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**THE MODERATING EFFECT OF EXTERNAL REGULATION ON THE  
RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP  
AND ENTERPRISE RISK MANAGEMENT ADOPTION BY  
COMMERCIAL STATE CORPORATIONS IN KENYA**

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**ABSTRACT**

**Background of the Study:** Commercial State corporations in Kenya are required to comply with both internal and external regulations that include, applicable laws and regulations, international and national standards, code of conduct, prudential and financial guidelines, and industry regulations among other regulations.

**Objective of the study:** This study sought to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

**Methodology:** This study adopted a positivist research philosophy and cross-sectional survey design approach. Target population comprised of all the 52 Commercial State Corporations in Kenya listed in the register of State Corporations Advisory Committee in January 2021. Census method was applied, and all members of the top management team were enumerated as respondents. The study achieved a response rate of 76% with the return of 276 questionnaires. The study used primary data which was collected through structured questionnaires. Descriptive and inferential statistics were employed in the analysis. The Statistical Package for Social Sciences (SPSS) was used in regression modeling for prediction and causal inferences between study variables.

**Results and Findings;** The study finding indicated a significant moderating effect of External Regulation in the relationship between Transformational Leadership and Enterprise Risk Management (ERM) adoption by Commercial State Corporations in Kenya.

**Recommendations:** The study recommends the mainstreaming and alignment of internal policies of commercial state corporations through continual to external regulations with periodic use of external consultancy to augment enterprise risk management adoption. It also recommends that

the top management team of commercial state corporations ought to periodically review their reporting charter to require periodic reporting on compliance to external regulation.

**Keywords:** *External Regulation, Transformational Leadership, Enterprise Risk Management Adoption & Commercial State Corporations*

## 1.0 Introduction

The discourse on the adequacy of risk management is a global, regional, and national issue. Togok, Isa and Zainuddin (2016) analyzed the situation in East Asian and concluded that, one tenth of the 800 listed companies on Bursa Malaysia were faced with poor corporate governance and poor risk management. Fraser and Simkins (2010) contend that the crisis in the US financial institutions that caused the ripple effect in global markets in 2008 was blamed on failures related to risk management in financial institutions. Golshan and Rasid (2012) analyzed public listed companies in Malaysia and found out that there exist many barriers for designing a comprehensive approach to managing risks in public firms. Demidenko and McNutt (2010) concluded that whereas companies in Australia are more mature than Russia on governance levels, international challenges in risk governance like establishing linkages between risk framework, enterprise value and strategic planning were evident Abah and Ojeonu (2019) posit that in Nigeria ERM is mainly practiced in private sector organisations with inadequate level of implementation in public sector. In Kenya, state corporations have not operated at expected levels in the terms of performance due to weak governance and other external factors (Republic of Kenya, 2013).

This study sought to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. In explaining the external regulation construct, it is imperative to note that regulations define both what constitutes ethical behaviour for organisations and how ethical behaviour is applied in corporations (Ben Khaled & Gond, 2020). Commercial State corporations are required to comply with both internal and external regulations that include applicable laws and regulations, national and international standards, codes of conduct, prudential and financial guidelines, and industry regulations, among other regulations. The enhancement of external regulations over the past decade is attributed to increased adoption of Enterprise Risk Management across all industries (Golshan & Rasid, 2012). In many countries, regulations have pressed firms to improve risk management maturity as they require alignment and compliance. However, the intensity of the effect differs depending on whether it is mandatory or optional (Paape & Speklé, 2012). Demidenko and McNutt (2010) contends that regulatory changes, growing concerns on fraud and responsibility to shareholders all require greater transparency and disclosures thus moving ERM to the forefront of strategic decision making in entities. Therefore, it is imperative for organisations to continually examine the interrelated risks inherent in the various strategic options in the ever-changing regulations. The importance of this responsibility has gained the close attention of most firms because of the global financial crisis, which had the effect of increasing awareness and recognition of the negative impact of ineffective risk management and thus helping in creating a risk aware culture across listed companies (Kimeto & K'Aol, 2018).

