

Moderating Effect of Communication Strategy on Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects in Kenya

Amolo Elvis Juma Amolo, PhD¹, Charles Mallans Rambo, PhD^{2*}, Charles Misiko Wafula, PhD^{3*}

¹Lecturer PhD, University of Nairobi, Kenya

²Associate Professor PhD, University of Nairobi, School of Open and Distance Learning, Kenya

³Senior Lecturer PhD, University of Nairobi, School of Open and Distance Learning, Kenya
Corresponding Author*

Abstract: Hydroelectric energy investment has been underexploited in Kenya due to financial constraint arising from investor's negative perception of the regions high investment risk and low creditworthiness which retards the degree of private capital penetration. The purpose of the study was to assess the moderating influence of Communication strategy on the relationship between financial risk management instruments and performance of hydroelectric energy projects in Kenya. The study adopted pragmatism paradigm and descriptive survey design while questionnaires and interview guide were used to collect quantitative and qualitative data from a census of 94 participants. Validity coefficient of 0.775 and reliability coefficient of 0.781 were obtained after pretesting of the instruments amongst the 10% of the participants. Analysis involved descriptive statistic of mean and standard deviation and inferential statistic of Correlation and Regression at a significance level of 0.05 and thematic content analysis of qualitative data for triangulation. The hypothesis result: 1. H_0 : Communication strategy does not significantly moderate the relationship between financial risk management instruments and performance of hydroelectric energy projects in Kenya was rejected since $P=0.000<0.05$. Therefore the study concluded that there is significant influence of all financial risk management instruments as well as moderating effect of Communication strategy on performance of hydroelectric energy projects in Kenya. It is recommended that Project management and policy makers should integrate appropriate communication strategy amongst financial risk management instruments users and providers to improve performance of hydroelectric energy projects besides developing targeted policies for strengthening implementation of the financial risk management instruments to boost investors and lenders confidence. Further research should be carried out on the influence of risk communication human resource on power projects in Kenya.

I. INTRODUCTION

In Kenya, in spite of having an estimated hydropower potential of about 9,000MW, only 848.8 MW has been exploited (Ministry of Energy, 2020) due to financial constraints. Financial markets can play critical role in stimulating private investments into the renewable energy

development to bridge the scarce resources at disposal of the public sector (Rezec and Scholtens, 2017). However, investor's negative perception of Kenya's high investment risk lowers the degree of private capital penetration (OECD, 2013). Thus, proper communication strategy regarding the utilization of financial risk management instruments to de-risk renewable energy infrastructure projects is essential for reducing private investment cost.

Financial risk management instruments are approaches to risk mitigation for renewable energy projects and they include alternative risk transfer, contingent capital, hedging derivatives, credit enhancement, and insurance. According to a review on the impact of market instruments on environmental challenges by Gómez-Baggethun and Muradian (2015), there exists the risk of framing and commoditization of environmental resources which requires the input of institutional investors to assess from a portfolio perspective the renewable energy projects in relation to financial risk management (Gitone, 2014). Renewable energy development thus demands attention on risk mitigation to ensure adequate funds can be solicited from both the local and international financial markets so as to reap from their benefits and improve performance of such project by ensuring their successful completion on schedule, within cost and quality. Further, Kaminker and Stewart (2012) stated that, information asymmetry on risks associated with renewable energy by credit ratings has hampered investor's interest in investing in such projects. Good communication strategies and plans enable projects to achieve success and should incorporate the media, government, the community and regulatory liaisons with clear processes for internal stakeholders involvement (Chihuri and Pretorius, 2010); thus helping in adopting and utilizing the appropriate instrument for risk management besides precise understanding of the KPI for effective success measurement. This study defines communication as the flow of information amongst project parties to minimize information asymmetry risks such as

adverse selection, moral hazard and holdup thus improving performance of the project.

