



## **PROJECT RISK MANAGEMENT STRATEGIES AND PERFORMANCE OF REAL ESTATE DEVELOPMENT PROJECTS IN NAIROBI CITY COUNTY, KENYA**

**<sup>1</sup> Komu Humphrey Njuho, <sup>2</sup> Dr. Mungai Anne Marie Wairimu**

<sup>1</sup> Degree of Master of Science in Project Management, Jomo Kenyatta University of Agriculture and Technology

<sup>2</sup> Lecturer, Jomo Kenyatta University of Agriculture and Technology

### **ABSTRACT**

Risk management for the real estate project management entails a proactive approach where the right risks are properly identified and assessed at different stages of the life cycle of the real estate development. The real estate sector in Kenya is facing various challenges that hinder project success in the sector. The general objective was to examine the effect of project risk management strategies on performance of real estate development projects in Nairobi County, Kenya. The specific objectives were to examine effect of risk transfer, and risk acceptance on performance of real estate development projects in Nairobi County, Kenya. This research was guided by portfolio theory, and enterprise risk management theory. The study adopted a descriptive research design. The study target was 80 registered real estate companies. The unit of the analysis was the company staff involved in project management; 80 project managers, 80 project supervisors, 80 project administrators, and 80 project architects (320 project staff). The sample size of 178 project team members was determined using Yamane 1967 formula. The study adopted a stratified random sampling technique. Questionnaires were used for data collection. A pilot test was conducted with 10% of the sample hence 18 project staff. The study used content and construct validity. Cronbach's Alpha Coefficient was used to measure reliability. Data was analyzed using descriptive (frequencies, percentages, and mean) and inferential statistics (correlation and regression) with the help of SPSS Version 28. Findings were tabulated. Findings show that there is a strong significant relationship between risk transfer and project performance ( $r=0.777$ ,  $p=0.000$ ), and a strong significant relationship between risk acceptance and project performance ( $r=0.835$ ,  $p=0.000$ ). The recommendations are; The firms' management should ensure that all projects are insured. This will ensure that project funds are not used to cater any losses incurred in case of work accidents or any other unfortunate event. The project management managers should set realist budget to manage project risks. This will ensure the project funds are not used to cover costs incurred when managing risks.

**Key Words:** Project Risk Management Strategies, Risk Transfer, Risk Acceptance, Real Estate Development Projects

## Background of the Study

According to PMI 7<sup>th</sup> edition, project risk is an uncertain event that when it occurs leads to a positive or negative consequence on at least one key indicator of project performance such as cost, time, quality or scope. Risk management is one of the nine knowledge areas propagated by the PMI. According to Kendrick (2019), risk management in a project or organization is dependent on the ability of the team to understand the sources and variations in projects, and then working to minimize threats while maximizing opportunities wherever it is feasible. The primary risk management strategies utilized in project management are transferring, and acceptance (Kerzner, 2019).

Hasani and Abdullah (2019) stated that risk management is the identification of factors that could have a negative impact on the project. Risk management is a planned and organised process that assists the project team in making the correct choice at the right time to identify, categorise, quantify, and manage risks (Masengesho *et al.*, 2020). Hijazi, et al., (2018) found that the key risks affecting donor-funded projects included risk identification, risk analysis, risk response, and risk mitigation. The risk identification process involved identifying possible risks that influenced project performance with a view of putting measures to either eliminate or reduce the same.

## Statement of the Problem

The real estate industry plays an important role in boosting the nation's economy and at the same time helping in meeting the daily or societal basic needs. According to statistics from the National Construction Authority (NCA) of Kenya, between 2018 and 2020, there was an average of 12% increase in the number of construction projects in Nairobi, highlighting the growing significance of the real estate sector in the county's economy (NCA, 2021). Kathambi and Obiero (2021) found that real estate firms contribute about 30% of the GDP, over 50% of the jobs and account for 80% of the workforce. Kenyan real estate sector has grown to be the fourth largest contributor to its GDP. The sector contributed to 10.5% to the total GDP in Q3'2022, coming in as the second largest contributor to Kenya's GDP, only behind the Agricultural sector that contributed 14.8%.