Enterprise Risk Management adoption construct refers to the embedding of an integrated and consistent approach to managing all the risks facing an organisation (Tseng, 2007). Enterprise Risk Management is a process, and hence entities vary in their level of adoption. The risk maturity model espouses five levels of ERM adoption in an organization; ad hoc (level 1), initial (level 2),

repeatable (level 3), managed (level 4) and leadership (level 5). The organization is supposed to gain positive results of ERM adoption at each level (RIMS, 2015).

To successfully adopt Enterprise Risk Management, it is essential for one to evaluate varied strategic directions by considering the combined risks within the possible scenarios to create a potential for risk opportunities and to manage risk within the stakeholders' risk appetite (Hoque & Ntsele, 2018). ERM can help identify risk opportunity across multiple silos of the enterprise to enhance and maximize the value of the company's return and support strategic orientation of the enterprise. This happens when risk appetite is well managed by balancing the performance objectives with recognized risks. Board of directors are normally held accountable and responsible for conducting risk oversight and it is important to consider the likelihood and impact of various risk scenarios that are linked to the company's overall business strategies (Pawar & Eastman, 2017).

Commercial State Corporations are established to implement government policies and execute national development agendas. Commercial State Corporations are also required to be sustainable and competitive in their commercial activities as well as serve as channels for strategic socio-economic development. Therefore, commercial state corporations are designed to operate on commercial principles, be self-financing, sustainable, and profitable. However, Commercial State Corporations in Kenya face corporate governance challenges that affect their effectiveness. To address the challenge of governance in state corporations, the government of Kenya developed Treasury Circular NO 3 / 2009 guidelines for the development and implementation of institutional risk management framework in the public sector (Republic of Kenya, 2009). The Mwongozo code of conduct was also developed to enhance effectiveness of boards, transparency, accountability, risk management and ethical leadership in state corporations (PSCK & SCAC, 2015).

### **1.1 Statement of the Problem**

The existence of a holistic risk management framework in an entity provides reasonable assurance in the realization of company objectives. It is for these reason that the government of Kenya has made the adoption of integrated risk management approach in state corporations mandatory to enhance corporate governance. Despite the advantages associated with ERM, studies have shown that few corporates have adopted ERM. Fadun (2013) asserts that despite the benefits of risk management, not many enterprises maintain ERM in Nigeria. According to Togok, Isa and Zainuddin (2016), the increased adoption of ERM in Malaysia is associated with the adoption of Bursa Malaysia guidelines in 2013 that required integrated risk management and reporting. ERM adoption challenges are experienced in all sectors of the commercial state corporations owing to differences in their objectives, different levels of risk tolerance and diversified risk appetites (Otieno, Ogotu, Ndemo & Pokhariyal, 2020). According to Faisal et al. (2021) implementation of ERM in Indonesia public listed companies is still at the initial stages although financial sector is doing much better in ERM maturity than other sectors. Studies reviewed for this research thus reveal conceptual and theoretical gaps that exist on the moderating effect of external regulation in the relationship between transformational leadership and ERM adoption (Alqatawenh, 2018; Togok et al., 2016; Faisal et al., 2021). Contextually, few studies have been undertaken in Kenya on ERM adoption in state corporations and none has researched on the moderating effect of external regulations in the relationship between transformational leadership and enterprise risk management adoption by commercial state corporations in Kenya (Kamau et al., 2018; Njagi & Njuguna, 2017; Ogeng'o & Omar, 2015; Otieno, et al., 2020; Yegon et al., 2014).