The purpose of the study is to assess the extent to which communication strategy moderates the relationship between financial risk management instruments and performance of hydroelectric energy projects in Kenya. The study provides a reference for other scholars, policy makers and investors besides contributing valuable knowledge on appropriate communication strategy for diffusion of the capabilities of financial risk management instruments besides giving insights into appropriate KPI of hydroelectric energy projects. The study was organized into introduction, literature review, findings and discussion, and conclusion.

II. LITERATURE REVIEW

2.1 Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects

Financial risk management instruments such as Alternative risk transfer (ART), hedging derivatives, contingent capital, credit enhancement and insurance, if used appropriately, could reduce renewable energy infrastructure projects' cost as risks will be transferred away from investors and lenders (Suprpto et al., 2016). Insurers have over the years used Alternative Risk Transfer (ART) products such as Catastrophic (CAT) bonds, CAT options, CAT futures, and Industry Loss Warranties (ILW) to access additional capitals and to directly transfer parts of their risk exposure to the capital markets thereby absorbing the resulting losses in cases of mega catastrophe (Sibindi, 2015). Contingent capital provides projects with strong and efficient recapitalization incentives when they experience significant equity loss or upon reaching a trigger threshold (Calomiris and Herring, 2013). Contingent capital can reduce financial distress by injecting liquidity to the project hence reducing risks and improving performance of renewable energy projects. Credit enhancement in the global financial market has been instrumental in strengthening the credit profile of participants to fulfill financial obligations at a cheaper cost thereby reducing demand pressure on the banking system (Dhruba, 2018; Chowdhury, Chen and Tiong, 2015). A study by Dhruba (2018) through a desk review found that higher credit rating reduces capital cost for development of renewable energy projects besides mitigating credit risk.

Hedging derivatives are important financial risk management instrument that can be used in a project to prevent losses and maintain high returns (Basha, 2013). However, scholars like Giraldo-Prieto, Uribe, Bermejo and Herrera (2017) believe that the instruments themselves carry with them certain risks such as counterparty risk and legal risk which may make the contract enforceable when it's required to perform and thus adequate understanding and supervision of derivatives transaction should be done with maximum accuracy. In Kenya, Waswa and Wepukhulu (2018) observed a positive relationship between derivative usage and financial performance of NSE listed non-financial companies.

Insurance companies as the paramount financial organizations in any surviving economy, have the prime business function of accepting and underwriting unwanted risk on insuring public's behalf at a premium (Soye, Adeyemo and Ayo, 2017). Gatzert and Kosub (2015) through desk review revealed that technical risks are comprehensively covered by modern insurance products while construction, operation and policy and regulatory risks coverage by such insurance products remain limited and this would require a collaboration with international financial institutions like World Bank that have already developed a partial risk guarantee for certain policy risks.

2.2 Communication Strategy and Performance of Hydroelectric Energy Projects

An effective communication strategy and plan that integrates media, government, public, project stakeholders and regulatory liaisons body is de facto to a project's success (Chihuri and Pretorius, 2010); as it helps in timely and accurate propagation of the required information concerning financial risk management instruments utilization and understanding PKI of projects to achieve optimum performance. Communication in project risk management facilitates monitoring and review processes for appropriate corrective measures to be taken (Serpell, Ferrada, Rubio and Arauzo, 2015). However, due to the conflicting interest amongst project partners, risk communication remains a challenge as each partner tries to gain advantage over the other by exercising information asymmetry (Ahmed *et al.*, 2007), thus, a well-organized communication strategy is of essence to facilitate timely risk identification, analysis and response using appropriate risk mitigation instruments (Ceric, 2012). Scholars opine that for communication strategies to be effective there needs to be a clear communication flow structure, innovative communication management tools, well operational communication channels and propagated information must be of quality (Project Management Institute, 2013).

