



Government Regulations' Moderating Influence on the Link between Local Petroleum Companies' Organizational Performance and Corporate Governance in Kenya

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ABSTRACT

In 2013, local petroleum firms in Kenya had a combined market share of 71% which in a span of 2 years had significantly declined to 52% as of 2015. The decline in the market share was as a result of stiff competition from the multinationals, which has continued to affect the organizational performance of local petroleum firms in Kenya. The purpose of this study was to determine the moderating effect of government regulations on the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. The study population was 834 local petroleum companies in Kenya licensed by Energy and Petroleum Regulatory Authority as of August December 2022. This study was anchored on Theory of Transformation Leadership and supported by Institutional Theory and Resource Dependence Theory. These theories are linked to corporate governance, strategy implementation, government regulations and organizational performance variables. Primary data was collected using structured and unstructured questionnaires. The study was guided by positivism philosophy and the data collected was coded and analyzed using Statistical Package for Social Sciences (SPSS version 22) and be presented in bar charts, percentages and tables. Data was analyzed using ANOVA, correlation and multiple regressions. The study findings indicated that the adjusted R square increased from 59.3% to 65.1% and 66.9% after the interaction term and thus, government regulations moderate the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. This means that there is a significant moderating effect of government regulations in the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. The study recommends that managers should ensure that the company is in compliance with all relevant laws and regulations, and that it adheres to best practices in corporate governance, to protect the company from potential legal or regulatory sanctions and maintain a positive reputation in the industry.

Key Word: *Corporate Governance, Government Regulations, Performance, Local Petroleum Companies, Kenya.*

1. Introduction

1.1 Background of the Study

International Monetary Fund warned of harsh worldwide recession if policy makers mishandle the fight against inflation, this causing worldwide petroleum crisis due to high global unstable prices. There have been higher fuel prices for the past five years excluding 2022 and it is speculated that oil prices will escalate higher in the foreseeable future; unless there is a big swan of positive events (US Energy Information Administration, 2022). The US has, since Ukraine-Russia war, has been drawing from strategic reserves in the storage caverns in Texas and Louisiana Gulf coasts in order to stabilize its markets. This has sent US strategic reserve to its lowest level since 1984. By mid-October 2022 the US had only 400 million barrels, down from 700 million barrels, and will be replenished once the prices reach between \$67 and \$72 a barrel or lower (US Energy Information Administration, 2022). Yasmin and Musmuliana (2016) indicated that the Nigerian's economy petroleum distribution is fraught with difficult challenges major being intercountry wars and inflated pump rises disputed. This necessitates the need for local petroleum companies in the country to implement relevant strategies to counter these challenges and ensure sustainability (Bottazi & Tamagni 2019).

Kenya has looked towards Tanzania for energy solution that explains why there will be a construction of 600-kilometre pipeline that will transport gas from Mtwapa Plant. This gas will be for industrial use when diesel gets out of reach. In 2021, Kenya imported 6.149 billion litres of refined petroleum worth US\$3.48 billion or Sh410 billion. Data from the Kenya National Bureau of Statistics (KNBS) show Kenya paid Sh268.5 billion to import petroleum products in the first half of 2022. In April 2021, the state introduced a fuel subsidy, which was to ease fuel costs by making wholesale prices nearly match the cost of selling diesel and petrol at the pump. This regulatory move was heavily criticized is not a sustainable to cushion Kenyans from high petroleum prices.

Corporate Governance

Corporate governance can be seen as a composition of measures that inspire factors for the society to participate in the process of over production by the organization. The excess production is then distributed fairly among the partners bearing in mind personal contribution towards the organization (Olumbe, 2012). In the world, good corporate governance practices have become necessary for improving firms' organizational performance in Europe by enhancing the investment atmosphere and encouraging economic development (Baydoun, Maguire, Ryan, & Willett, 2013). According to Braga-Alves and Shastri (2011) and Adiloglu and Vuran, (2012) good corporate governance has gained extensive fame in the market economy.

Just like in most developed economies in the world and developing nations in the region, Kenya is not left behind in terms of Corporate Governance Practices in state owned entities. According to Malenya (2011) corporate governance continues to deteriorate in Kenya even though there is a tight regulatory framework. According to Koech and Ogollah (2018), many institutions in Kenya have been characterized with scandals of different levels and magnitudes. A study conducted by Mwendu (2012). On the effect of corporate governance on organizational performance of public corporations in Kenya established that corporate governance is one of the determinants in the level of organizational performance. Further, developing countries like Kenya are often faced with (Ayandele, & Emmanuel (2013) a multitude of problems that include uncertain economies, weak legal controls, protection of investors and frequent government intervention. These problems make it even more necessary for developing countries to adopt effective corporate governance structures. Poor corporate governance in Kenya especially in the public institutions has led to collapse of public institutions for example in Mombasa Kipevu Refinery, this would have led to lower petroleum prices. The bureaucracy lobbied by the multinationals has taken aback by the sudden liberalization of local petroleum companies in the sector.