The Kenyan government formulated the code of governance for State Corporations, referred to as *Mwongozo*, with clear measures aimed at addressing matters of effectiveness of the Board, transparency, accountability, risk management and ethical leadership in state corporations (Republic of Kenya, 2016). However, studies on ERM adoption in Kenya and interaction of external regulation are scanty with exception of the assessment of levels of ERM adoption and maturity in the insurance companies in Kenya undertaken in 2017 (Njagi & Njuguna, 2017). The government has been mainstreaming good corporate principles in Commercial State Corporations principally to enhance existing processes and controls to address incidents of corruption, imprudent utilization of resources and overall performance. This study sought to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

## 1.2 Objective of the Study

To examine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

## 1.3 Hypothesis of the Study

**H<sub>0</sub>:** There is no significant moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

## 2.0 Literature Review

The theoretical and empirical literature reviews were undertaken in relation to key variables being advanced in this research.

### 2.1 Theoretical Review

The study reviews the Stewardship Theory to support the external regulation construct as applied in this study. Donaldson and Davis (1991) developed stewardship theory and is premised on the belief that the manager is the steward of the firm and has its best interest at heart. The theory explains the firm-Chief Executive Officer (CEO) duality relationship and builds on the good traits of a motivational manager. Stewardship theory argues that the CEO is not an opportunist and is aligned with the goals of the shareholders. It spells out the empowerment framework within the organisation thus ensuring productiveness and effectiveness (Donaldson & Davis, 1991). The CEO's actions are very significant and can increase the investments of the shareholders thereby increasing returns and earnings. Studies have indicated a correlation between CEO duality and firm performance, when the manager and principal work together as stewards, the portability index of the firm grows (Eddleston & Kellermanns, 2007).

The stewardship theory further espouses the view that a steward protects and maximizes shareholders' wealth through influencing the firm's performance. Stewards are company executives and managers who work for the shareholders to protect their investments and make profits for them. The stewards are satisfied and motivated when organizational success is attained. The theory stresses that employees or executives should act more autonomously so that shareholders' returns are maximized. This is because employees take ownership of their jobs and work at them diligently. The stewardship theory illustrates situations in which managers hold motives that are aligned with the objectives of their principals rather than pursue their individual

goals (Davis & Donaldson, 1997). The advocates of this theory argue that managers acting as stewards behave in a collective manner because they are trying to accomplish the goals of the organization. These goals include greater innovation, profitability, sales growth, and survival/continuity (Vallejo, 2009). A steward watches over shareholders wealth and seeks to maximize it through favorable firm performance (an aim shared by most stakeholder groups) because this will maximize his or her utility functions as well. Goyder (2011) describes stewardship as the active and responsible management of entrusted resources now and in the longer term, so as to hand them over in a better condition. Stewardship theory implies that reciprocally trusting relationships, empowering organizational structures, and involvement-oriented contexts foster pro-organizational behaviors and company performance (Corbetta & Salvato, 2004; Davis & Donaldson, 1997).

In stewardship theory, the model of man is based on a steward with more collectivistic behaviors than individualistic, self-serving behaviors (Donaldson & Davis, 1991). Stewardship theorists describe managers as frequently having interests that are isomorphic with those of shareholders. They provide leadership in the formulation of corporate strategies, ensure adherence to regulations and implement necessary controls to enhance good corporate governance and shareholder value. Stewards' theory assumes that managers act not in their own interest but put the company's interest front of the personal ones (Borlea & Violeta-Monica, 2013). Stewards are aligned with the interests of the business owners (Cossin, Ong & Coughlan, 2015). The stewardship theory therefore is based on trust, intrinsic motivation, where principal agent goals and strategies are aligned and where the organization drives corporate governance through empowering of structures and prudential reporting.

## **2.2 Empirical Literature Review**

It is envisioned that external regulation is a moderating variable in the relationship between the transformational leadership and ERM adoption. This forms the basis for the review of empirical literature on the conceptual and theoretical gaps that exist.