A study by Forcada, Serrat, Rodríguez and Bortolini (2017) investigated communications' key performance indicators (KPI) and success of construction projects through quantitative survey with Likert scale questionnaires as instruments for collecting data from a sample size of 390 construction partners in Spain while analysis involved ordinal logistic regression and Chi-square (χ^2) test. Findings revealed that information quality is the most significant communication KPI while communication flow structure, communication channels and information management are relevant aspects of project success. In Kenya, Mugo and Moronge (2018) investigated the relationship between organizational communication and implementation of building projects within Nairobi County by adopting descriptive survey design and data collected using questionnaires from a sample size of 74 respondents consisting of engineers, architects and quantity surveyors while analysis involved descriptive and inferential statistics of Correlation, Regression and ANOVA. The study

revealed that communication framework with clear roles and well-documented communication plan is essential to enhance project implementation and; appropriate communication channel ensures that information is relayed to right audience and improves team coordination, increases synergy and trust hence performance improvement. Thus effective communication has a positive significant influence on performance of the project in achieving cost reduction, scope coverage, time schedule, risk management and quality of the products. Further, investors will have a clear understanding of the appropriate financial risk management instruments to be utilized in achieving project objectives.

III. RESEARCH METHODOLOGY

The study adopted pragmatism paradigm and descriptive survey design for collecting qualitative and quantitative data and triangulation of results to deduce in-depth knowledge of the problem under study without manipulating the environment (Creswell, 2013), hence, neutralizes biases and limitations inherent in any single method (Teddlie and Tashakkori, 2009). A census of 94 participants consisting of 84 respondents and 10 Key Informants were involved while questionnaire and Interview Guide were used to collect data. The data collection instruments were pre-tested in 10 unselected participants and a validity coefficient of 0.775 and reliability coefficient of 0.781 obtained. Analysis involved descriptive statistics and inferential statistics of correlation and regression at a significance level of 0.05 while the qualitative data was analyzed manually through descriptive statistics of thematic content analysis.

A multiple regression model was used to test hypothesis 2. H_0 .

1. H_0 : Communication strategy does not significantly moderate the relationship between combined financial risk management instruments and performance of hydroelectric energy projects in Kenya

Performance = f(financial risk management instruments, communication strategy, and the interaction term between Financial Risk Management Instruments and performance of hydroelectric energy projects, random variable)

$$Y_j = \beta_0 + \beta_1 X_j + \beta_2 X_m + \beta_3 X_n + \alpha$$

IV. FINDINGS AND DISCUSSION

The study realized a 100% questionnaire return rate. The study sought the perspectives of participants on moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. Financial Risk Management Instruments used in this study were; Alternative risk transfer, Contingent Capital, Credit Enhancement, Hedging derivatives, and Insurance.

Table 4.1: Combined Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects.

Combined Financial Risk Management Instruments	n	Mean	Standard deviation
Alternative risk transfer	84	3.96	0.445
Contingent Capital	84	3.95	0.344
Credit Enhancement	84	4.25	0.210
Hedging derivatives	84	4.12	0.197
Insurance	84	3.92	0.223
Composite mean standard deviation	& 84	4.04	0.166

4.1. Analysis of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects

The study sought the views of participants on moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The subsequent results using descriptive statistics is given in table 4.37

Table 4.12: Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects.

Communication Strategies, Financial Risk Management Instruments	n	Mean	Std. Deviation
Alternative Risk Transfer	84	4.17	0.269
Contingent Capital	84	4.16	0.225
Credit Enhancement	84	4.31	0.200
Hedging Derivatives	84	4.24	0.184
Insurance	84	4.15	0.196
Communication Strategy	84	4.38	0.300
Composite mean & standard deviation	84	4.23	0.194

Table 4.37 presents the descriptive statistics on participants' perspectives on moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The study results indicates that following the moderating effect of communication strategy (Mean=4.38, SD=0.300), the means for each financial risk management Instruments increased. This can be shown by comparing mean scores results from Table 4.32 before communication strategy was introduced; (Alternative risk transfer (Mean=3.96), Contingent capital (Mean=3.95), Credit enhancements (Mean=4.25), Hedging derivatives (Mean=4.12) and Insurance (Mean=3.92)) with Table 4.37 mean score results after the moderating influence of communication strategy (Alternative risk transfer (Mean=4.17), Contingent capital (Mean=4.16), Credit enhancements (Mean=4.31), Hedging derivatives (Mean=4.24) and Insurance (Mean=4.15)). The mean for Credit enhancement was the highest (Mean=4.31,