Government Regulations

Baffes et al. (2015) assert that international organizations and governments across the globe have set up regulatory rules for both private and public companies. In addition, according to Kyazze, Nkote and Wakaisuka- Isingoma (2017) good government regulations is regarded as important in reducing risk for investors, attracting investment capital, and improving the organizational performance of institutions, especially in the developing economies. Furthermore, Kyazze et al. (2017) adds that corporate governance changes that have been embarked upon in sub-Saharan Africa have placed particular importance on improving regulatory institutional practices for all corporates. The sale of petroleum products with the exception of crude oil, provide such information and statistics in relations to upstream petroleum operations in Kenya to the Cabinet secretary responsible for matters relating to petroleum as may be required from time to time. Work with other relevant statutory authorities to formulate, enforce and review environmental, health, safety and quality standards for the upstream petroleum sectors. Uphold petroleum laws, regulations, contracts and treaties in relation to petroleum. The Kenyan local oil marketing firms want the government protection from the multinationals who are accused of engaging in unfair practices with the aim of edging them out the market (Deloitte, 2016; Petroleum Institute of East Africa (PIEA), 2016a). The Failure to proper government regulations in place in the petroleum industry in Kenya, Has Led to fuel malpractices in Kenya. Local petroleum entities are charged thousands of dollars monthly for transport and storage fees by government regulatory intuitions, it should be decided if these public institutions are in the business of profit making or providing public service providers.

Organizational performance

Markiewicz (2015) notes that in order to accurately assess a firm's success, both qualitative and quantitative measurement constraints must be taken into account in addition to market share, ROI, and profitability. This implies that the organization's financial and non-financial components are what determine organizational performance. In their study of the organizational performance analysis model, Fusch and Gillespie (2012) show how business managers can identify organizational performance gaps by comparing actual to desired organizational goals. Moreover, according to Ferlie et al. (2016), the purpose of any business firm is to have a better competitive advantage compared to the competition, and offer better returns to the owners and stakeholders. Organizational performance permits evaluation of firms for easy comparison with the competition. Productive non-governmental organizations are mission-led, resilient, client-focused, innovative, result-oriented and maintainable. Organizational performance is operationalized using the cost recovery, service quality, service reliability and service coverage as the indicators.

In this study, organizational performance was measured by use of organizational performance contracting. There needs to be adjustments of business-related costing in the petroleum industry in Kenya, that have remained unchanged whereas all other facilitating cost to conduct a petroleum business in Kenya are going up. Lack of access to tailor made financial assistance, or insurance to help local petroleum companies to help them navigate during hard time has led to many unprecedented pains for no return on capital, is threatening to keep these local investors in business.

1.2 Statement of the Problem

Petroleum consumption in Kenya is expected to grow from 4.5 million metric tonnes to 12 million metric tonnes by the year 2030 (National Oil, 2015). The total quantity of petroleum products imported into the country has increased from 6,114.4 thousand tonnes in 2018 to 6438.9 thousand tonnes in 2019, representing 5.3% increase, according to EPRA 2020 report. This anticipated growth in consumption of petroleum products, will make Kenyan government to make changes through the Energy and Petroleum Regulatory Authority to encourage new local petroleum entrants especially locally owned oil marketing firms. In 2013, local petroleum firms in Kenya had a combined market share of 71% which in a span of 2 years had significantly declined to 52% as of 2015 (Africa, 2015). There are several studies on the relationship between corporate governance and firm. This study further sought to enrich the body of knowledge in corporate governance and its impact on organizational performance at a national level. Existing studies have provided evidence that introduction of moderating variables, has resulted to establish a definite relationship between corporate governance and organizational performance

yet few studies have examined moderating influence of government regulations. However, some studies have indicated negative moderating effect (Juma, 2014), non-significant (Love and Rachinsky, 2015) and positive moderating effect (Muturi et al., 2017) of corporate governance. Based on the limited empirical studies of the moderating effect of government regulations, the current study examines the moderating effect of government regulations on the relationship between corporate governance and the organizational performance of local petroleum companies in Kenya.

Study objectives

To determine the moderating effect of government regulations on the relationship between corporate governance and organizational performance of local petroleum companies in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Theory of Transformational Leadership

As an organization travels the road of uncertainty and unpredictability, when implementing new strategies, this transformation leadership theory, encourage the corporate governance of an organization to embrace new learning while taking actions based on new discoveries rather than perception with an intention to adopt new behavior (Northouse, 2016). According to Hanaway (2019) he explains that, transformation begins with the realization or revelation that an organization current thinking is incomplete, limiting flawed or even worse and destructive. A transformational leader puts effort on his vision, develops the intellectual stimulation for the followers, inspires while fostering subordinates' organizational performance (Baquer, & Ramesh, 2015). Transformational leaders stimulate and motivate coworkers at workplace through sharing of vision concerning what can be accomplished (Northouse, 2016). According to Odumeru and Ogbonna (2013) and Chandra (2016), transformational leadership implies drive to change or coordinates subordinate efforts towards desired behavior. Transformational leadership refers to leadership effort aiming at encouraging workers through shared collectivism instead of individualism approach. Transformational leadership style established reciprocal relationship between the leader and the subordinates to achieve desired objectives (McCleskey, 2014). Transformational leadership focuses on group effort instead of individual (Breevaart, Bakker, Hetland, Demerouti, Olsen & Espevik, 2014). This transformational leadership theory is applicable to unknown destination, especially when an organization is implementation new strategies, which they have not applied before.

