 to ensure sample adequacy and allow for factor analysis. According to Bartlett (1954), the Bartlett's sphericity must have significant P-values. An analysis of all factors was performed, and those with loadings greater than 0.4 were maintained for future testing.

Construct and Sub Constructs	KMO	Approximate. Chi-Square	df	Sig.
Board Practices				
Audit Committee Practices	0.700	333.851	6	0.000
Gender Mainstreaming practices	0.758	203.220	6	0.000
Board Accountability	0.812	261.353	6	0.000
Transparency and Disclosure	0.814	327.696	6	0.000
Enterprise Risk Management				
Structures to Oversee ERM	0.814	438.502	6	0.000
Effectiveness of ERM Process	0.801	552.816	6	0.000

Table 2 Kaiser-Meyer-Olkin and Bartlett's Tests

The results presented in Table 2 demonstrate that the p-values for Bartlett's test were significant for all subconstructs, as recommended by Bartlett (1954). This indicates that the data is appropriate for exploratory factor analysis (EFA). Additionally, the Kaiser-Meyer-Olkin (KMO) values for all sub-constructs exceeded 0.6, as suggested by Kaiser (1974), indicating that the sample size was adequate for EFA. The study performed EFA analyses for each variable. The confirmatory factor analysis (CFA) was conducted after performing CB-SEM to verify the adequacy of the model fitness. These statistical tests provide evidence that the sample data is suitable for further analysis and that the study has taken necessary steps to ensure the validity and reliability of their findings.

Descriptive Statistics for Board Practices

Audit Committee Practices

In the study, board audit committee practices were measured using a set of four practices, as presented in Table 3. Participants were asked to rate these practices using a five-point Likert scale ranging from 1 to 5, with 1 indicating "Not at all" and 5 indicating "Very large extent". This scale allowed the participants to express their level of agreement or disagreement with each practice. However, the dependent variables in this study were derived from performance contracting reports.

Cronbach's Alpha if

1	Table 3 Board Audit Committee Practices									
				Factor	Corrected					
			Std.	Loading	Item-Total					
		Mean	Deviation		Correlation					

	Mean	Deviation	Louding	Correlation	Item Deleted
Board audit committee includes members with finance profession	4.60	.772	.741	.585	.854
background					
Board audit committee meetings are held regularly and at least once on quarterly basis.	4.82	.531	.803	.616	.810
The Board audit committee has put in place mechanism for follow up of audit recommendations.	4.80	.474	.921	.806	.749
The board has put in place a program for continuous development and systematic induction of audit committee members	4.71	.614	.875	.749	.748
Average	4.73	.597			
Overall Cronbach's Alpha 0.833					

The results in Table 3 indicated that amongst the government owned enterprises in Kenya, board audit committee includes members with finance profession background to a very large extent (Mean = 4.60; SD 0.772). It was also established that among the government owned enterprises in Kenya, Board audit committee meetings are held regularly and at least once on quarterly basis to a very large extent (Mean = 4.82; SD 0.531).

The study established that the board audit committee has put in place mechanism for follow up of audit recommendations to a high extent (Mean=4.80; SD 0.474). Further, the study established that the board has put in place a program for continuous development and systematic induction of audit committee members to a very large extent (Mean=4.71; SD 0.614) In summing up, an average mean of 4.73 ascertained that the various audit committee practices have been implemented to a high extent among the government owned enterprises. This was supported by a small standard deviation which indicated that there was a small variation in the responses for all the statements in of board accountability practices (SD = 0.597).

Cronbach Alpha's internal consistency measure of reliability produced a total score of 0.833, far beyond the minimal threshold of 0.7 necessary to determine reliability. The item total correlation scores, which were higher than the advised value of 0.3, provided evidence for this. Principal component analysis with varimax rotation performed for the EFA further demonstrated that all factor loadings, namely 0.741, 0.803, 0.921, and 0.875, were above the minimum acceptable value of 0.4, meaning that the items therefore adequately satisfied the basic criteria and requirements for reliability and validity and therefore were subjected to further statistical analysis.

Descriptive Statistics for Gender Mainstreaming Practices

Gender mainstreaming practices were measured using 4 practices as shown in Table 4. The practices were rated on a five-point Likert scale.