SD=0.200), followed by Hedging derivatives (Mean=4.24, SD=0.184), Alternative risk transfer (Mean=4.17, SD=0.267), Contingent capital (Mean=4.16, SD=0.225) and Insurance (Mean=4.15, SD=0.196). The study results further revealed that composite mean of mean was 4.23 and standard deviation of 0.194; meaning that communication strategy moderated the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. Though Chihuri and Pretorius (2010) and Serpell et al., (2015) only revealed that communication strategy influences Performance of Hydroelectric Energy projects, the current study has gone further to find that communication strategy has an increasing moderating influence between financial risk management instruments and performance of hydroelectric energy projects.

These findings were further supported by qualitative data and this is what the participant had to say on moderating influence of communication strategy on the relationship between financial risk management instruments and performance of Hydroelectric Energy project. The interviewee from KenGen said that

“...to ensure achievement of the overall sector mandate we engage stakeholders and regulators such as Kenya Power “off-taker”, Energy Regulatory Commission (ERC) and National Environmental Management Authority (NEMA) through appropriate communication channels such as local daily newspapers and company’s website that offers timely and quality information for appropriate action. Internal Communication for employees has also been enhanced through an intranet platform.” Further, *“...environmental scanning of any inherent reputational risk is frequently being undertaken so that potential adverse communication is addressed with relevant stakeholders through a sound communication engagement strategy to reduce chances of a decline in the market share price and failure to attract investors.”*

Concerning environmental safety the KenGen participant argued that

“...KenGen has developed and communicated an Occupational health and safety policy (OSH policy) that undertakes to observe Health & Safety standards that exceed the minimum legal requirements through continuous training on environmentally friendly practices and maintain open communications regarding OSH practices.”

Efforts towards development and implementation of a national capacity building exercise aimed at demystifying the cost of investing in a cleaner environment and healthier workforce should be stepped up.

On risk mitigation the KenGen participant stated that

“...sensitizing market stakeholders through creating awareness using the right channels and learning from international green finance issuers is a great part of capacity building for the Kenyan economy.” For financial access capacity improvement, *“...we collaborate with our partners to grow a green bonds market in Kenya as part of delivering lower cost capital to green projects, and developing capital markets in Kenya, for instance, in 2020 Kenya issued a sovereign green bond enhancing its strategic green financing position in Africa.”*

4.2 Correlation Analysis of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects

Inferential statistics was conducted on moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. Pearson product moment correlation coefficient was used in order to establish whether Communication strategy moderates the relationships between financial risk management Instruments and Performance of Hydroelectric Energy projects. The correlation results showed that all the financial risk management Instruments and Communication strategy, (Alternative Risk Transfer ($r=0.562$; $p\text{-value}=0.000<0.05$), Contingent Capital, ($r=0.632$; $p\text{-value}=0.000<0.05$), Credit Enhancement ($r=0.678$; $p\text{-value}=0.000<0.05$), Hedging Derivatives, ($r=0.646$; $p\text{-value}=0.000<0.05$), Insurance ($r=0.457$; $p\text{-value}=0.000<0.05$) and Communication strategy ($r=0.693$; $p\text{-value}=0.000<0.05$) were significantly related ($P\text{-values}=0.000<0.05$) against the Statements of Performance of Hydroelectric Energy projects when moderated with communication strategy. The overall correlation coefficient for the moderating effect of communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects was found to be 0.934 with a $p\text{-value}$ of $0.000<0.05$, implying that there is a significant moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects; leading to rejection of the null hypothesis; 7. H_0 Communication strategy does not significantly moderate the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The result supports the findings of studies by Serpell et al., (2015) that communication strategy influences performance of projects by modeling the concept of moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The correlation results are shown in Table 4.38

Table 4.2: Correlation Analysis of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects. (n=84)