2.1.2 Resource Dependence Theory

Resource dependence theory (RTD) argues that enterprises must learn to exchange with their environment if they can be able to gain resources (Scott 1987). Paetzold (2010) states that the theory centers on the role of resources and how they can be acquired externally or from other sources for the firm to survive or thrive He Further notes external resources can make a firm depend on vital resources to help reduce reliance on other firms, which implicates a firm must increase its ability to use their environment for the benefit (Johnson, Daily and Ellstrand 2012). According to Hillman et al. (2010) explain that external resources make an organization depend on vital resources to reduce dependency on other organization in their environment for their advantage. This theory is applicable during strategy implementation, as it factors out various external environmental factors, regarding the future of an organization Johnson, et al. (2014).

Turnbull (2012) indicates critiques of this theory argue that the theory assumes that resources are heterogeneously distributed across organizations and that this can be sustained over time. It presents different resource variables leaving out other factors, for example the notion of variables co-alignment, a capability that could boost organizational performance Sustainable success is achieved when a company maintains a competitive advantage over its rivals by accumulating and utilizing appropriate set of superior resources and capabilities. An organization alone control resources, its needs corporate governance to consider a strategy before implementing in order to effectively utilize resources (Darley, Luethge & Blankson, 2013). Corporate governance can offer relevant resources which include, knowledge in form of specific skills which will bring a good reputation and critical business contact to facilitate access to information and offer an essential bridge between an organization and external environment (Al Mamun, Yasser, & Rahman, 2013).

In this study, the theory conceptualizes the argument that organizational performance is enhanced when organizations use unique resources that they own and configure the same to enable the firm to attain a competitive advantage position. This theory is relevant since it helps in determining the resources (organizational skills, competencies and capabilities) that require proper corporate leadership with intervention of strategy implementation and government regulations to achieve desired organizational performance.

2.2 Empirical Literature Review

2.2.1 Corporate Governance, Government Regulations and Organizational Performance

Oyelakin and Kandi (2017) explored whether government policies have a regulating impact on the relationship between business development and growth in Nigeria. The explanatory research design was used in the study. The findings of the exploration showed that government policies determined how the business will behave and perhaps influenced its growth. The examination went further to report that the development and expansion of the business unit

from one region to another is highly influenced by the laws governing the area. The positive ways are achieved when the government policies are favorable, while adverse outcomes are derived when the government intervention is unfriendly.

Muturi (2019) examined the effect of government regulation on the relationship between residential mortgage practices and the organizational performance of real estate companies in Kenya. The population of the target in the study was real estate firms registered with Kenya Property Developers Association (KPDA) while the respondents were 138 real estate and finance managers of these companies using a census approach. Primary data was collected through a self-administered, semi-structured questionnaire and secondary data obtained from published sources. Analyses was done using moderated multiple regression (MMR) analysis to compare ordinary least-squares (OLS) regression model and MMR model. The study found out that government regulations moderated the relationship between residential mortgage financing practices and the organizational performance of real estate firms in Kenya. The study established that aligning the operations of real estate firms with government regulations helps in creating a strategic fit that positions them above their rivals. Overall, the study demonstrated a positive relationship between government regulations and the organizational performance of real estate firms in Kenya. Namusonge (2015) found that compliance with procurement regulatory framework plays a very important role in bringing forth improved enterprise risk management adoption. In addition to compliance with procurement regulatory framework, other factors that improve enterprise risk management adoption include transparency, professionalism and procurement procedures.

Ndumia (2015) sought to establish the influence of regulatory framework on organizational performance of building construction projects in Nairobi County, Kenya. The study adopted descriptive survey research design and random sample of 19 licensed quantity surveyors, 28 licensed architects and 132 licensed building contractors operating in Nairobi. The study found that a regulatory framework in which regulators challenge firms to improve based on constructive and active engagement can be effective in ensuring compliance before a serious problem emerges and regulatory framework governing the construction industry could seek legal capacity to prosecute errant developers. Although this study was conducted in Nairobi County, the study was conducted in the construction industry while the current study was conducted among management consultancy firms. In addition, the study only showed the influence of regulatory framework on organizational performance construction projects but did not link organizational performance to operations strategy.