Chukwudi et al. (2015) studied the relationship between the performance of Small and Medium Enterprises (SMEs) and the regulatory environment. The study findings revealed a positive correlation between regulatory environment and SME's effectiveness. All the proxies of effectiveness had a positive relationship with regulatory environment. The study however did not consider the moderating and mediating variables. The study was also confined to SMEs thus creating a contextual gap to be addressed by the current study by looking at the moderating effect on external regulation in Commercial State Corporations in Kenya. Cappa, Cetrini and Oriani (2020) researched on the impact of corporate strategy on capital structure and found out that corporate strategies impacted firms' capital structure both simultaneously and independently. The integration and internationalization were negatively related with debt ratio while diversification is positively related with debt ratio. Whereas the foregoing study examined the relationship between corporate strategy and capital structure, the current study assessed the effect of external regulation in the relationship between transformational leadership on enterprise risk management adoption.

Yang, Ishtiaq and Anwar's (2018) study results indicated that enterprise risk management practices had a statistically significant influence on competitive advantage and performance. The study used structured questionnaires to collect data. Structural Equation Modeling (SEM) was used to test the hypotheses. The study concluded that there was a partial mediation effect of competitive advantage on the relationship between enterprise risk management practices and performance. Girangwa,

Rono and Mose (2020) in their research established statistically significant correlation between ERM and firm performance. Descriptive and inferential statistics were applied, and a positive correlation was found between ERM structures, governance, and performance. Both studies examined the effect of enterprise risk management on performance while in the current study enterprise risk management is a dependent variable and external regulation a moderating variable.

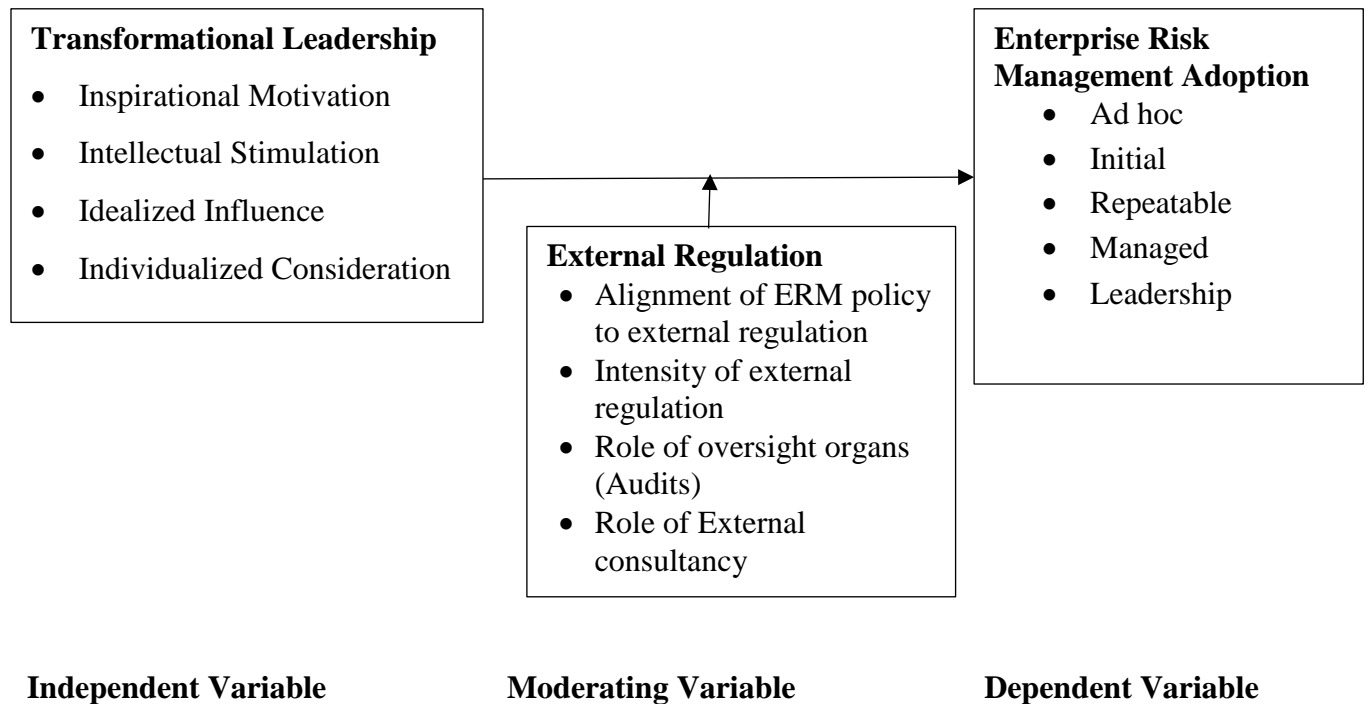
Miriti (2018) studied the relationship between Retirement Benefits Authority (RBA) regulations and financial returns of Pension Schemes in Kenya. The study adopted the descriptive research design. The study results indicated that countries all over the world have set up regulatory bodies to offer guidelines on the management of Pension Funds as well as controlling their financial activities. Some regulatory authorities offer excessive controls while others such as USA apply the prudent man rule where Pension Funds have no set regulations on the investments. The study found that there is a positive relationship between investment regulations by RBA and financial performance. The study recommended the publication of the industry results in order to empower the public with information that would be useful in making 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) conducted a study on the effect of regulations on the financial performance of commercial banks in Kenya. Financial 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, i.e., 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. The study's findings were that there is no relationship between regulations and the financial performance of commercial banks.