Communication Strategy, Financial Risk Management Instruments		Performance of Hydroelectric Energy Projects
Alternative Risk Transfer	Pearson correlation	0.562*
	sig. (2-tailed)	0.000
Contingent Capital	Pearson correlation	0.632*
	sig. (2-tailed)	0.000
Credit Enhancement	Pearson correlation	0.678*
	sig. (2-tailed)	0.000
Hedging derivatives	Pearson correlation	0.646*
	sig. (2-tailed)	0.000
Insurance	Pearson correlation	0.457*
	sig. (2-tailed)	0.000
Communication Strategy	Pearson correlation	0.693
	Sig.(2-tailed)	0.000
Overall correlation	Pearson correlation	0.934*
	sig. (2-tailed)	0.000

NB. *Correlation significant at 0.05 level (2-tailed)

4.3. Regression Analysis of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects

Multiple linear regressions were adopted to investigate whether Communication strategy moderates the relationships between financial risk management Instruments and Performance of Hydroelectric Energy projects. The underpinning rationale of using the regression analysis model was to establish how each predictor upon moderating effect of Communication strategy significantly or insignificantly predicted Performance of Hydroelectric Energy projects; secondly to find out which of the predictors best predicted Performance Hydroelectric Energy projects and finally to confirm whether the regression model was a best fit for predicting Performance of Hydroelectric Energy projects. The model summary suggested that there was a positive multiple correlation (R=0.934) between moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. In addition, 87.3% (R²=0.873) of the variance in the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects is explained by the moderating influence of Communication strategy. The result supports the findings of studies by Serpell et al., (2015) that communication strategy influences performance of projects by modeling the concept of moderating influence of Communication strategy on the

relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The model summary results are shown in Table 4.39

Table 4.3: Regression Model Summary of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.934 ^a	0.873	0.865	0.261
a. Predictors: (Constant), Communication strategies, Financial risk management Instruments				

The study sought to find out whether the regression model is best fit for predicting Performance of Hydroelectric Energy projects. The ANOVA results indicated that F-statistics (6,77)=253.75 is significant given that the P-value of 0.000<0.05; which implies that the regression model results in significantly better prediction of Performance of Hydroelectric Energy projects. The ANOVA results are shown in table 4.40

Table 4.4: An ANOVA results of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.739	6	6.6230	253.75	0.000 ^b
	Residual	2.011	77	0.0261		
	Total	41.750	83			
Dependent Variable: Performance of Hydroelectric Energy Projects						
b. Predictors: (Constant), Communication Strategies, Financial Risk Management Instruments						

The study sought to find out whether there was moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects. The multiple linear regression coefficients results indicated that there was significant moderating influence of Communication strategy on the relationship between financial risk management Instruments and Performance of Hydroelectric Energy projects (P-Value=0.00<0.05). By substituting the beta value as well as the constant term, the proceeding multiple linear regression model was as follows:

$$Y = -0.588 + 0.879X_1 * CS + 0.475X_2 * CS + 0.951X_3 * CS + 0.544X_4 * CS + 0.243X_5 * CS + 0.329CS$$

Where by CS is communication strategy.

The model shows that Alternative risk transfer (P-value= 0.000<0.05), Contingent capital (P-value= 0.000<0.05), Credit enhancement (P-value= 0.000<0.05), Hedging derivatives (P-value= 0.000<0.05, and insurance (P-value=

0.000<0.05) had statistical significance (P-value= 0.000<0.05) after the moderating effect of Communication strategy. In terms of the best predictor for the Performance of Hydroelectric Energy projects, the study revealed that the best predictors were as follows; Credit enhancement (beta=0.962), Contingent capital (beta=0.890), Hedging derivatives (beta=0.593), Alternative risk transfer (beta=-0.518), Communication strategy (beta=-0.326), and Insurance (beta=0.224). The regression coefficients results are in Table 4.41

Table 4.5: Coefficients for the Regression of Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects.