Njeru (2018) studied the effects of regulations on the financial organizational performance of the retirement benefits funds in Kenya. Secondary Data was collected from retirement benefits fund financial reports and multiple regression analysis used in the data analysis. The study revealed that there was a positive relationship between financial organizational performance of retirement funds and liquidity of the scheme, the study also found that there was a negative relationship between financial of retirement benefits fund and scheme expense ratio and financial distress or vulnerability. The study also found that regulations affect the financial organizational performance of retirement benefits funds in Kenya; thus, the study concluded that since the enactment of the Retirement Benefits Authority Act, there had been significant growth in organizational performance of retirement benefits fund. The relationship between regulatory changes and financial organizational performance of pension schemes in Kenya is unidirectional and runs from regulatory changes to organizational performance. The study further found that regulatory changes have a significant influence on the organizational performance of pension schemes in Kenya as the results passed the significance tests where p-value was less than 0.05.

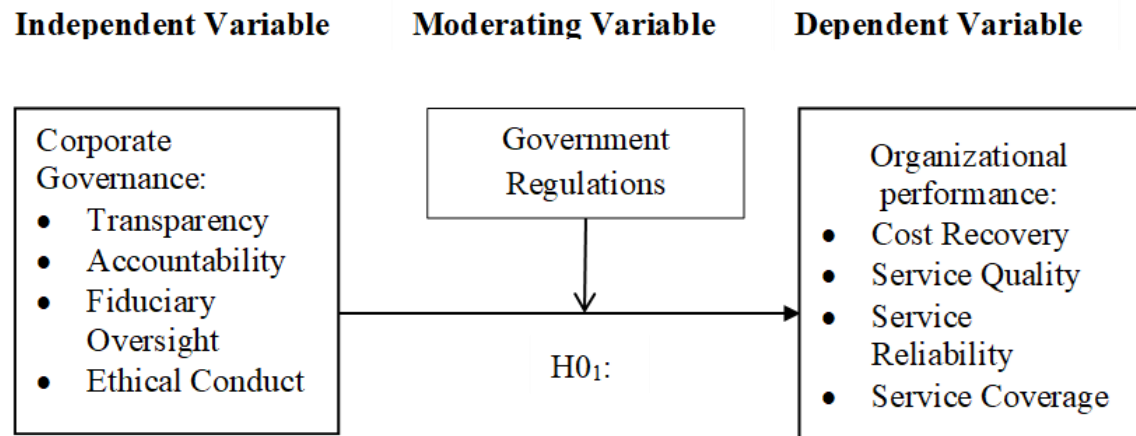
Mwongeli (2016) conducted a study on the effect of regulations on the financial organizational performance of commercial banks in Kenya. Financial organizational performance was measured using financial ratios such as return on capital, return on equity, return on assets, credit risk, liquidity ratio, interest coverage ratio, core capital to total risk-weighted assets ratio, total capital to total risk-weighted assets ratio and core capital to total deposit liabilities ratio. This study also analyzed capital adequacy. The population of the study was the 43 commercial banks in Kenya and the period of study was between 2010 and 2015. Three years before the reviewed prudential guidelines for banks of 2013 came into effect and three years after. Chi-square test of independence was used to analyze the relationship between the two variables. The analysis was carried out on each of the ratios and the findings were that there is no relationship between regulations and the financial organizational performance of commercial banks.

2.3 Conceptual Framework

The framework of this study highlights the relationship corporate governance on organizational performance of local petroleum companies in Kenya. The conceptual framework is a significant as it is used in this study to address the relationship between corporate governance and organizational performance of local petroleum companies in Kenya.

The following research null hypothesis was developed in order to accomplish the aims of the study:

H₀: There is no significant moderating effect of government regulations on the relationship between corporate governance and organizational performance local petroleum companies in Kenya.



3.0 RESEARCH METHODOLOGY

3.1 Research Design

Research design is the overall plan or strategy for conducting research. According to Eriksson & Kovalainen (2015), a research design is the plan, structure or blueprint of examination conceived to get answers to the research questions and control variance. To examine the relationship that exists between corporate governance and organizational performance, the researcher used cross-sectional survey design. The cross-sectional design was used to examine the relationship between corporate governance, government regulations strategy implementation, and organizational performance. The versatility, admissibility of questionnaires, and leverage in collection of data from a large number of respondents in a relatively short period of time, this makes the cross-sectional design most suitable for this study. The cross-sectional design was considered most appropriate for this study because it gives provision of an entire population under study. The study used all local petroleum companies resided by EPRA website. This provided more accurate information that met the objectives of the study.

3.2 Target Population

A population is an entire group of individuals, objects, elements or items from which samples are taken for measurement and results are generalized or transferred (Casteel & Bridier, 2021). Capturing the variability in population allows more reliability of the study (Banerjee & Chaudhury, 2010). Collis and Hussey (2013), states, a population is the total collection of elements, people, events or services of a study. The target population was 852, all local petroleum companies listed firms licensed by EPRA August 2022, which formed the unit of analysis for this study. The listed local petroleum firms in Kenya firms belong to the 7 sectors of the petroleum industry in Kenya. The various sectors were classified under these market segments as follows; storage depots, LPG storage and filling stations, pipeline transportation, wholesalers and exporters, transportation by road, retailers and petroleum.

