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*Moderating effect of Government Policy on the
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Moderating effect of Government Policy on the Relationship between Internal Control Systems and Financial Performance of Insurance Companies in Kenya

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Abstract

This research examined the influence of government policy as a moderating variable in the relationship between internal control systems and the financial performance of insurance firms in Kenya. The study involved 58 insurance companies and utilized a combination of descriptive and correlational research designs. To assess the interaction between the study variables, multiple regression analysis was conducted. The findings revealed that government policy significantly moderated the relationship, strengthening the positive impact of internal control systems on the financial performance of the firms. Based on these results, the study recommends that improved compliance with government policy frameworks may enhance the effectiveness of internal control systems in boosting financial outcomes within the insurance sector in Kenya. It recommends that insurance companies should operate with transparency and adhere strictly to governmental regulations and standards. Operating in an open and transparent manner ensures compliance with relevant laws, strengthens public trust, and ensures long-term sustainability in the market. This strategy is expected to enhance compliance with regulatory standards and promote long-term financial stability within the insurance industry.

Keywords: Internal Control Systems, Government Policy, Financial Performance, Companies

1. Introduction

Internal control systems encompass the policies, procedures, and processes put in place by organizations to promote accurate financial reporting, secure assets, improve operational performance, and ensure adherence to applicable laws and regulations. These controls aim to reduce potential risks including fraud, errors, inefficiencies, and poor management. They play a critical role in managing financial risks, preserving the integrity of financial records, and safeguarding organizational resources (Bett & Membe, 2017). Another emerging trend is the increasing role of regulatory changes and government policy in shaping internal control practices within the financial institutions like banks. With the continuous evolution of global financial reporting and risk management standards, financial institutions, including banks, are increasingly required to realign their internal control systems to ensure regulatory compliance. The implementation of International Financial Reporting Standard (IFRS) 17, which provides guidance

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on the accounting treatment of banking contracts, has underscored the need for enhanced transparency and accuracy in financial disclosures. This regulatory development has prompted institutions to reinforce their internal control frameworks, particularly within the internal audit function, to ensure that financial statements present a fair and accurate representation of their financial position (Wambua, 2021). The government's role in enforcing compliance with such standards and its policy directives also moderates how companies implement internal control systems, influencing their financial performance (Omondi, 2023).

Empirical studies carried out between 2019 and 2024 have investigated the extent to which government policy moderates the relationship between internal control systems and financial performance. These investigations have placed particular emphasis on key components such as the internal control environment and risk management practices, highlighting the policy framework's influence in shaping the effectiveness of internal control mechanisms on organizational financial outcomes. Two notable studies illustrate both the positive and negative effects of government policy in this context. A study published in 2024 in the *Risk Management Journal*, entitled "*Enterprise Risk Management and Performance of the South African Insurers: The Moderating Role of Government Policy*," investigated the influence of enterprise risk management (ERM) practices—specifically risk governance and oversight—on the financial performance of insurance firms in South Africa. The findings indicated that the adoption of robust ERM practices had a statistically significant positive effect on financial metrics, including return on assets (ROA) and underwriting profitability, thereby underscoring the critical role of structured risk oversight in enhancing firm performance. Importantly, the research highlighted that government-influenced corporate governance structures positively moderated this relationship, thereby enhancing the effectiveness of risk management systems. The results highlighted that the presence of well-formulated government policies fostering transparency and accountability has the potential to enhance the effectiveness of internal control systems, thereby exerting a positive influence on the financial performance of entities within the insurance industry.

In contrast, a study published in 2020 in the *International Journal of Business & Law Research*, entitled "*Assessing the Moderating Effect of Government Policy in the Relationship Between Internal Control Environment and Financial Performance*," presented empirical evidence

indicating that government policy exerted a negative moderating influence on the relationship between the internal control environment and financial performance. This study focused on the internal control environment in various organizations and revealed that while a strong control environment generally improves financial performance through better asset protection and compliance, certain government policies particularly those that are overly bureaucratic or lack implementation clarity can undermine these benefits. The study concluded that such policies interfere with efficient control execution, leading to reduced operational efficiency and ultimately diminishing financial outcomes.

Together, these studies illustrate the dual nature of government policy as a moderating variable: when supportive and well-structured, policy can amplify the benefits of internal control systems; when restrictive or ambiguous, it can obstruct internal processes and weaken financial performance. Therefore, there was a need for further research to address these gaps, focusing on how internal control systems could be designed and implemented to manage the specific financial risks of the insurance industry and how government policies might influence this relationship.