However, the sector is facing various challenges that hinder project success in the sector. The high cost of financing developments is leading to an unprecedented number of properties being put up for auction (Knight Frank, 2021). Both retail and residential sectors have been severely hit with malls having endless square footage without tenants driving them to give out outrageous offers just to ensure they keep their tenancy. Some malls are yet to find a single tenant two years on. In the residential sector, developers targeting the high end clientele are having a hard time moving their products due to a saturation of that market (The Cytonn Q1'2021). According to a survey conducted by the Kenya Institute of Management (KIM) in 2020, approximately 30% of real estate development projects in Nairobi experienced delays, leading to increased project costs and reduced investor confidence (KIM, 2020). Kitoto (2019) found that at least 70% of the real estate projects in Nairobi County are completed late while 50% experience more than 20% budget overrun. In support of this, Ministry of Housing, Land and Urban Development (2021) reported that 48% of real estate projects in Nairobi County are still incomplete and 10% have completely stalled. In addition, Koskela (2017) mentioned that the cost incurred as a result of safety due to poor implementation of the housing construction projects is high. The total costs of construction accidents accounted for 7.9% to 15% of the total costs of projects. This has led to a slow uptake of housing construction projects.

Despite the existence of numerous studies on project risk management across various sectors in Kenya, including banking, healthcare, and general project management, a significant gap persists in the literature regarding the application of risk management strategies specifically within the realm of real estate development projects in Nairobi County, Kenya. While studies such as Chepkruai (2022), Aduma and Kimutai (2018), Ndambiri and Kimutai (2016), and Njuguna (2019) have explored the relationship between risk management strategies and project

performance in different sectors and contexts within Kenya, none have comprehensively addressed the methodological and conceptual gap regarding risk management practices in real estate development projects in Nairobi County. The methodological gap arises from the limited scope of existing research, which predominantly focuses on sectors such as banking and healthcare, neglecting the unique challenges and dynamics inherent in the real estate sector. Furthermore, the conceptual gap lies in the absence of a thorough examination of risk management strategies specifically tailored to the real estate development context in Nairobi County. While studies like Chepkru (2022) and Njuguna (2019) have identified various risk management strategies and their impact on project performance, they do not specifically address how these strategies apply to the complex and multifaceted nature of real estate development projects in Nairobi County. Thus, this study seeks to bridge both the methodological and conceptual gaps by conducting a comprehensive investigation into the effect of risk management strategies on the performance of real estate development projects in Nairobi County, Kenya.

### **Specific Objectives**

- i. To establish effect of risk transferring on performance of real estate development projects in Nairobi City County, Kenya.
- ii. To examine effect of risk acceptance on performance of real estate development projects in Nairobi City County, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Framework**

#### **Portfolio Theory**

Portfolio theory was developed by Markowitz (1959). The main principle of the theory is on spread of risks. Portfolio theory of project investment maximizes portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of the project (Hamimah, 2008). Portfolio Theory is a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment projects that have collectively lower risk than any individual project. A collection of both types of project units can therefore have lower overall risk than individual projects. Diversification on the other hand lowers risk even if projects returns are not negatively correlated indeed, even if they are positively correlated (Ritchie & Bridley, 2005).

Portfolio theory models project performance as a normally distributed curve such that it defines project risk as the standard deviation of project objective and model a portfolio as a weighted combination of project so that the achieved success of a portfolio is the weighted combination of the project performance. By combining different project units whose returns are not perfectly positively correlated, portfolio theory seeks to reduce the total variance of the portfolio return (Sharpe, 2004). The theory supports the risk transfer variable in which project managers need to diversify risks to other agencies so as not to spend a huge portion of the project budget on one risky project.