3.3 Sample Size

According to Israel (2003) the strategies for determining the sample size are census for small population, using a sample size of similar study, using published tables, or using formulas. In this study, the researcher prefers to use Cochran formula for finite population to result in an adjusted size sample, which is more precise.

Given the population under the study is finite, 852, the sample size is corrected using Cochran formula for finite population, equation (2).

$$n' = \frac{no}{1 + ((no-1)/N)}$$

Where:

n' = Sample size after a finite population correction,

no = sample size derived from equation (1)

N = population size, 852

This results in a sample size of **268**, which represent 31% of the total population.

Table 1: Distribution of Study Respondents

Oil company categories	Population	Sample (31% of population)
Export and wholesale of petroleum products	537	167
Export and Wholesale of Jet-A1	6	2
Import export wholesale of bitumen	7	3
Storage and wholesale of LPG in cylinders	10	4
Import export and wholesale of petroleum products2	9	3
Transport of petroleum products	279	87
Transporters of LPG with Cylinders	4	2
Totals	852	268

3.4 Data Collection Instruments

Data collection describes the instruments, procedures and tools to be used for collecting data. This study used questionnaire technique. A questionnaire is a research tool containing a sequence of questions for collecting data from respondents (Collis & Hussey, 2013). Primary data was used and a structured questionnaire facilitated collection of primary data (Appendix 2). The questionnaire contained Likert scale questions developed in line with the objectives of the study and compose responses on general information in section one to generate background information of local petroleum companies in Kenya and the respondents while sections two, three, four and five collected information on corporate governance, government regulations, strategy implementation and organizational performance respectively.

3.5 Hypothesis Testing

3.5.1 Moderation Model

The model checks how the “prediction of a dependent variable, P, from an independent variable differs across levels of a third variable, L” (Baron and Kenny, 1986). Variable moderation has an impact on the strength and direction of the relationship between predictors and an outcome thus increasing, reducing, or affecting the influence of the predictor variable. To form a composite variable Government Regulations (Moderating Variable) a weighted average for the four constructs of the Moderating variable was computed using the following equation.

$$GR = \frac{(W9+W10+W11 + W12)}{4} \dots\dots\dots iii$$

Where:

W9...12 = The value of each individual item in the list of statement in the construct being averaged

GR = Government Regulations (Composite index of Government Subsidies, Government Incentives, Government Law and Statutory and Government Standards)

Moderation depicts the interaction between variables; thus, the test involves determination of the statistical significance of the interaction term (Whisman & McClelland, 2005).

The model for the study:

$$P = \beta_0 + \beta_3CG + \epsilon \dots\dots\dots (6)$$

Finally, model 6 was used to estimate direction and effect of the moderator on the independent variable and the total effect of the moderator on the dependent variable by interacting the moderating variable and the predictor variable.

$$P = \beta_0 + \beta_1CG + \beta_4GR + \epsilon \dots\dots\dots (7)$$

$$P = \alpha + \beta_1CG + \beta_2GR + \beta_3CG*GR + \epsilon \dots\dots\dots (8)$$

Where

P = Organizational performance

CG = Corporate Governance

GR = Government Regulations

β0 = Constant

β1...β4 = Beta coefficient

CG*GR = interaction term,

ε = Error term

4.0 DATA ANALYSIS AND RESEARCH RESULTS

4.1 Response Rate

The response rate was analyzed to show the representativeness of the sample size. A response rate is very important to the credibility of the research results. A low response rate may decrease the statistical power of the data collected and undermine the reliability of the results. It may also undermine the ability of the researcher to generalize the results to the population.

Table 2: Response Rate

Response	Frequency	Percent
Returned	268	100%
Unreturned	0	0%
Total	268	100%

Source: Field Data (2023)

The results indicated that all the 268 questionnaires were filled representing 100% response rate. According to Mugenda and Mugenda (2003) and Kothari (2004), a response rate of above 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of above 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Thus 100% was considered excellent for the study and the implication was that it was a representative for the population.

4.2 Years of Service

The study sought to find out the years the respondents had worked in the petroleum sector, which was a reflection on the level of experience on corporate governance issues. This was achieved by using the frequency of the respondent's response on years of service in the questionnaire. The results presented in Table 3.

Table 3: Years of Service

Duration	Frequency	Percentage
1-4 years	38	14.2%
5-9 years	66	24.6%
10-14 years	61	22.8%
15-19 years	67	25%
20 and above	36	13.4%
Total	268	100

Source: Field Data (2023)

The results show that majority of the respondents have been in the petroleum sector for 5-9 years represented by 25% and followed by those with 10-14 years at 24.6%. Those with 15-19 years were represented at 22.8% and those with 1-4 years at 14.2%. The least was 20 and above at 13.4%. This was an indication that the leaders were highly experienced. The implication of experience and years of service for leaders is that it represents the experience gained over time and thus better decision making in the organization. The experience gained over time can be used to perform tasks in timely and cost efficiently (Plaskoff, 2017). Majority of the leaders had more than 5 years' experience which presented room for better decision making in the organization based by experience.