	Mean	Std. Deviation	Factor Loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Board promotes gender equality when making human resources decisions	4.44	.687	.852	.592	.591
Board encourages and attends gender transformation activities and programs	4.09	.913	.854	.597	.549
The board has put in place policies against gender-based violence and discrimination	3.54	1.414	.506	.328	.831
Board supports the development and implementation of gender mainstreaming policies	4.46	.669	.862	.637	.574
Average	4.12	.920			
Overall Cronbach's Alpha 0.690			•		

Table 4 Gender Mainstreaming Practices

As presented in Table 4, the study established that among the government owned enterprises in Kenya, board promotes gender equality to a large extent when making human resources decision (Mean = 4.44; SD 0.687). It was also established that the boards encouraged and attends gender transformation activities and programs the boards among Kenyan government owned enterprises to a large extent (Mean = 4.09; SD 0.913). Similarly, the study established that the board has put in place policies against gender-based violence and discrimination to a large extent (Mean = 3.54; SD 1.414). Further the study established that the boards of the Government Owned Entities support the development and implementation of gender mainstreaming policies to a large extent (Mean=4.46, SD 0.669). This was the least of the standard deviations showing that the responses were least varied for this statement. To sum up, an average mean of 4.12 implied that gender mainstreaming activities among the government owned enterprises to large extent. The corresponding overall standard deviation of .920 showed high variation of the responses to the gender mainstreaming practices.

The internal consistency measure of reliability by Cronbach Alpha gave an overall value of 0.690 which is approximately equal to the minimum threshold of 0.7 as required to ascertain reliability. This was supported by the item total correlations scores which were above the recommended value of 0.3. Principal component analysis with varimax rotation conducted for EFA further revealed that all the factor loadings that is 0.852, 0.854, 0.506 and 0.842 were above the minimum acceptable value of 0.4 meaning that the items therefore adequately satisfied the basic criteria and requirements for reliability and validity and therefore were subjected to further statistical analysis.

Descriptive Statistics for Board Accountability

Accountability practices were measured using 4 practices as shown in 5. The practices were rated on a five-point Likert scale.

	Mean	Std. Deviation	Factor Loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The board has operating plan that outlines its activities and objectives	4.86	.450	.823	.675	.801
The board is involved in formulating strategic and business plans	4.86	.436	.830	.693	.791
The board reviews their performance on annual basis	4.93	.273	.856	.728	.805
The board monitors and reviews performance of management on regular basis on financial and operational indicators	4.86	.430	.835	.684	.794
Average	4.88	.397			

Table 5 Board Accountability

Overall Cronbach's Alpha 0.841

The presentation of Table 5 shows that to a very large extent for Government owned entities in Kenya, the boards had operating plan that outlines its activities and objectives and the boards were involved in formulating strategic and business plans which had a similar mean of 4.86 with the former statement having an SD of .450 while the latter had an SD of .436. Further, the study established that the boards reviews their performance on annual basis to a very large extent (Mean=4.93, SD 0.273).

The study established that the boards monitored and reviewed performance of management on regular basis on financial and operational indicators to a very large extent (Mean=4.86, SD 0.430). To sum up an average mean of 4.88 shows that the Government Owned Entities embraced board accountability to a very large extent. The corresponding standard deviation at .397 showed that the variation in the responses to board accountability practices were low.

The overall Cronbach Alpha value measuring internal consistency reliability was 0.841 which was above the minimum threshold of 0.7 as required confirming reliability. This was supported by the item total correlations scores which were above the recommended value of 0.3. Principal component analysis with varimax rotation conducted for EFA further revealed that all the factor loadings that is 0.823, 0.830, 0.856 and 0.835 were above the minimum acceptable value of 0.4 meaning that the items therefore adequately satisfied the basic criteria and requirements for reliability and validity and therefore were subjected to further statistical analysis.

Descriptive Statistics for Transparency and Disclosure

Transparency and disclosure were measured using 4 practices as shown in Table 6. The practices were rated on a five-point Likert scale

Table 6 Transparency and Disclosure

	Mean	Std. Deviation	Factor Loading	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The board ensures that the entity publishes the names and background of directors and executive management on its website.	4.82	.601	.795	.653	.871
The board ensures detailed financial statements and reports are published on timely and regular basis	4.90	.426	.837	.702	.841
The board ensures the entity carries out its procurement of goods and services in an open and transparent manner	4.87	.522	.874	.751	.816
The board members on regular basis discloses any business or other interests that are likely to create potential conflict of interest	4.90	.455	.913	.822	.794
Average	4.87	.501			
Overall Cronbach's Alpha 0.867					

The presentation of Table 6 shows that to a very large extent for Government owned entities in Kenya, the boards ensured that the entities publish the names and background of directors and executive management on their websites (Mean=4.82, SD 0.601). Further, the board ensures detailed financial statements and reports are published on timely and regular basis to a very large extent (Mean=4.90, SD, 0.426). Also, the board ensures the entity carries out its procurement of goods and services in an open and transparent manner to a very large extent (Mean=1.13, SD .522).