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.588	0.300		1.962	0.053
	Alternative risk transfer	0.475	0.104	0.518	4.584	0.000
	Contingent capital	0.879	0.207	0.890	4.246	0.000
	Credit enhancement	0.951	0.207	0.962	4.684	0.000
	Hedging derivatives	0.544	0.109	0.593	4.171	0.000
	Insurance	0.243	0.103	0.224	2.232	0.000
	Communication Strategy	0.329	0.091	0.326	3.600	0.000
a. Dependent Variable: Performance of Hydroelectric Energy Projects						

An effective communication strategy that integrates project stakeholders is de facto to a project's success as it helps in timely and accurate propagation of the required information concerning financial risk management instruments utilization and in understanding the PKI of any project to achieve optimum performance. Thus, to reduce information asymmetry due to conflict of interest amongst project partners, a well-organized communication strategy is of essence to facilitate timely risk identification, analysis and response using appropriate risk mitigation instruments to optimize projects performance. Communication strategy key concepts should focus on clear communication flow structure, innovative communication management tools, well operational communication channels and quality information propagation.

4.4. Moderating Influence of Communication Strategy on the Relationship between Financial Risk Management Instruments and Performance of Hydroelectric Energy Projects

The seventh research objective was to determine moderating influence of Communication strategy on the relationship between financial risk management instruments and

Performance of Hydroelectric Energy projects. The composite mean and composite deviation of the moderating influence of communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects were 4.23 and 0.194 respectively; implying that using the Likert scale the study participants agreed that there is a moderating influence of Communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects. The overall correlation coefficient for moderating influence of Communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects was found to be 0.934 with a p-value of 0.000<0.05, implying that from all the views of participants in the study the results indicated that there is a significant relationship between moderating influence of Communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects leading to rejection of the null hypothesis (7. H₀: Communication strategy does not significantly moderate the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects) and acceptance of the alternative hypothesis. The ANOVA results indicated that the regression model for moderating influence of Communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects results in significantly (P=0.000<0.05) better prediction of Performance of Hydroelectric Energy projects. The multiple linear regression coefficient values indicated that there was a statistically significant (P=0.000<0.05) moderating influence of Communication strategy on the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects.

V. CONCLUSIONS

The multiple linear regression coefficients as well as the Pearson correlation results indicated that there was significant influence of financial risk management instruments on Performance of Hydroelectric Energy projects. The small p-values (0.000<0.05) implies that there is a significant influence of combined financial risk management instruments on Performance of Hydroelectric Energy projects; leading to rejection of the null hypothesis 1. H₀: There is no significant relationship between financial risk management instruments and Performance of Hydroelectric Energy projects; and so it was concluded that there is significant relationship between financial risk management instruments and Performance of Hydroelectric Energy projects. The multiple linear regression coefficients as well as the Pearson correlation results indicated that there was significant (P-values=0.000<0.05) moderating influence of Communication strategy on the Relationship between financial risk management instruments and Performance of Hydroelectric Energy projects; leading to rejection of the null hypothesis 2. H₀: Communication strategy

does not significantly moderate the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects; and so it was concluded that Communication strategy significantly moderates the relationship between financial risk management instruments and Performance of Hydroelectric Energy projects. The findings of this study thus provide significant contributions to the body of knowledge as it establishes the relationship between financial risk management instruments, communication strategy and performance of hydroelectric energy projects. Based on the findings, the study recommends targeted policy enactment for inclusion of financial risk management instruments in hydroelectric energy projects and awareness creation on the operations and availability of financial risk management instruments to the instruments providers and investors in hydroelectric energy projects. An appropriate communication strategy with clear communication flow structure, innovative communication management tools, operational communication channels and quality information that integrates project stakeholders should be entrenched in projects for timely and accurate propagation of information concerning financial risk management instruments utilization and understanding of project objectives besides facilitating monitoring and review processes for appropriate corrective measures. This study was delimited to Kenya and on hydroelectric energy projects alone and therefore, a study can be replicated in other developing countries and in projects other than hydroelectric energy projects to explain the possibility of other environmental factors thereby improving generalizability of the findings.

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