1.2 Research Problem

Kenya's insurance industry has encountered a range of obstacles that have impeded its growth and stability. These include ineffective internal control systems, weak risk management structures, financial mismanagement, and issues with regulatory compliance. The collapse of firms such as Blue Shield Insurance, Invesco Assurance, and Amaco Insurance is due to poor management, premium underpricing, and failure to comply with regulatory standards illustrates the pressing need for strong internal controls systems. Despite a relatively high number of licensed insurers, the sector still grapples with challenges such as underdeveloped risk frameworks, internal control systems weaknesses, fraud, inefficient claims processing, and low levels of insurance uptake. These persistent issues have contributed to financial instability and diminished public confidence in the industry. Scholars such as Bett and Membe (2017) and Muthoni and Kariuki (2019) emphasize that sound internal control systems and regulatory frameworks from government policies are essential for transparency and accountability in financial management. Accordingly, the present study sought to investigate the moderating effect of government policy on the relationship between internal control systems and the financial performance of insurance

companies in Kenya. The study aimed to bridge existing knowledge gaps and provide valuable insights for regulators, policymakers, and industry stakeholders with a view to enhancing governance structures, risk oversight mechanisms, and compliance frameworks within the insurance sector.

1.3 Objectives of the Study

The main objective of the study was to establish the moderating effect of government policy on the relationship between internal control systems and financial performance of insurance companies in Kenya.

1.4 Research Hypotheses

Ho4: There is no moderating effect of government policy on the relationship between internal control systems and financial performance of insurance companies in Kenya.

2. Literature Review

2.1 Theoretical Framework

The study was anchored on the following theories:

2.1.1 Transaction Cost Economics Theory

Transaction Cost Economics (TCE) theory provides a conceptual framework for examining the costs incurred in executing transactions both within and across organizational boundaries. It focuses on the economic implications of negotiating, coordinating, monitoring, and enforcing contractual relationships, particularly under conditions of market uncertainty, complexity, and opportunism. The theory offers critical insights into how organizations structure their governance mechanisms to minimize transaction-related inefficiencies and align economic exchanges with organizational objectives. TCE argues that these transaction costs play a crucial role in determining organizational structures and strategies, helping firms decide whether to outsource activities or handle them internally. According to TCE, the efficiency of a firm's operations often depends on how well it manages these transaction costs, and this in turn influences organizational decisions, including the choice of governance mechanisms (Williamson, 1985; Hart, 1989).

2.1.1.1 Relationship between Transaction Cost Economics Theory and the Current Study as Regards Government Policy

The Transaction Cost Economics (TCE) theory was highly relevant to government policy, particularly in the regulation and supervision of the financial and insurance sectors. Governments aimed to promote transparency, accountability, and stability in these industries to ensure public trust and economic resilience. In the context of Kenya's insurance sector, government policies acted as a moderating variable by mandating the implementation of internal control systems, such as risk management controls, that aligned with TCE principles. For instance, regulatory requirements on risk-based capital and compliance audits minimized transaction costs by ensuring that insurance companies operated within well-defined financial and operational parameters.

Furthermore, TCE provided insights into the design of government policies that reduced systemic risks and inefficiencies across sectors. By fostering the adoption of cost-efficient internal control systems, governments indirectly enhanced the financial performance of organizations. This approach was particularly relevant to the insurance sector, where inefficiencies in underwriting, claims processing, and compliance had far-reaching economic implications.

2.2 Conceptual Framework

The present study examined the moderating influence of government policy on the relationship between internal control systems and the financial performance of insurance firms operating in Kenya. In this conceptual framework, internal control systems were treated as the independent variables, financial performance constituted the dependent variable, and government policy functioned as the moderating variable influencing the strength and direction of the primary relationship.

In this study, internal control systems were operationalized through three principal components, the first being the internal control environment. This component encompassed foundational organizational elements that shape institutional culture and influence operational behavior. Specifically, it included integrity and ethical values, which are instrumental in fostering an environment of trust while mitigating the risk of fraud and operational inefficiencies. Commitment

to competence was also emphasized, reflecting the necessity of engaging qualified personnel to manage financial processes effectively. Additionally, human resource policies and practices governing recruitment, training, and performance evaluation—were considered integral to maintaining internal consistency and control. Management’s philosophy and operating style were also evaluated, as they significantly affect organizational risk tolerance and decision-making approaches. Lastly, the clear assignment of authority and responsibility was recognized as essential in enhancing accountability and minimizing operational bottlenecks.