In addition to that the study established that, the board members on regular basis to a very large extent discloses any business or other interests that are likely to create potential conflict of interest (Mean=4.87, SD 0.455). To sum up an average mean of 4.90 shows that the Government Owned Entities embraced board transparency and disclosure to a very large extent. The corresponding standard deviation at .501 showed that the variation in the responses to board accountability practices were low.

The overall Cronbach Alpha value measuring internal consistency reliability was 0.867 which was above the minimum threshold of 0.7 as required confirming reliability. This was supported by the item total correlations scores which were above the recommended value of 0.3. Principal component analysis with varimax rotation conducted for EFA further revealed that all the factor loadings that is 0.795, 0.837, 0.874 and 0.913 were above the minimum acceptable value of 0.4 meaning that the items therefore adequately satisfied the basic criteria and requirements for reliability and validity and therefore were subjected to further statistical analysis.

Descriptive Statistics for Enterprise Risk Management

The information on ERM practices were obtained by two sub constructs categorized as structures to oversee ERM processes and effectiveness of ERM process each measured by four practices. The indicators were first tested for reliability and validity prior to being exposed to CB-SEM analytics.

Descriptive Statistics for Structures to Oversee Enterprise Risk Management

The structures to oversee ERM processes were measured using 4 practices as shown in Table 7. The practices were rated on a five-point Likert scale. The GOEs have well documented, circulated and approved policy on enterprise risk management (Mean = 4.59; SD= 0.748). The entities have an active risk management committee in place (Mean = 4.56; SD= 0.794). The entities have board committee responsible for enterprise risk management process to a very large extent (Mean = 4.59; SD 0.756). Most GOEs regularly review and update their risk registers (Mean 4.56; SD = .818). The study established that the government owned enterprises in Kenya have structures in place to oversee the ERM processes (Mean = 4.58). This was supported by a small standard deviation (SD = 0.779).

Overall Cronbach Alpha value measuring internal consistency reliability was 0.915 which was above the minimum threshold of 0.7.

Table 7	Structures	to O	versee	ERM	Processes
I aDIC /	Suucuits	ιυv	VUISUU	LINIT	110003303

			Factor	Corrected	Cronbach's
			Loading	Item-Total	Alpha if
	Mean	Std. Deviation		Correlation	Item Deleted
The entity has well documented	4.59	.748	.881	.787	.895
circulated and approved policy on					
enterprise risk management.					
The entity has an active risk	4.56	.794	.904	.823	.883
management committee in place					
Entity has board committee	4.59	.756	.858	.754	.906
responsible for enterprise risk					
management process					
The organization regularly	4.56	.818	.925	.858	.870
reviews and updates its risk					
registers					
Average	4.58	.779			
Overall Cronbach's Alpha 0.915					

This was also supported item-total correlations scores which were all above the recommended value of 0.3. EFA test further established that all factor loadings, that is, 0.881, 0.904, 0.858 and 0.925 respectively measured were above required value of 0.4. Thus, the items met the reliability and validity criteria, hence were therefore accepted for further statistical analysis.

Descriptive Statistics for Effectiveness of Enterprise Risk Management Process

Effectiveness of ERM process evaluated by four sub constructs as shown in Table 8. The practices measured on a five-point Likert scale.