4.3 Hypotheses Testing

4.3.1 Moderating Effect of Government Regulations

The objective of the study was to determine the moderating effect of government regulations on the relationship between corporate governance and organizational performance of local petroleum companies in Kenya.

HO₁: There is no significant moderating effect of government regulation on the relationship between corporate governance and organizational performance of local petroleum companies in Kenya.

Hypothesis was stated in the null form that there is no significant moderating effect of government regulations on the relationship between corporate governance and organizational performance local petroleum companies in Kenya. The moderating effect of government regulations was assessed, and

results explained using coefficient of determination (adjusted R-Square), Analysis of Variance (ANOVA) and the regression coefficients. Hierarchical regression analysis was performed with an interaction term (a product of corporate governance and government regulations) introduced as an additional predictor. This was done in 3 steps.

Table 4: Model Summary for Corporate Governance, Government Regulations and Organizational performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771a	0.594	0.593	0.4787
2	.808a	0.653	0.651	0.4434
3	.820a	0.672	0.669	0.4320

Source: Field Data (2023)

The results in Table 4 indicated that that the adjusted R-squared for the moderating effect had varying values. The first model for regressing corporate governance against organizational performance had 59.3% while the second step of regressing corporate governance and government regulations against organizational performance had 65.1%. The third step which regressed corporate governance, government regulations, and the interaction term CG*GR against organizational performance had 66.9%. The adjusted R-square for model increased from 59.3% to 65.1% and 66.9% (7.6% change) after the interaction term and thus we conclude that government regulations moderate the relationship between government regulations and organizational performance of local petroleum companies in Kenya.

ANOVA results for corporate governance, government regulations and organizational performance are as shown in Table 5.

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.328	1	89.328	389.828	.000b
	Residual	60.953	266	0.229		
	Total	150.282	267			
2	Regression	98.177	2	49.088	249.66	.000b
	Residual	52.105	265	0.197		
	Total	150.282	267			
3	Regression	101.025	3	33.675	180.488	.000b
	Residual	49.257	264	0.187		
	Total	150.282	267			

Source: Field Data (2023)

The ANOVA results in Table 26 indicate that all the three models were significant at $0.000 < 0.05$. The F-Calculated for model one was $(1, 267) = 389.828$, $p = 0.000 < 0.05$, which is greater than F-Critical $(1, 267) = 3.84$ at 95% confidence level. F-Calculated for model two was $(2, 267) = 249.66$, $p = 0.000 < 0.05$, which is greater than F-Critical $(2, 267) = 2.995$ at 95% confidence level. F-Calculated for model three was $(3, 267) = 180.488$, $p = 0.000 < 0.05$, which is greater than F-Critical $(2, 267) = 2.604$ at 95% confidence level. Therefore, the results confirm that the regression models one, two and three are significant. The regression of coefficients for corporate governance, government regulations and organizational performance are as shown in Table 6.

Table 6: Regression Coefficients for Moderating Effect

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	2.369	0.077		30.959	0.000
	Corporate Governance	0.466	0.024	0.771	19.744	0.000
2	(Constant)	2.164	0.077		28.017	0.000
	Corporate Governance	0.301	0.033	0.498	9.144	0.002
	Government regulations	0.229	0.034	0.365	6.708	0.000
3	(Constant)	2.061	0.08		25.875	0.000
	Corporate Governance	0.237	0.036	0.392	6.574	0.000
	Government regulations	0.178	0.036	0.284	4.972	0.026
	CG*GR	0.150	0.038	0.223	3.907	0.000

Source: Field Data (2023)

The regression of coefficients results in Table 27 indicated that in **step one**, the regression model of corporate governance on organizational performance of local petroleum companies in Kenya was significant with $\beta=0.749$, $p=0.000<0.05$. In **step two**, the results show that the regression model of corporate governance and government regulations on organizational performance of local petroleum companies in Kenya was significant with $\beta_1=0.430$, $p=0.000<0.05$; $\beta_2=0.447$, $p=0.000<0.05$. In **step three**, the results show that the regression model of corporate governance, external regulation, and the interaction term Corporate Governance and Government Regulations (CG*GR) on organizational performance of local petroleum companies in Kenya was significant with $\beta_1=0.237$, $p=0.000<0.05$; $\beta_2=0.178$, $p=0.026<0.05$; $\beta_3=0.150$, $p=0.000<0.05$.

The fitted models were:

$$\text{Model 1: } P = 2.369 + 0.466CG$$

$$\text{Model 2: } P = 2.164 + 0.301CG + 0.229GR$$

$$\text{Model 3: } P = 2.061 + 0.237CG + 0.178GR + 0.150CG*GR$$

Where:

P = Organizational performance; CG = Corporate governance; GR = Government Regulations.

The moderation analysis adopted the Baron and Kenny (1986) method. Results indicate that the P value of the interaction term (CG*GR) is $0.000 < 0.05$ and the adjusted R-square increased from 59.3% to 65.1% and 66.9% after the interaction term and thus, government regulations moderate the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. Consequently, the study rejected the null hypothesis and adopted the alternative hypothesis that there is a significant enhancing moderating influence of government regulations on the relationship between corporate governance and organizational performance of local petroleum firms in Kenya.