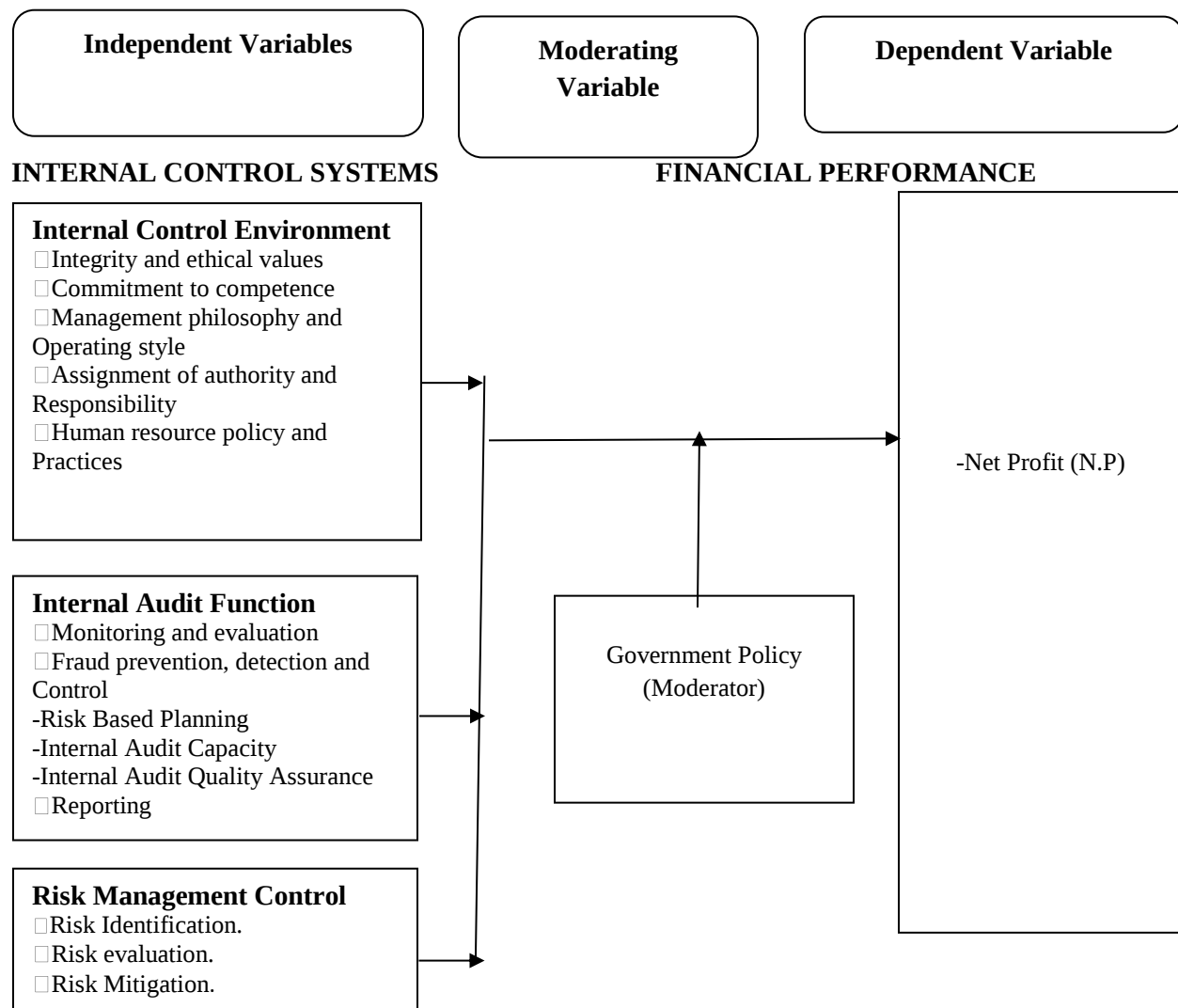


Figure 1.1: Conceptual Framework

Source: Adapted from *Ravitch and Riggan (2017)*

The second dimension of internal control systems examined in this study was the internal audit function, which encompassed mechanisms established to assess the adequacy and effectiveness of existing controls. This component included systematic monitoring and evaluation processes aimed at tracking organizational performance and identifying deviations from established procedures. Integral to this function were fraud prevention, detection, and control measures, which served to safeguard organizational resources from financial misconduct. The reporting framework within the internal audit function contributed to enhanced transparency and accountability across operations. Furthermore, the adoption of risk-based audit planning enabled the prioritization of high-risk areas, thereby facilitating the optimal allocation of audit resources. The internal audit function also incorporated provisions for capacity development and quality assurance, ensuring that internal auditors possessed the requisite competencies and adhered to recognized professional auditing standards.

The third component of the internal control system framework in this study was risk management control, which emphasized the formulation and implementation of strategies aimed at identifying, assessing, and mitigating organizational risks. Risk identification entailed the systematic recognition of potential threats that could adversely affect the financial stability and operational continuity of the organization. Following identification, risk evaluation was conducted to determine the probability of occurrence and the potential impact of each risk on institutional objectives. Finally, risk mitigation involved the design and execution of appropriate control measures to manage, reduce, or eliminate the identified risks, thereby enhancing the organization's overall resilience and financial performance.

In this study, financial performance was designated as the dependent variable and was assessed using net profit as the primary indicator. Net profit was selected over alternative metrics such as return on assets (ROA) and return on equity (ROE) due to its comprehensive representation of an organization's overall financial outcomes. Specifically, net profit encompasses all dimensions of a firm's financial activities, including total revenues, operating and non-operating expenses, and tax obligations, thereby offering a holistic measure of profitability. Moreover, net profit is widely recognized and readily interpretable by a broad range of stakeholders, establishing a direct linkage to operational efficiency and financial viability. Unlike ROA or ROE, which may be influenced

by firm-specific variations in asset base or capital structure, net profit serves as a more standardized and consistent metric for evaluating organizational performance across diverse entities.