Table 8: Effectiveness of ERM Process

			Factor	Corrected	Cronbach's
			Loading	Item-Total	Alpha if
	Mean	Std. Deviation		Correlation	Item Deleted
The organization regularly holds workshops and training for staff on enterprise risk management	4.42	.951	.823	.709	.940
The entity has in place processes for assessment and mitigation of financial risk	4.59	.720	.950	.898	.855
Management regularly reviews and evaluates financial risk when making strategic decisions	4.63	.706	.954	.894	.858
The organization considers the level of risks before embarking on new projects	4.66	.674	.886	.778	.897
Average					
	4.58	.763			

Overall Cronbach's Alpha 0.912

The study established that the GOEs regularly hold workshops and training for staff on enterprise risk management (Mean = 4.42; SD= .951). The entities have in place processes for assessment and mitigation of financial risk (Mean = 4.59; SD = 0.720). Further, management regularly reviews and evaluates financial risk when making strategic decisions (Mean = 4.63; SD = .706). The organizations considered the level of risks before embarking on new projects (Mean 4.66; SD= 0.674). It was also established that GOEs have effective ERM processes (Mean = 4.58). This was supported by a small standard deviation from the respondents (SD = 0.763).

The Overall Cronbach Alpha value measuring internal consistency reliability was 0.912 which was above the minimum threshold of 0.7 as required, thus confirming reliability. This was supported by the item-total correlations scores which were above the recommended value of 0.3. EFA test further revealed that close relationship of indicators to their respective constructs. The loadings were 0.823, 0.950, 0.954 and 0.886 respectively. They all met the required criteria, hence were adopted for further statistical examination and investigations.

Board Practices and Organization Performance

The existing relationship between the variables in the path diagram was established to test the first hypothesis of the study that is:

H₀₁: The board practices have no significant effect on performance by government owned entities.

Table 9 shows the standardized regression weights for the existing relationship.

 Table 9 Standardized Regression Weights for Direct Effect

			R	R ²	S. E	t	P-Value
OP	<	BP	0.787	0.619	0.119	5.980	0.000

The results as shown in table 9, indicated that board practices explained 61.9 % of performance variation by government owned entities. In addition, study found positive significant relationships amongst board practices and performances of GOEs (β =0.787, t = 5.980>1.96, SE=0.119, P-Value < 0.05) at five percent significance level. Null hypothesis that states board practices have no significant effect on performance by government owned entities was rejected to imply they indeed have significant influence on organizational performance.

Board Practices, Enterprise Risk Management and Organization Performance

The intervening effect of Enterprise Risk Management on the relationship between Board Practices and Organization performance in the path diagram was established to test the first hypothesis of the study that is: H_{02} : The enterprise risk management practices have no significant intervening effect to relationship of board practices and performances by government owned entities.

Below are details in Table 10

Table 10 Standardized Regression Weights for intervening Effect of ERM

	R	R ²	SE	Т	Р
ERM< BP	.670	0.4489	.169	5.676	.000
OP < BP	.600	0.36	.122	4.482	.000
OP < ERM	.268	0.0718	.067	2.549	.011

The direct impact by board practice to organizational performance in the absence of ERM as shown above was positive, significant (β =0.600; SE = 0.122; t = 4.482 > 1.96; P-Value < 0.05) at five percent level. Furthermore, direct effect of board practices on ERM of government owned entities in Kenya positive, significant (β =0.670; SE = 0.169; t = 2.549 > 1.96; P-Value < 0.05) at five percent.

Study also established ERM significantly positively impacted performance by government owned entities (β = 0.268; SE = 0.067; t = 3.181 > 1.96; P-Value < 0.05) at five percent significance. However, presence by ERM as an intervening variable, impact of board practices to performance by government owned enterprises reduces from 0.600 to 0.268 although it remains positive and significant (β = 0.268; SE= 0.067; t = 10.123). This indicates that ERM has major impact to the association of BP and OP. However, despite presence of ERM, indirect influence of board practices on organizational performance remains significant, indicating partial intervention. Hence, null hypothesis was therefore rejected. This implies that ERM practices have a significant effect as intervenors on relationship of board practices to organizational performance.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

To achieve the study objectives, data was sought from all 234 government-owned entities operating in Kenya. 153 GOEs returned properly filled up questionnaires. Secondary data on performance were derived from performance contracting reports. The data was then processed, cleaned, and coded, and analyzed using AMOS graphics to obtain CB-SEM paths with the aid of IBM SPSS version 26.