The findings are consistent with Miriti (2018) study found there is a positive relationship between investment regulations by RBA and financial organizational performance. The study recommended the publication of the industry results in order to empower the public with information to make informed decisions. It also recommended the strengthening of the compliance department that would ensure that retirement benefits schemes adhere to the investment guidelines. Mwongeli (2016) findings were that there is no relationship between regulations and the financial organizational performance of commercial banks. The findings also agree with Prajogo and Sohal (2016) who established that there is a positive relationship between government regulations and organizational performance. This is because productive environment government regulations created through establishment of a system and culture for organizations to operate in result in enhanced organizational performance of set strategy. Mwongeli (2019) findings were that there is no relationship between regulations and the financial organizational performance of commercial banks.

Njeru (2018) study revealed that there was a positive relationship between financial organizational performance of retirement funds and liquidity of the scheme, the study also found that there was a negative relationship between financial of retirement benefits fund and scheme expense ratio and financial distress or vulnerability. The study also found that regulations affect the financial organizational performance of retirement benefits funds in Kenya; thus, the study concluded that since the enactment of the Retirement Benefits Authority Act, there had been significant growth in organizational performance of retirement benefits fund. The findings are in line with Ndumia (2015) study found that a regulatory framework in which regulators challenge firms to improve based on constructive and active engagement can be effective in ensuring compliance before a serious problem emerges and regulatory framework governing the construction industry could seek legal capacity to prosecute errant developers. Oyelakin and Kandi (2017) findings of the exploration showed that government policies determined how the business will behave and perhaps influenced its growth. Regulations are to have an acceptable tool to achieve some degree of unification in the institutional frameworks (Yatim, Rusuli & Yatim, 2019).

5.0 SUMMARY AND CONCLUSIONS

5.1 Summary

Hierarchical regression analysis was performed with an interaction term (a product of corporate governance and government regulations) introduced as an additional predictor. This was done in 3 steps. The moderation analysis adopted the Baron and Kenny (1986) method. Results indicate that the P value of the interaction term (Corporate Governance * Government Regulation) is $0.000 < 0.05$ and the adjusted R square increased from 59.3% to 65.1% and 66.9% after the interaction term and thus, government regulations moderate the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. The study thus rejected the null hypothesis and adopted the alternative hypothesis that there is a significant moderating effect of government regulations in the relationship between corporate governance and organizational performance of local petroleum companies in Kenya.

5.2 Conclusions

The study concluded that there is a significant moderating effect of government regulations in the relationship between corporate governance and organizational performance of local petroleum companies in Kenya. The conclusion that government regulations moderate the relationship between corporate governance and organizational performance suggests that the impact of corporate governance on performance is stronger in some environments than others. This is likely because government regulations can create a more or less favorable environment for corporate governance. This can lead to

improved performance, even if the company's corporate governance practices are not otherwise very good. Additionally, the moderating effect of government regulations can also be explained by the fact that regulations can make it more difficult for companies to implement their strategies.

5.3 Recommendations

The study findings of this study provide the policy makers in the Government of Kenya with insights on the critical factors considered when formulating policies, in the petroleum sector and relevant statutory authorities. This study has provided relevant information to these government regulatory institutions when enforcing government regulations in the petroleum sector in Kenya. Decision makers in the petroleum industry in Kenya are guided by the findings of this study while developing policies for the petroleum industry in Kenya. To uphold the need of good governance and mechanisms of improving organizational performance of local petroleum companies in Kenya. The decision makers will utilize the study finding to enrich good corporate governance in the industry. The findings of this study have provided a source of information for any further studies and research undertaken thereafter.

The findings of the study that there is moderating effect of government regulation on the relationship between corporate governance and organizational performance of local petroleum companies in Kenya contributes to practice that adoption of good corporate governance practices can help companies to improve their performance, attract investors, and build trust with stakeholders. Additionally the petroleum company's leadership should monitor the company's compliance with laws, regulations and best practices. Managers should ensure that the company is in compliance with all relevant laws and regulations, and that it adheres to best practices in corporate governance. This will help protect the company from potential legal or regulatory sanctions and maintain a positive reputation in the industry.