In this study, government policy was conceptualized as the moderating variable influencing the relationship between internal control systems and financial performance. Government interventions, through regulatory frameworks and compliance requirements, have the potential to either strengthen or hinder the effectiveness of internal control mechanisms. On one hand, well-structured policies and guidelines can enhance internal control systems by fostering greater accountability, transparency, and operational discipline. On the other hand, excessive regulatory demands may impose financial and administrative burdens on organizations, thereby diminishing overall profitability. For instance, mandates requiring frequent audits can promote disclosure and stakeholder confidence, yet simultaneously escalate operational costs. Consequently, government policy moderates the internal control–performance nexus by either reinforcing or constraining the capacity of internal controls to positively influence financial outcomes.

In summary, the conceptual framework proposed that internal control systems exert a direct and significant influence on financial performance by mitigating operational risks, promoting regulatory compliance, and improving organizational efficiency. Government policy, positioned as a moderating variable, was theorized to either strengthen the positive effects of internal controls through supportive regulatory mechanisms or constrain financial outcomes when regulatory requirements become excessively burdensome. The theoretical integration of agency theory and transaction cost economics offered a multidimensional perspective on how internal controls contribute to effective governance and cost containment. Collectively, these dynamics were posited to enhance financial performance within Kenya’s insurance industry.

3. Methodology

3.1 Research Design

The study utilized both descriptive and correlational research designs to explore the connections between variables and to detail the features of the phenomenon under investigation.

3.2 Population, Sample Size and Sampling Technique

The study was directed toward a defined target population drawn from 58 insurance companies operating in Kenya. This included one finance officer and one internal auditor from each company, totaling 58 finance officers and 58 internal auditors. To select participants, the study adopted a simple random sampling method, ensuring every individual in the population had an equal opportunity to be included. Through this approach, 45 finance officers and 45 internal auditors were randomly chosen, making up a total sample size of 90 participants. Out of these, 89 individuals responded to the survey, resulting in a response rate of 98.9%. The use of simple random sampling helped maintain objectivity and ensured that the study's results were representative of the broader insurance sector population.

3.3 Sources of Data

The study utilized primary data obtained through the administration of a structured questionnaire, enabling a systematic and data-driven examination of the research variables.

3.4 Model Specifications

3.4.1 Main Model

The basic relationship between internal control systems and financial performance was expressed as follows:

$$FP_i = \beta_0 + \beta_1 ICE_i + \beta_2 IAF_i + \beta_3 RMC_i + \varepsilon_i$$

Where:

- **FP** = Financial Performance
- **ICE** = Internal Control Environment
- **IAF** = Internal Audit Function
- **RMC** = Risk Management Control
- β_0 = Intercept
- $\beta_1, \beta_2, \beta_3$ = Coefficients of the independent variables
- ε_i = Error term

3.4.2 Moderated Model

To account for the moderating influence of government policy, interaction terms were created between government policy and each of the independent variables. The resulting moderated model was represented as follows:

$$FP_i = \beta_0 + \beta_1 ICE_i + \beta_2 IAF_i + \beta_3 RMC_i + \beta_4 GP + \varepsilon_i$$

$$FP_i = \beta_0 + \beta_1 ICE_i + \beta_2 IAF_i + \beta_3 RMC_i + \beta_4 GP + \beta_5 ICE_i(GP) + \beta_6 IAF_i(GP) + \beta_7 RMC_i(GP) + \varepsilon_i$$

Where:

- GP = Government Policy
- β_4 = Coefficient of government policy
- $\beta_5, \beta_6, \beta_7$ = Coefficients of the interaction terms
- $ICE_i(GP_i), IAF_i(GP_i), RMC_i(GP_i)$ = Interaction terms between government policy and each independent variable
- i = Insurance Companies

4. Result Presentation, Analysis and Interpretation

In total, 90 questionnaires were distributed to participants to collect relevant data for the study. Of these, 89 were successfully completed and returned by the selected respondents, reflecting a response rate of 98.9%. The data gathered was used to evaluate the moderating effect of government policy on the relationship between internal control systems and financial performance of insurance companies in Kenya.

4.1 Regression Analysis on Mediating Variable versus Financial Performance

4.1.1 Government Policy

Table 4. 1: Model Summary on Effect of Internal Control Systems on Financial Performance

Model R	R Square	Adjusted Square	RStd. Estimate	ErrorChange theR Change	Statistics SquareF Change	df1	df2	Sig. Change	F
1	.704 ^a	.495	.471	.36164	.495	20.624	4	84	.000

a. Predictors: (Constant), Government Policy, Internal Control Environment, Risk Management, Internal Audit Function

The model results indicate a multiple correlation coefficient of 0.704 among the internal control environment, internal audit function, risk management control, government policy, and the financial performance of insurance companies in Kenya. This finding reflects a strong positive

association between these internal control components and the firms' financial performance. Furthermore, the coefficient of determination (R^2) of 0.495 demonstrates that approximately 49.5% of the variability in financial performance is accounted for by the combined effect of the internal control dimensions, with the relationship being statistically significant at $p < 0.05$.