#### **Enterprise Risk Management Theory**

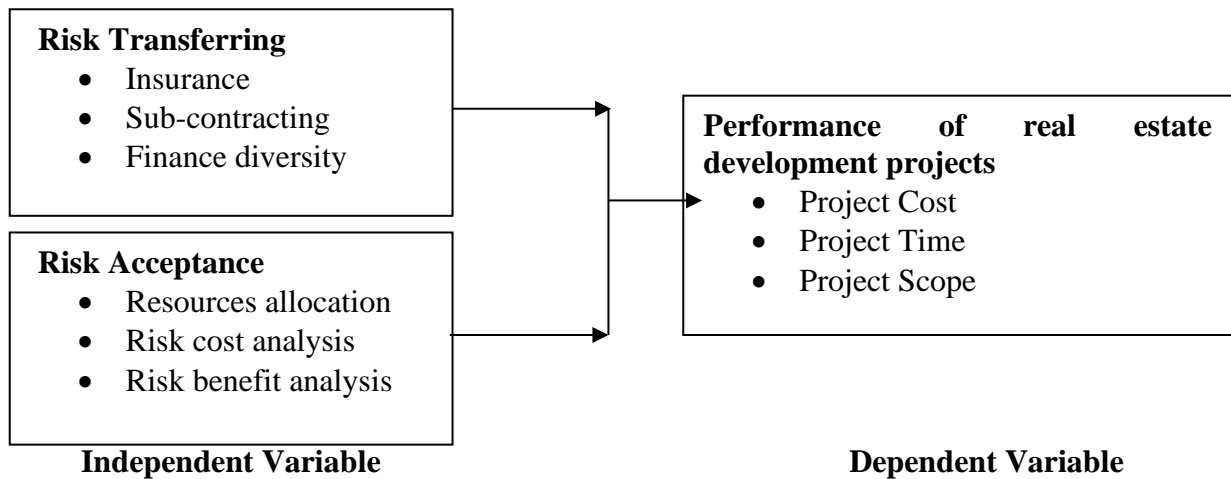
The theory of risk management was developed by Daniel Bernoulli in 1738. The major aim of this theory is to ensure that the project can keep on creating significant value under any uncertain environment. The Enterprise Risk Management (ERM), risk management framework of managing risk emphasizes that senior company executives and employees should actively be involved in risk management process of analyzing and responding to a wide range of company risks (Hallowell, Molenaar, & Fortunato, 2013). This concept encourages all members of the organization to be involved in the management of risks and not only one or a few members. Managers stand high chances of saving a lot of money if they deal with uncertain

project events in a proactive manner that will minimize the impact of threats and seize the opportunities that could occur (Shahu et al., 2012).

The ERM theory has become popular in project management techniques despite the fact that it was developed for management of company risks. Drumll (2001) explains that adopting ERM philosophy in project management is a wise decision as it applies to industries that have very high rates of failure like the construction industry. These failures are as a result of failure to identify, mitigate and control risk across the entire business, making this theory relevant to this research. Proper management of the risks will determine how the managers will prevent the risks from occurring. The theory is significant to this research since project failure may be as a result of failure to plan and allocate adequate resources that would help the management to cope with project risks and maintain project quality.

**Conceptual Framework**

The conceptual framework of this study draws upon various theoretical perspectives to explain the relationship between project risk management strategies and the performance of real estate development projects in Nairobi County, Kenya as shown in figure 2.1 below.