Oluoch, K'Aol and Kosha (2021) conducted a study to examine the moderating influence of regulatory framework on the relationship between strategic leadership and financial sustainability of NGOs in Kenya. The study was underpinned by strategic leadership theory and applied descriptive correlational research design. The study concluded that the regulatory framework does not have a significant moderating effect. Studies reviewed for this research thus reveal conceptual and theoretical gaps that exist on the moderating effect of external regulation in the relationship between transformational leadership which this study seeks to address by examining the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

### **2.3 Conceptual Framework**

Figure 1 depicts the interactions of the independent variable, moderating variable and dependent variable in a conceptual framework. It is conceptualized that transformational leadership is the independent variable, external regulation as moderating variable and the ERM adoption is the dependent variable.



**Figure 1: Conceptual Framework**

### 3.0 Research Methodology

This study adopted positivism philosophy which is premised on the proposition that factual knowledge is accomplished through observation and measurement. Further, that the researcher remains objective, applies existing theory to develop hypothesis to test during the research process. The foregoing principles were appropriate in this research and were upheld in this study. It adopted a cross sectional survey design as this is more appropriate since the data collected helps answer research questions related to only one point in time (Hair, Money, Samouel, & Page, 2010). Target population comprised of all the 52 Commercial State Corporations in Kenya listed in the register of State Corporations Advisory Committee in January 2021. Census method was applied, and all members of the top management team were enumerated as respondents. Kothari and Garg (2014) also argue that census approach enhances the generalizability of the research findings. This helps eliminate both the sampling error and the sampling bias. It is also preferred because the population is relatively small and homogeneous. Each unit comprised elements that were instrumental in acquiring relevant information for drawing conclusions. The study used structured questionnaires to collect primary data. Quantitative data was then coded and analysed using SPSS version 22.

Regression analysis (process analysis method), as suggested by Baron and Kenny (1986), was used to establish the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. The model checks how the prediction of the dependent variable, Enterprise Risk Management, differs across levels of a third variable, External Regulation. Since the moderating variable affects the strength and direction between the independent and dependent

variable, the test involves determination of the statistical significance of the interaction term (Whisman & McClelland, 2005).

$$ERM = \alpha + (\beta_1 TL) + \varepsilon$$

$$ERM = \alpha + (\beta_1 TL) + (\beta_2 ER) + \varepsilon$$

$$ERM = \alpha + \beta_1 TL + \beta_2 ER + \beta_3 TL * ER + \varepsilon$$

Where:

ERM = Enterprise risk management adoption; TL = Transformational Leadership; ER = External Regulation;  $\alpha$  = constant (intercept);  $\beta$ =Coefficient parameters to be determined, \* =interaction term,  $\varepsilon$  = Error/disturbance),  $\varepsilon$  = Constant error

## 5.0 Results and Findings

The response rate was used to depict the representativeness of the sample size. A response rate is very important to the credibility of the research results. The study administered 364 questionnaires to respondents in the top management. The study achieved a response rate of 76% with the return of 276 questionnaires. Correlation analysis results showed that External Regulation is positively and significantly associated with ERM Adoption by Commercial State Corporations in Kenya ( $r=0.773$ ,  $p=0.00 < 0.05$ ).