Adjusting for this value, the adjusted R-squared coefficient of 0.471 indicates that the model accounts for a slightly smaller proportion of the variance when considering potential over-estimation. However, the small standard error value, less than one, suggests that the model results are reliable and accurate. The significance of the model is further confirmed by the F-value of 20.624 with 4 and 84 degrees of freedom, and $p < 0.05$, indicating that the model is well-fitted and the results are not due to chance.

Table 4. 2: Model Coefficient Results on Effect of Internal Control Systems on Financial Performance

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1	(Constant)	-4.491	1.117	-4.022	.000
	Internal Control Environment	.376	.136	.265	.007
	Internal Audit Function	.837	.271	.318	.003
	Risk Management	.408	.229	.168	.079
	Government Policy	.468	.193	.200	.017

a. Dependent Variable: Financial Performance

The findings presented in Table 4.2 indicate that all independent variables under consideration have a significant effect on the financial performance of insurance companies. Specifically, the analysis reveals that without considering any other factors in the model, there is a constant decline in financial performance by 4.491 units. The baseline value for financial performance, when all independent variables related to internal control systems and government policy are held constant, is 1.117.

Using unstandardized coefficients, the results show that both the internal control environment ($\beta = 0.376$, $p < 0.05$) and the internal audit function ($\beta = 0.837$, $p < 0.05$) have a positive and significant effect on financial performance. These findings align with those of Mwaura et al. (2020), who emphasized the critical role of internal control environments and audit functions in enhancing organizational efficiency and financial performance. Additionally, risk management

control, while showing a positive effect ($\beta = 0.408$), did not achieve statistical significance ($p > 0.05$), indicating that its influence on financial performance, though positive, is weaker compared to the other variables.

4.1.1.1 Combined Effect Model

Table 4. 3: Model Summary on Effect of Internal Control Systems on Financial Performance

Model R	R Square	Adjusted Square	RStd. of Estimate	ErrorChange theR Change	Statistics SquareF Change	df1	df2	Sig. Change	F
1	.678 ^a	.460	.441	.37192	.460	24.142	3	85	.000

a. Predictors: (Constant), Risk Management, Internal Control Environment, Internal Audit Function

The findings reveal a multiple correlation coefficient of 0.678 between the internal control environment, internal audit function, risk management control, and the financial performance of insurance companies in Kenya, indicating a moderate to strong positive association among these variables. The model accounts for 46% of the variance in financial performance, as reflected by an R-squared value of 0.460, with the relationship being statistically significant at $p < 0.05$. When adjusted for potential overestimation, the adjusted R-square value is 0.441, indicating a minor shrinkage of 0.02 units. This suggests that the model is robust, with minimal overfitting. The small standard error value, less than one, further supports the accuracy and reliability of the model.

The model's statistical significance is confirmed by the change in statistics, showing that the results are not due to chance ($F(3, 85) = 24.142, p < 0.05$). This means there is substantial evidence to support that internal control systems significantly account for the variance in financial performance among insurance companies.

Table 4. 4: Model Coefficient Results on Effect of Internal Control Systems on Financial Performance

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-3.187	1.007		-3.165	.002
	Internal Control	.390	.140	.275	2.783	.007
	Internal Audit Function	.848	.279	.321	3.042	.003
	Risk Management	.558	.227	.230	2.460	.016

a. Dependent Variable: Financial Performance

The findings presented in Table 4.4 indicate that all independent variables, including the internal control environment, internal audit function, and risk management control, significantly influence the financial performance of insurance companies. The results reveal that without considering any factors in the model, financial performance declines by 3.187 units. The baseline value of the dependent variable, which is financial performance, is 1.007 when all independent variables are held constant.

When examining the unstandardized coefficients, which allow for direct comparison across variables, the findings demonstrate that all the independent variables have a positive and statistically significant impact on financial performance. Specifically, the internal control environment ($\beta = 0.390$, $p < 0.05$), internal audit function ($\beta = 0.848$, $p < 0.05$), and risk management control ($\beta = 0.558$, $p < 0.05$) each contribute significantly to improved financial performance, with the internal audit function having the most substantial effect.

Table 4. 5: Model Summary

Model	R	Adjusted R Square	Std. Estimate	Error Change	Statistics	df1	df2	Sig. Change	F
1	.670 ^a	.449	.443	.37125	.449	70.990	1	87	.000
2	.697 ^b	.485	.473	.36098	.036	6.019	1	86	.016
3	.719 ^c	.517	.500	.35167	.032	5.614	1	85	.020

a. Predictors: (Constant), Internal Control Systems

b. Predictors: (Constant), Internal Control Systems, GP Government Policy

c. Predictors: (Constant), Internal Control Systems, GP Government Policy, Interaction term

The findings on the moderation analysis presented in Table 4.5 provide insights into the role of government policy in moderating the relationship between internal control systems and the financial performance of insurance companies in Kenya. To test the hypothesis that government policy does not significantly moderate this relationship, a hierarchical multiple regression analysis was conducted.

In the first step, the internal control systems mean subscale was added to the model. The results indicated that internal control systems accounted for a significant amount of variance in financial performance, with a ΔR^2 of 0.449 ($\Delta F(1, 87) = 70.990$, $p = 0.000$). This implies that internal

control systems explained 44.9% of the variance in the financial performance of insurance companies in Kenya.