The crucial role of the board in enhancing Enterprise Risk Management (ERM) within government-owned entities (GOEs) was evident. The board's responsibilities encompassed setting the organization's risk management strategy, approving key risk management initiatives, and ensuring alignment with strategic objectives. Additionally, the board continuously reviewed the risk management program and updated risk registers to adapt to changes in operations and the external environment, thereby reinforcing the effectiveness of the ERM framework. The study's results clearly indicated that ERM significantly influenced the relationship between board practices and organizational performance in GOEs. While the intervention was partial, the significant impact of ERM practices on this relationship emphasized the board's instrumental role in fostering effective risk management strategies that positively impacted overall organizational performance. Findings from previous studies by Otieno, Ogutu, and Pokhariyal (2019) and Girangwa, Rono, and Mose (2020) further supported the notion that the implementation of robust ERM practices had a positive and significant effect on organizational performance in government-owned entities, highlighting the importance of the board's involvement in driving improved performance through effective risk management practices.

Conclusion

Effective board practices are crucial for the performance of government-owned entities (GOEs). Clear mission and vision statements, setting objectives and strategies, and promoting transparency and accountability create a foundation for effective governance and management. Board members who are well-informed and engaged provide valuable input and expertise, enhancing the organization's ability to navigate challenges and opportunities. The audit committee's role in monitoring and oversight ensures efficient operations, safeguards assets, and maintains reliable financial reporting. By promoting responsible financial management and independent assurance, the audit committee builds trust with stakeholders and ensures compliance with laws and regulations. Overall, board practices create an environment that supports organizational performance and helps GOEs achieve their goals.

Gender mainstreaming practices in board structures are essential for creating inclusive and equitable workplaces. By integrating gender perspectives into policies and programs, organizations can address inequalities and promote diversity and inclusion. Gender mainstreaming practices have been shown to improve communication, collaboration, problem-solving, customer service, and employee satisfaction and productivity. Additionally, these practices reduce gender-based discrimination, fostering a supportive work environment. Effective board accountability practices, including guidelines for behavior and resource allocation, create a transparent and trustworthy environment where employees are held accountable and strive to exceed expectations. This culture of accountability and responsibility ensures optimal resource utilization to achieve organizational goals. Transparent and disclosure practices increase stakeholder confidence, leading to improved trust and engagement from investors, customers, and employees. Compliance with regulatory requirements improves performance and reduces penalties, while accurate information allows the public to identify risks associated with investments and operations. Overall, these practices contribute to organizational performance and sustainability.

The adoption of ERM practices can lead to enhanced effect by board practices to performance. Study highlights importance in implementing effective ERM practices by organizations which can assist in identification, assessment and management of risks that could negatively impact the achievement of organizational goals. This can lead to better decision making and enhanced efficiency which will eventually lead to enhanced performance. In conclusion, study highlights critical role that good board practices, internal controls, and enterprise risk management practices play in enhancing organizational performance by government owned entities. Findings suggest these factors should be given equal consideration when formulating strategies aimed at improving organizational performance. The study also provides useful insights to policymakers, managers, and other stakeholders in government owned entities in Kenya, as well as in other countries, to the need of implementing effective and efficient board practices to achieve better organizational performance.

Another key conclusion drawn from the study is that the board of a state corporation play a critical role in enhancing enterprise risk management practices. The board sets the overall risk management strategy and culture, approves major risk management policies, and monitors the effectiveness of enterprise risk management processes. This ensures that risks are identified, evaluated, reported, monitored and properly mitigated, which leads to improved organizational performance. Therefore, it is essential for the board to establish a risk awareness culture and proactive ERM practices to promote sustained organizational growth and resilience.

Recommendations

- 1. Establish comprehensive guidelines for board members that emphasize the importance of clear mission and vision statements, strategic planning, and transparent decision-making processes.
- 2. Integrate gender mainstreaming practices into board structures and organizational policies to promote inclusivity, diversity, and a supportive work environment.
- 3. Strengthen board accountability practices through the implementation of clear behavior guidelines, resource allocation protocols, and transparent reporting mechanisms to ensure optimal resource utilization and ethical conduct.
- 4. Develop and implement robust ERM practices that focus on proactive risk identification, assessment, and management, ensuring alignment with organizational goals and strategies.
- 5. Provide regular training, induction and capacity building for board members to enhance their understanding of effective governance, gender mainstreaming, accountability, and ERM practices.