### 5.1 Analysis of Moderating Effect of External Regulation

The objective of the study was to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. The hypothesis was stated in the null form that there is no significant moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

#### 5.1.1 Correlation Analysis

Correlation analysis was carried out to determine the association between the variables, Transformational Leadership, External Regulation and Enterprise Risk Management Adoption by Commercial State Corporations in Kenya. The mean score for each variable was calculated and the Pearson's correlation obtained using SPSS. The correlation results are presented in Table 2.

**Table 1: Correlation Matrix**

		ERM Adoption	Transformational Leadership	External Regulation
ERM Adoption	Pearson Correlation	1.000		
	Sig. (2-tailed)			
Transformational Leadership	Pearson Correlation	.769**	1.000	
	Sig. (2-tailed)	0.000		
	Sig. (2-tailed)	0.000	0.000	
External Regulation	Pearson Correlation	.773**	.625**	1.000
	Sig. (2-tailed)	0.000	0.000	



The results in Table 1 indicate that Transformational Leadership is positively and significantly associated with ERM Adoption by Commercial State Corporations in Kenya ( $r= 0.769$ ,  $p=0.00<0.05$ ). External Regulation is positively and significantly associated with ERM Adoption by Commercial State Corporations in Kenya ( $r=0.773$ ,  $p=0.00<0.05$ ). Since the R-values were above 0.7, this is an indication that Transformational Leadership and External Regulation portrayed a high association with ERM Adoption by Commercial State Corporations in Kenya.

### 5.1.2 Hypothesis Testing

The objective of the study was to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. The hypothesis is stated in the null form as follows:

**H<sub>0</sub>:** There is no significant moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya.

Regression analysis (process analysis method) as suggested by Baron and Kenny (1986) was used to establish the moderation effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial state corporations in Kenya. The moderating effect of external regulation was assessed, and results explained using coefficient of determination (R-Square), Analysis of Variance (ANOVA) and the regression coefficients. Hierarchical regression analysis was performed with an interaction term (a product of transformational leadership and external regulation) introduced as an additional predictor. This was done in 3 steps.

**Table 2: R<sup>2</sup> for Transformational Leadership, External Regulation and ERM Adoption**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.769	0.592	0.591	0.655
2	.830	0.690	0.688	0.572
3	.844	0.713	0.710	0.551

The results in Table 2 shows that the R squared for the moderating effect had varying values. The first model for regressing Transformational Leadership against ERM adoption had 59.2% while the second step of regressing Transformational Leadership and External Regulation against ERM adoption had 69%. The third step which regressed Transformational Leadership, External Regulation and the interaction term TL\*ER against ERM adoption had 71.3%. The R square for model increased from 59.2% to 69% and 71.3% after the interaction term and thus we conclude that External Regulation moderates the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya. ANOVA results for Transformational Leadership, External Regulation and ERM adoption are as shown in Table 3.

**Table 3: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	216.07	1	216.07	503.8	.000
	Residual	148.83	275	0.43		
	Total	364.90	276			
2	Regression	251.61	2	125.80	384.2	.000
	Residual	113.29	274	0.33		
	Total	364.90	276			
3	Regression	260.05	3	86.68	285.2	.000
	Residual	104.85	273	0.30		
	Total	364.90	276			

The ANOVA results indicate that all the three models were significant at  $0.000 < 0.05$ . The F-Calculated for model one was  $(1, 276) = 503.8$  which is greater than F-Critical  $(1, 276) = 3.84$  at 95% confidence level. F-Calculated for model two was  $(2, 276) = 384.2$  which is greater than F-Critical  $(2, 276) = 2.995$  at 95% confidence level. F-Calculated for model three was  $(3, 276) = 285.2$  which is greater than F-Critical  $(2, 276) = 2.604$  at 95% confidence level. Therefore, the results confirm that the regression model one, two and three are significant. The regression of coefficients for Transformational Leadership, External Regulation and ERM Adoption are as shown in Table 4.