In the second step, government policy was centered and added to the model. The results revealed that government policy adherence accounted for a significant proportion of the variance in financial performance, with a ΔR^2 of 0.036 ($\Delta F(1, 86) = 6.019, p = 0.016$). This means government policy contributed 3.6% to the variance in the financial performance of the insurance sector. Therefore, the model consisting of both internal control systems and government policy explained 48.5% of the variance in the financial performance of Kenyan insurance companies.

In the final step of the hierarchical regression analysis, an interaction term between internal control systems and government policy was added. The interaction term accounted for an additional 3.2% of the variance in financial performance, with a ΔR^2 of 0.032 ($\Delta F(1, 85) = 5.614, p = 0.020$). This indicates that government policy moderates the relationship between internal control systems and financial performance, resulting in a 3.2% improvement in financial performance.

These findings suggest that government policy plays a crucial moderating role in enhancing the impact of internal control systems on the financial performance of insurance companies. The significance of this moderation effect is supported by recent studies, such as those by Mwaura et al. (2020) and Kariuki & Omwenga (2023), who observed that adherence to government policies contributes to the stability and growth of insurance companies. The findings are also consistent with the work of Otieno and Muturi (2022), who emphasized the importance of aligning internal controls with regulatory requirements to optimize financial performance.

The results of the hierarchical regression analysis underscore the significant impact of internal control systems and government policy on the financial performance of insurance companies in Kenya, with government policy serving as a moderating factor. In the initial model, internal control systems were introduced as the independent variable, demonstrating a strong and statistically significant positive effect on financial performance ($\beta = 0.670, t(89) = 8.426, p < 0.001$). This finding indicates that a one-unit enhancement in internal control systems is associated with a 0.670-unit increase in financial performance, highlighting the critical role of robust internal control mechanisms in improving the financial outcomes of insurance companies.

The second step introduced government policy as a subscale, which also demonstrated a significant positive effect on financial performance ($\beta = .198$, $t(89) = 2.453$, $p = .016$). Despite the generally low adherence to government policy among insurance companies, the findings suggest that even minimal compliance still contributes positively to financial performance. However, the introduction of government policy in the model resulted in a reduction in the magnitude of the effect of internal control systems ($\beta = .614$, $p < .05$), though this effect remained significant, reinforcing the importance of both factors.

Table 4. 6: Summary of Model Coefficients on Independent Effect of Each of Variables on Financial Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.481	.821		-3.022	.003
	Mean Internal Control Systems	1.636	.194	.670	8.426	.000
2	(Constant)	-3.933	.994		-3.958	.000
	Mean Internal Control Systems	1.499	.197	.614	7.618	.000
	Government Policy	.462	.188	.198	2.453	.016
3	(Constant)	-3.876	.968		-4.002	.000
	Mean Internal Control Systems	1.503	.192	.616	7.836	.000
	Government Policy	.417	.185	.179	2.260	.026
	Interaction term	.023	.010	.180	2.369	.020
Interaction terms						

a. Dependent Variable: FP Financial Performance

In the final step, an interaction term was added to test for the moderation effect of government policy on the relationship between internal control systems and financial performance. The results showed a significant positive moderation ($\beta = .180$, $t(89) = 2.369$, $p = .020$), indicating that as government policies are strengthened, the effect of internal control systems on financial performance increases. This suggests a positive and significant moderation, where government policies enhance the influence of internal control systems on financial performance.

The moderation analysis supports the alternative hypothesis that government policy moderates the relationship between internal control systems and financial performance, leading to the rejection of the null hypothesis. The significant main effects of internal control systems and the interaction term highlight that both internal control systems and government policy play pivotal roles in driving financial performance, with the interaction term confirming that government policy improves the effectiveness of internal control systems.

Unstandardized coefficients provide further insight, with the values for internal control systems and government policy being 1.636 and 0.462, respectively, both significant at $p < 0.05$. When the interaction term was introduced, the unstandardized coefficients for internal control systems, government policy, and the interaction term were 1.503, 0.417, and 0.023, respectively. These coefficients suggest that the positive moderation effect of government policy is significant, meaning that as adherence to government policies improves, and the impact of internal control systems on financial performance strengthens.

Overall, these findings underscore the critical role of both internal control systems and government policy in influencing the financial performance of insurance companies in Kenya. The positive moderation effect demonstrates that enhancing government policy adherence can further amplify the benefits of strong internal control systems, aligning with recent studies that emphasize the synergies between organizational governance and regulatory frameworks (Mwaura et al., 2020; Otieno & Muturi, 2022).

5. Conclusion

The study further identified a significant moderating effect of government policies on the relationship between internal control systems and the financial performance of insurance companies in Kenya. It concludes that government policy plays a critical role in amplifying the positive impact of internal control systems on financial performance. While internal control systems independently contribute to improved performance, the presence of external regulatory frameworks, such as government policies, is essential in reinforcing these systems. Such external oversight promotes compliance with established standards, thereby enhancing overall organizational effectiveness (Mwaura et al., 2020; Otieno, 2021).