REFERENCES

- Ali, M. (2016). Impact of Corporate Governance on Firm's Financial Performance, A Comparative Study of Developed and Non-Developed Markets, Arabian Journal of Business and Management Review, 6(6), 1-6.
- Andrés, L. A., Schwartz, J., & Guasch, J. L. (2013). Uncovering the drivers of utility performance: Lessons from Latin America and the Caribbean on the role of the private sector, regulation, and governance in the power, water, and telecommunication sectors, *The World Bank*. Approach to structural equation modeling? *Long Range Planning*, 45(5-6),

- Ariffin, N. M & Kassim, S. H. (2011). Risk management practices and financial performance of Islamic banks: Malaysian evidence. 8th International Conference on Islamic Economics and Finance on 11th December 2011. (pp. 19-21). Betriebswirtschaft, 58(3), 141-166.
- Bhattacherjee, A. (2012). Social science research: principles, methods, and practices. *Retrieved from Textbooks Collection. Book 3.*
- Bartlett, M. S. (1954). A note on the multiplying factors for various χ 2 approximations. *Journal of the Royal Statistical Society. Series B (Methodological)*, 296-298.
- Curi, C., Gedvilas, J., & Lozano-Vivas, A. (2016). Corporate Governance of SOEs and performance in transition countries. Evidence from Lithuania. *Evidence from Lithuania*
- Grundei, J. (2008). Are managers agents or stewards of their principals? Logic, critique, and reconciliation of two conflicting theories of corporate governance. *Journal für Betriebswirtschaft*, 58(3), 141-166.
- GoK (2013). Report of the Presidential Taskforce on Parastatal Reforms, *Executive office of the President, Republic of Kenya*.
- GoK (2015). The Code of Governance for State Corporations, *Public Service Commission & State Corporations Review Commission, Mwongozo code*.
- GoK (2018). https://www.isc.go.ke/state-corporations-their-parent-ministry.
- GoK (2019) https://www.treasury.go.ke/wp-content/uploads.
- GoK (2020) http://www.psyg.go.ke/?page_id=622
- Heo, K. (2018). Effects of corporate governance on the performance of state-owned enterprises. *World Bank Policy Research Working Paper*, (8555).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Kaiser, H. F. (1974). A computational starting point for Rao's canonical factor analysis: Implications for computerized procedures. Educational and Psychological Measurement.
- Kobia, M., & Mohammed, N., (2006), *The Kenyan experience with performance contracting, In 28th AAPAM Annual Round Table Conference.*
- Laimaru, S. (2018). Influence of governance principles on performance of commercial state corporations in Kenya, Doctoral dissertation, JKUAT-COHRED.
- Menozzi, A., Gutiérrez Urtiaga, M., & Vannoni, D. (2012). Board composition, political connections, and performance in state-owned enterprises. *Industrial and Corporate Change*, 21(3), 671-698.
- Michelberger, K. J. (2017). Impact of corporate governance on firm performance and total shareholder return of German listed companies, *Doctoral Thesis submitted to Subfield Business Management, Faculty of Economics and Management, University of Latvia.*
- Mongeri, O. (2021). Board Structure, Earnings Management, Firm Characteristics and Audit Opinion in Commercial State-Owned Enterprises in Kenya. *Doctoral dissertation, University of Nairobi.*
- Nasir, H. M. (2017). State-Owned Enterprises: A comparison between the UK, Japan, and Malaysia, *International Journal of Economics, Commerce and Management United Kingdom*, 5(2).
- Nguyen, T. V. (2015). Corporate governance structures and financial performance: A comparative study of publicly listed companies in Singapore and Vietnam, *Doctoral dissertation, University of Waikato.*
- Ongore, V. O., Peter, O. K., Ogutu, M., & Bosire, E. M. (2015). Board composition and financial performance: Empirical analysis of companies listed at the Nairobi Securities Exchange. *International Journal of Economics and Financial Issues*, 5(1), 23.
- Ongeti, W. J. (2014). Organizational resources, corporate governance and performance of Kenyan state corporations. Unpublished PhD thesis. Nairobi: University of Nairobi.
- Oruke, M., Iraya, C. M., Omoro, N. O., & Otieno, O. L. (2021). Corporate governance and modification of audit opinion: evidence from state owned enterprises in Kenya. An Unpublished Thesis, University of Nairobi.
- Otieno, E., Ogutu, M., & Pokhariyal, G. (2019). Enterprise Risk Management, Top Management Demographics, Macro Environment and Organizational Performance: Evidence from Kenyan State-Owned Corporations. International Journal of Business and Social Science, 10(11).
- Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American economic review*, 63(2), 134-139.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson education.
- Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*, 80(1), 99-103.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International journal of medical education, 2, 53.