**Table 4: Regression coefficients for Moderating effect**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.541	0.104		5.21	0.000
	Transformational Leadership	0.749	0.033	0.769	22.44	0.000
2	(Constant)	0.154	0.098		1.57	0.118
	Transformational Leadership	0.430	0.042	0.441	10.15	0.000
	External Regulation	0.447	0.043	0.453	10.42	0.000
3	(Constant)	0.044	0.097		0.45	0.651
	Transformational Leadership	0.333	0.045	0.342	7.43	0.000
	External Regulation	0.322	0.048	0.327	6.77	0.000
	Transformational Leadership*External Regulation	0.260	0.049	0.259	5.27	0.000

The regression of coefficients results shows that in step one, the regression model of Transformational Leadership on ERM adoption by Commercial State Corporations in Kenya was significant with  $\beta=0.749$ ,  $p=0.000 < 0.05$ . In step two, the results show that the regression model of Transformational Leadership and External Regulation on ERM adoption by Commercial State Corporations 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 Transformational Leadership, External

Regulation, and the interaction term TL\*ER on ERM adoption by Commercial State Corporations in Kenya was significant with  $\beta_1=0.333$ ,  $p=0.000<0.05$ ;  $\beta_2=0.322$ ,  $p=0.000<0.05$ ;  $\beta_3=0.260$ ,  $p=0.000<0.05$ .

The fitted models were:

Model 1:  $ERM = 0.541 + 0.749TL$

Model 2:  $ERM = 0.154 + 0.430TL + 0.447ER$

Model 3:  $ERM = 0.044 + 0.333TL + 0.322ER + 0.260TL*ER$

Where;

ERM = Enterprise risk management adoption; TL = Transformational Leadership; ER = External Regulation

The moderation analysis adopted the Baron and Kenny (1986) method. Results indicate that the P value of the interaction term (TL\*ER) is  $0.000 < 0.05$  and the  $R^2$  increased from 59.2%, to 69% and 71.3% after the interaction term and thus, External Regulation moderates the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya. The study thus rejected the null hypothesis and adopted the alternative hypothesis that there is a significant moderating effect of External Regulation in the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya.

## 6.0 Discussion of Findings

The objective of the study was to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. The moderating effect of external regulation was assessed, and results explained using coefficient of determination (R-Square), Analysis of Variance (ANOVA) and the regression coefficients. Hierarchical regression analysis was performed with an interaction term (a product of transformational leadership and external regulation) introduced as an additional predictor. This was done in 3 steps according to Baron and Kenny (1986) method. Results indicate that the P value of the interaction term (TL\*ER) is  $0.000 < 0.05$  and the  $R^2$  increased from 59.2%, to 69% and 71.3% after the interaction term and thus, External Regulation moderates the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya. The study thus rejected the null hypothesis and adopted the alternative hypothesis that there is a significant moderating effect of External Regulation in the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya.

Based on descriptive statistics it was found out that that majority of commercial state corporations in Kenya are in the Ad hoc and initial stages of ERM adoption. This has significant policy implications that whereas state corporations are complying with the implementation of integrated risk management framework through ERM adoption; commercial state corporations are at different levels of ERM adoption, with majority being at Ad hoc and initial stages of ERM adoption.