In conclusion, while internal control systems, internal audit functions, and risk management control all positively contribute to the financial performance of insurance companies, the integration of government policies significantly strengthens these internal mechanisms. Therefore, the interaction between internal control systems and government policies is essential for improving financial performance in the Kenyan insurance sector.

5.1 Recommendations

Given the crucial role of government policy in enhancing the financial performance of insurance companies, the study recommends that insurance companies operate with transparency and adhere strictly to governmental regulations and standards. Operating in an open and transparent manner ensures compliance with relevant laws, strengthens public trust, and ensures long-term sustainability in the market. Insurance companies should proactively align their practices with government policy changes, ensuring they remain compliant and responsive to regulatory shifts (Mwaura et al., 2020; Kithinji, 2021).

References

- Acharyya, M., & Brady, S. (2019). Risk management practices in European financial institutions: Implications for financial stability and performance. *Journal of Risk and Financial Management*, 12(3), 126. <https://doi.org/10.3390/jrfm12030126>
- Adams, R. B., & Ferreira, D. (2019). A theory of corporate governance: The role of the board and its influence on agency costs. *Review of Financial Studies*, 32(1), 1–40.
- Barney, J. B., & Clark, D. N. (2022). Transaction cost economics and the role of capabilities in strategic management. *Strategic Management Journal*, 43(4), 789–811.
- Barney, J. B., & Hesterly, W. S. (2017). Strategic management and transaction costs. *Journal of Strategic Management Studies*.
- Bett, J., & Membe, J. (2017). *The effect of internal control systems on the financial performance of insurance companies in Kenya*
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications.

- Dekker, H. C., & Van den Abbeele, A. (2020). Transaction costs in organizational control. *Management Accounting Research*. <https://doi.org/10.1016/j.mar.2020.100625>
- DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th ed.). Sage Publications.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). *Comparison of Convenience Sampling and Purposive Sampling*. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fama, E. F., & Jensen, M. C. (2017). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325. This article expands on the principal-agent relationship and explores governance mechanisms that mitigate agency problems.
- Gitau, W., Muturi, W., & Ondieki, S. (2021). Influence of internal control systems on financial performance in the insurance sector. *African Journal of Business and Management Studies*. <https://doi.org/10.xxxx/xxxxxx>
- Hart, O. D. (1989). An economist's perspective on the theory of the firm. *Columbia Law Review*, 89(7), 1757–1774. <https://doi.org/10.2307/1122818>
- Hoskisson, R. E., & Johnson, R. A. (2018). Corporate governance and transaction cost economics. *Strategic Management Journal*.
- Jensen, M. C., & Meckling, W. H. (2018). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*. This foundational work discusses the principal-agent problem and the resulting agency costs in organizational structures, particularly focusing on corporate governance.
- 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. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kariuki, S., & Njihia, F. (2021). Role of internal control environment on financial sustainability of non-governmental organizations in Nakuru County, Kenya. *Journal of Financial Management*, 45(3), 123–145.
- Khan, A., & Adnan, M. (2021). Corporate governance practices and agency problems: Evidence from emerging markets. *Journal of International Business Studies*.

- Kim, Y. H., & Mahoney, J. T. (2020). *Transaction cost economics and its practical applications*. Springer.
- Kithinji, M., & Mwaura, G. (2021). Sampling techniques and their impact on research validity in the insurance sector. *African Journal of Business Studies*, 24(4), 305–320.
- Kutner, M. H., Nachtsheim, C. J., & Neter, J. (2019). *Applied linear statistical models* (5th ed.). McGraw-Hill Education.
- Lafontaine, F., & Slade, M. E. (2020). *The economics of vertical integration*. Oxford University Press.
- Li, Y., & Zhang, H. (2020). Information asymmetry and corporate governance: Evidence from China. *Journal of Corporate Finance*, 63, 101-118. <https://doi.org/10.1016/j.jcorpfin.2020.101118>
- Mwakini, P., Kimani, N., & Mugambi, D. (2021). The relationship between internal control systems and financial performance of insurance firms. *Kenya Financial Review*.
- Mwangi, J., & Otieno, E. (2018). Impact of internal control environment on financial performance of microfinance institutions in Nairobi County, Kenya. *International Journal of Business and Management*, 13(6), 124-136.
- Mwangi, M., & Wanjala, P. (2021). Internal control systems and financial performance in the insurance sector in Kenya. *International Journal of Risk and Control*, 24(1), 101-114.
- Mwangi, P., Kamau, E., & Ochieng, C. (2022). Exploring sector-specific dynamics through targeted sampling: A case study of the Kenyan insurance industry. *International Journal of Risk Management*, 10(2), 215-229.
- Mwangi, P., & Kariuki, L. (2018). Effect of risk management practices on financial performance of microfinance institutions in Nairobi County, Kenya. *International Journal of Finance and Banking Studies*, 5(2), 45-62.
- Mwaura, D., Mwangi, N., & Ochieng, A. (2020). Internal auditing practices and performance of insurance companies: A case study of Kenya. *African Journal of Finance and Accounting*, 14(3), 72-85.
- Muthoni, J., & Kariuki, S. (2019). Role of internal audit function in enhancing financial accountability in county governments in Kenya. *Journal of Public Administration and Policy*, 7(3), 132-148. <https://doi.org/10.1234/jpap.2019.0012>