**Figure 2.1: Conceptual Framework**

**Risk Transferring**

Risk transferring involves finding a new team member who is ready to take on project management responsibilities and assume responsibility for any potential risks (Naji, Hafeth, & Ali, 2018). Risk transfer is a key component of a risk management strategy that is aimed at minimizing uncertainties and liabilities affecting a project. Transferring the risky aspects of a real estate project needs to be done through the use of contractual means like indemnification clauses, guaranteeing agreements and performance assurances which enable contractors to share the risks of the projects with other players in the business (Fewings & Henjewe, 2019). The responsibility for risks that arise during the construction process, such as delays or defectives, may be undertaken by contractors as part of their contractual agreements with project owners while insurance policies would be the appropriate means to share, management of risks related to property damage, liability claims or force majeure events to insurance companies (Heigermoser et al., 2019).

Moreover, the risk-transferring method of real estate project management usually entails utilizing of composites like builder’s risk insurance, liability insurance, and a range of professional indemnity products that assist in the mitigation of financial risks and legal liabilities. Insurance contracts of different types ensure a financial medium to cover a range of risks, which may be property damage, bodily injury, professional negligence, and contractual

disputes (Nicholas & Steyn, 2020). Chin and Liu (2020) indicated that risk transfer strategy is among the best practices in real estate risk management. They asserted that buyers and sellers in real estate transactions consider buying insurance especially in cases where the buyers are interested in making pure electronic transactions. By involving insurance, the risks associated with conducting electronic transactions are hedged out.

### **Risk Acceptance**

Risk acceptance involves embracing the risks while closely monitoring them to ensure that they are managed properly. This approach assumes that we live in a world in which unpredictable may create risks that may break in and that we have the option of acceptance and understanding without taking action against these risks (El Khatib et al., 2020). Risk acceptance according to PMBOK occurs when the project team decides not to modify the project plan to address a risk or is unable to come up with an alternative effective strategy to address the risks. Accepting risks may necessitate greater resources or time, employing a tried-and-true technique rather than an innovative one, or avoiding an unfamiliar subcontractor.

Risk acceptance means a level of uncertainty a project manager is ready to bear. The fundamental characteristics attached to stakeholders' risk perception include their tolerance to risk and their readiness to bear any losses or gains that may occur from specific undertakings (Tereso et al., 2019). Moreover, risk acceptance in real estate project management is the employment of mitigation strategies when dealing with high-impact risks but accepting lower-level risks as part of the normal conduct of operation (Ehrhart et al., 2020). Project teams identify potential risks during the project planning phase, try to evaluate each risk and give a certain amount of priority based on the damage the risks may cause and its effect on the project objective. According to Roy (2023), highly critical or damaging risks that cause failure of the project may be resolved through implementing a number of preventive risk management measures including a robust project management process, establishing buffers or pools of emergency funds, or even maybe ensuring insurance coverage.

### **Empirical Literature Review**

#### **Risk Transferring and Project Performance**

Shaw (2020) conducted a study on the theory and practice of new urban real estate markets. The study used a risk-transferring approach for real estate investments. The findings show that risk transference depends on the market trends, asset performance, and risk profiles. Transferring risks had an influence on the performance of the real estate companies. Risks diversification helps to effectively manage the project resources. Bacon (2023) studied effect of risk-transferring strategies in real estate project management. The research shows that transferring techniques, such as contract review, provide the adjustment of risk exposure to changing market environment. In addition, the ability to adopt changes in market prices involved complex process which in turn leads to reduced transaction costs.

Kolo (2015) investigated the influence of project risk management practices in construction projects in Abuja Nigeria. The study adopted a descriptive research design. Questionnaires were used to collect data. Findings showed that the main risk transfer strategies adopted included taking up insurance policies and risk premiums. Risk transfer had a significant relation with project performance. Macharia and Kirui (2018) studied effect of risk transfer on performance of projects in public secondary schools in Murang'a County. Questionnaires were used to collect data. Results showed that risk transfer technique significantly affects performance of construction projects.