The findings are consistent with the findings of Chukwudi *et al.* (2015) study on the relationship between the performance of SMEs and the regulatory environment which revealed a positive correlation between regulatory environment and SME's effectiveness. Girangwa, Rono and Mose (2020) study established statistically significant correlation between ERM and firm performance. A positive correlation was found between ERM structures, governance and performance was also confirmed. Iriyadi and Yadiat's (2017) study on the influence of transformational leadership, audit

committees' role and internal control toward financial reporting quality and its implication on investment efficiency in Indonesia, concluded that the quality of financial reporting is influenced by the transformational leadership and the effective roles of audit committees. Alkhawlan, Bohari and Shamsuddin (2019) examined the impact of transformational leadership style on crisis management and in private organisations in Yemen and found that there was a significant positive influence of transformational leadership style on crisis management. It also revealed that Managers' crisis experience moderates the relationship between transformational leadership style and crisis management.

The findings are consistent with Miriti's (2018) study, which found that there is a positive relationship between investment regulations by RBA and financial 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. Mwangeli (2016) found that there is no relationship between regulations and the financial performance of commercial banks. The study by Njeru (2018) revealed that there was a positive relationship between the financial 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. Additionally, the study found that regulations affect the financial 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 the performance of retirement benefits fund.

The findings by Pedo, Kabare and Makori (2018) established that the regulatory framework had a significant and positive influence on the performance of Public Private Partnerships in road projects in Kenya. Karungani's (2015) research findings indicated that policy and regulatory framework within the procurement sector plays a very important role in improving enterprise risk management adoption. The research also revealed that policy and regulatory framework led to improvement in enterprise risk management adoption by creating a level playing field for organizations engaged in the procurement field. Aterido, Hallward-Driemeier and Pagés' (2019) finding revealed that small and medium firms enjoy the benefit of adequate access to finances from various sources associated with the growth in the investment.

The findings are in line with Ndumia's (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. It also asserts that a regulatory framework governing the construction industry could seek legal capacity to prosecute errant developers. Oyelakin and Kandi's (2017) showed that government policies determined how the business behaves and perhaps influenced its growth. Regulations are a useful and acceptable tool in achieving some degree of unification in the institutional frameworks (Yatim, Rusuli & Yatim, 2019). The policies and regulations are designed to guarantee that legislations are realigned and developed towards the best standards and conform to Kenya's environment (Nakpodia, Adegbite, Amaeshi & Owolabi, 2018). The research finding however contrast with the finding by Oluoch, K'Aol and Kosha (2021) that regulatory framework does not have a significant moderating effect on the relationship between strategic leadership and financial sustainability of NGOs in Kenya.

## 7.0 Conclusion

The objective was to determine the moderating effect of external regulation on the relationship between transformational leadership and enterprise risk management adoption by Commercial State Corporations in Kenya. The study rejected the null hypothesis and adopted the alternative hypothesis, which posits that there is a significant moderating effect of External Regulation in the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya.

## 8.0 Recommendations

The study has established a significant moderating effect of External Regulation in the relationship between Transformational Leadership and ERM adoption by Commercial State Corporations in Kenya. It thus recommends the mainstreaming and alignment of internal policies of state corporations to external regulations to enhance enterprise risk adoption and good governance. Internal policies should be reviewed periodically to incorporate changes in external regulations. It is also recommended the periodic review be undertaken by external consultants. The top management team of the organisation ought to review their reporting charter as policy intervention to include periodic reporting on compliance to external regulation. Oversight bodies, like State Corporations Advisory Committee (SCAC), that oversee corporate governance in state corporations ought to sustain enforcement and compliance of external regulation as they have a moderating effect on ERM adoption. Continual alignment with best practices and monitoring compliance to external regulations are important ingredients that should be incorporated into processes and procedures of the entity. Further, rewards and sanction should be embraced to ensure compliance and realization of corporate governance objectives. It is also crucial to ensure reporting structures and allocation of resources are aligned to the organization design and that the risk management policies are cascaded to all stakeholders for ownership and accountability. The replication of similar studies is recommended in both public and private sectors for comparisons and to generate knowledge on best practices and thus contribute to enterprise risk management discipline.

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