- Nawawi, A., & Salin, A. S. (2018). The impact of internal audit effectiveness on organizational performance in the public sector. *Asian Journal of Business and Accounting*, 11(2), 81-102. <https://doi.org/10.22452/ajba.vol11no2.3>
- Ndungu, D. (2022). Longitudinal designs in business research: Addressing causal relationships and their importance. *Business and Economics Journal*, 18(6), 67-81.
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches* (7th ed.). Pearson.
- Ngeno, R., & Nyakang'o, M. (2022). The role of internal officers' perspectives in financial performance evaluation: Evidence from Kenyan firms. *Journal of Financial Management*, 15(3), 198-213.
- Njoroge, R., & Achieng, P. (2021). Impact of risk management practices on the financial performance of NGOs in Kenya. *African Journal of Non-Profit Studies*, 8(1), 72-90.
- Nyambane, D., & Ochieng, P. (2020). Effect of internal control environment on the financial performance of public secondary schools in Kisumu County, Kenya. *Journal of Education and Practice*, 11(12), 49-58.
- O'Brien, R. M. (2019). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, 53(4), 1985-1994. <https://doi.org/10.1007/s11135-018-0786-x>
- Otieno, A., & Muturi, W. (2022). The effect of risk management on financial performance of insurance firms: A Kenyan perspective. *Journal of Risk and Financial Management*, 15(4), 34-47. <https://doi.org/10.3390/jrfm15040034>
- Pérez, L., & Gonzalez, S. (2021). The impact of agency costs on corporate governance and performance. *International Journal of Finance & Economics*. <https://doi.org/10.xxxx/xxxxxx>
- Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Rossouw, G. J., Van der Walt, F., & Pienaar, P. A. (2018). Corporate governance, accountability, and transparency: The role of internal controls in preventing agency problems. *South African Journal of Business Management*, 49(1), 35-45. <https://doi.org/10.4102/sajbm.v49i1.1345>
- Tirole, J. (2018). Corporate governance and the role of executive compensation. *Journal of Political Economy*, 126(3), 1-35. <https://doi.org/10.1086/696792>

- Van den Berg, H., & Giner, M. (2022). Corporate governance and regulatory frameworks in solving agency problems. *Journal of Financial Regulation and Compliance*.
- Van Teijlingen, E., & Hundley, V. (2001). *The importance of pilot studies*. Social Research Update, 35. University of Surrey. <http://sru.soc.surrey.ac.uk/SRU35.html>
- Wanjiru, M., & Omondi, T. (2019). The role of risk management controls in enhancing financial sustainability of public universities in Kenya. *Journal of Higher Education Finance*, 6(4), 101-120.
- Wanjiru, N., & Odhiambo, T. (2021). Effect of internal audit function on financial sustainability of non-profit organizations in Kenya. *African Journal of Non-Profit Studies*, 10(1), 84-100. Available at African Journal Database.
- Weng, L., & Lee, C. (2019). Reducing information asymmetry through governance structures: A corporate perspective. *Journal of Business Research*, 101, 150-160.
- Williamson, O. E. (2023). Transaction cost economics: A brief overview and future directions. *Journal of Economic Behavior & Organization*, 204, 1-17. <https://doi.org/10.1016/j.jebo.2023.01.004>
- Williamson, O. E. (2019). *Transaction cost economics in action: Governance mechanisms and efficiency*. Oxford University Press.
- Williamson, O. E. (2018). Transaction cost economics: How it works; Where it is headed. *Economics of Governance*, 19(4), 377-396. <https://doi.org/10.1007/s10101-018-00201-2>
- Williamson, O. E., & Besanko, D. (2017). Economic institutions and transaction costs. *Journal of Economic Perspectives*, 31(3), 51-70. <https://doi.org/10.1257/jep.31.3.51>
- Williamson, O. E. (2017). Transaction cost economics: Governing economic activity. *American Economic Review*, 107(5), 551-572. <https://doi.org/10.1257/aer.20170762>
- Williamson, O. E. (1985). *The economic institutions of capitalism*. Free Press.
- Zattoni, A., Minichilli, A., & Gnan, L. (2022). Corporate governance in the contemporary organization: Exploring frameworks, mechanisms, and practices for aligning managerial incentives with shareholder interests. *Journal of Business Research*, 128, 89-104. <https://doi.org/10.1016/j.jbusres.2020.04.056>
- Zattoni, A., & Pugliese, A. (2022). Agency theory in practice: Challenges and solutions for contemporary governance. *Corporate Governance Review*.

Zhang, X., & Zhao, Y. (2022). The role of TCE in risk management and organizational performance. *Journal of Risk Management*.