References

- Adiloglu, B., & Vuran, B. (2012). The relationship between the financial ratios and transparency levels of financial information disclosures within the scope of corporate governance: Evidence from Turkey. *Journal of Applied Business Research (JABR)*, 28(4), 543-554.
- Aguilera, R. V., Desender, K., Bednar, M. K., & Lee, J. H. (2015). Connecting the dots: Bringing external corporate governance into the corporate governance puzzle. *Academy of Management Annals*, 9(1), 483-573.
- Banerjee, A., & Chaudhury, S. (2010). Statistics without tears: Populations and samples. *Industrial Psychiatry*, 19(1), 60-65.
- Baquer, S., & Ramesh, M. (2015). Attaining Leadership through Transformational Interventions. In *Unveiling Women's Leadership: Identity and meaning of leadership in India* (pp. 105-115). London: Palgrave Macmillan UK.
- Baydoun, N., Maguire, W., Ryan, N., & Willett, R. (2013). Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal*, 28(1).
- Bennett, W., Lance, C. E., & Woehr, D. J. (Eds.). (2014). Performance measurement: Current perspectives and future challenges.
- Braga-Alves, M. V., & Shastri, K. (2011). Corporate governance, valuation, and organization performance: evidence from a voluntary market reform in Brazil. *Financial Management*, 40(1), 139-157.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of occupational and organizational psychology*, 87(1), 138-157.
- Chamanifard, R., Nikpour, A., & Chamanifard, S. (2014). Investigating the impact of emotional intelligence on organization performance in international division of Tejarat bank, Iran. *International Journal of Scientific Management & Development*, 2(11), 652-657.
- Collis, J., & Hussey, R. (2013). Business research: A practical guide for undergraduate and postgraduate students. *Macmillan International Higher Education*.
- Earnest, D. F., & Sofian, S. (2013). The mediating role of corporate governance on intellectual capital and corporate organization performance. *Journal of Economics, Business and Management*, 1(4), 339-342.
- Eriksson, P., & Kovalainen, A. (2015). Qualitative methods in business research: A practical guide to social research. *Sage*.
- Ferlie, E., Ledger, J., Dopson, S., Fischer, M. D., Fitzgerald, L., McGivern, G., & Bennett, C. (2016). The political economy of management knowledge: management texts in English healthcare organizations. *Public Administration*, 94(1), 185-203.
- Fusch, G. E., & Gillespie, R. C. (2012). A practical approach to organization performance interventions and analysis: 50 models for building a high-organization performance culture. FT Press.
- Girgin, S., & Krausmann, E. (2016). Historical analysis of U.S. onshore hazardous liquid pipeline accidents triggered by natural hazards. *Journal of Loss Prevention in the Process Industries*, 1-17.
- Iglesias Palau, A. (2000). Pension reform and corporate governance: impact in Chile.
- Israel, G. D. (2003). Determining sample size. Retrieved from <https://www.tarleton.edu/academicassessment/documents/samplesize.pdf>
- Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996). Boards of directors: A review and research agenda. *Journal of management*, 22(3), 409-438.

- Kent State University Libraries. (2021). SPSS Tutorials: Computing Variables. Retrieved from <https://libguides.library.kent.edu/spss/computevariables>
- Kiratu, M.K., & Moronge M. (2016). Influence of Corporate Governance on Organizational Performance in Kenya. A case of Agricultural State Corporations. *Journal of Management*, 2(2), 33.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods, quantitative and qualitative approaches. *Nairobi: ACT*.
- Muturi, P. G. (2019). Effect of government regulations on the relationship between residential mortgage financing practices and performance of real estate firms in Kenya (Doctoral dissertation, JKUAT-COHRED).
- Mwau, P. M., Oloko, M., & Muturi, W. (2017). The moderating effect of ownership structure on the relationship between the growth strategies and the performance of firms within the insurance industry in Kenya.
- Mwongeli, J. A. (2016). The Effect of Regulations on Financial Performance of Commercial Banks in Kenya (Doctoral dissertation, University of Nairobi).
- Namusonge, F. N. (2015). Challenges of the Implementation of Strategic Decisions in Bungoma County, Kenya (Doctoral dissertation, University of Nairobi).
- Ndumia, S. N. (2015). Influence of regulatory framework on performance of building construction projects in Nairobi County, Kenya (Doctoral dissertation, University of Nairobi).
- Northouse, P. G. (2016). Leadership: Theory and practice (7th ed.). *Los Angeles, CA: Sage Publications Inc.*
- Ongeti, W., & Machuki, V. (2018). Organizational Resources and Organization performance of Kenyan State Corporations. *European Scientific Journal ESJ*, 14. doi:10.19044/esj.2018.v14n34p91
- Onchieku, E. N., & Ragui, M. (2019). Effect of strategic leadership on organization performance of housing co-operative societies in Nairobi City County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(5), 411-433.
- Okoye, V., & Eze, O. R. (2013). Analysis of corporate governance and the performance of pension scheme in Nigeria. *International Journal of Business Management and Administration*, 2(1), 15-20.
- Olumbe, C. O. (2012). The relationship between internal controls and corporate governance in commercial banks in Kenya. *University of Nairobi Press*
- Oyelakin, O., & Kandi, U. M. (2017). The moderating role of government policies on the relationship between technology, innovation and entrepreneurship development in Nigeria: a partial least square approach. *Universal Journal of Management*, 5(10), 477-484.
- Palmer, I., Dunford, R., & Buchanan, D. (2016). EBOOK: Managing organizational change: a multiple perspectives approach (ISE). McGraw Hill.
- Yermack, D. (2017). Corporate governance and blockchains. *Review of Finance*, 21(1), 7-31.