#### **Risk Acceptance and Project Performance**

Wyatt's (2022) studied the effect of property valuation in performance of real estate projects. Results showed that risk acceptance is a key factor in determining investment decisions in the real estate sector which necessitates risk tolerance and risk appetite to be high. The authors also

found that risk acceptance permits investors to benefit from investment opportunities. Sagi (2021) studied the role of risk acceptance in real estate project performance. Findings showed that risk acceptance and portfolio diversification help to mitigate concentration of risks in a project. These acceptance strategies provide the foundation for risk diversification and higher liquidity levels, but they simultaneously bring about complexities and uncertainties to the portfolio management system.

Mariusz, Adnan and Oino (2019) investigated the role of risk management on project success. The researchers used a descriptive research design to collect data from 152 project managers. Findings showed that although there are various risk management practices employed in project managers to mitigate the impact of risks, some techniques like risk acceptance (project managers accept the loss or benefit of a risk or develop a contingency plan after the emergence of a risk), was identified in being fundamental in enhancing project success. Njuguna (2019) sought to determine the influence of risk management practices on performance of projects in Nairobi City County, Kenya. The study adopted a descriptive design. Primary data was used to collect data. The study concluded that risk acceptance had a positive and significant effect on the performance of the projects.

### **RESEARCH METHODOLOGY**

The study adopted a descriptive research design. The study targeted real estate companies in Nairobi City County, Kenya. According to the Kenya Property Developers Association (KPPDA), Nairobi County has 80 registered real estate companies. The companies were the study's unit of analysis. The unit of the analysis was the company staff involved in project management; 80 project managers, 80 project supervisors, 80 project administrators, and 80 project architects (320 project staff). The sample size of 178 of the project team members was determined using Yamane 1967 formula. The study adopted a stratified random sampling technique. The respondents were sampled according to their role in the project. From every strata, the researcher randomly selected at least 44 project staff until the required sample is attained. The study used questionnaires for data collection. The study used close-ended questionnaires. A pilot test was conducted to ascertain validity and reliability of the questionnaire. Pilot test was conducted with 10% of the sample hence 18 project staff as recommended by Orodho (2014). Pilot test results were used to test the questionnaire validity and reliability. Data was analyzed using descriptive and inferential statistics with the help of SPSS Version 28. Data was analyzed using descriptive (frequencies, percentages, and mean) while inferential statistics (correlation and regression) was used to test the relationship between the study variables.

### **RESEARCH FINDINGS AND DISCUSSIONS**

The sample size of study was 178 project staff. The pilot test respondents were 10% of the total hence 18 respondents. The researcher distributed 160 questionnaires to the respondents and 133 were successfully filled and returned. The response rate was 84 % which meets the recommended response rate threshold of 70% as recommended by Kothari (2012).

#### **Risk Transfer**

The first objective sought to establish effect of risk transferring on performance of real estate development projects in Nairobi City County, Kenya. Respondents were asked to tick on the extent to which they agree/disagree with statements related to risk transferring. Findings are presented in Table 1.

**Table 1: Risk Transfer**

Key: *SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean.*

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
The firm insures project items such as construction equipment to ensure no circumstances will result to delay in projects.	15	11.3	18	13.5	3	2.3	14	10.5	83	62.4	3.99
Legal contracts are signed with third parties, particularly when things happen that could delay projects.	10	7.5	9	6.8	6	4.5	22	16.5	86	64.7	4.24
The project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted	17	12.8	15	11.3	3	2.3	31	23.3	67	50.4	3.87
Most tasks that could impede a project team's progress are outsourced	11	8.3	16	12.0	3	2.3	60	45.1	43	32.3	3.81
We have a system that ensures risk is transferred to minimize financial stress	18	13.5	15	11.3	4	3.0	26	19.5	70	52.6	3.86
All project risks are carefully documented before any transfer	90	67.7	14	10.5	3	2.3	16	12.0	10	7.5	2.19
The firm is in partnership with others for risk handling	18	13.5	3	2.3	7	5.3	34	25.6	71	53.4	4.03
We outsource tasks that, if carried out by the project team, might cause delays	7	5.3	19	14.3	3	2.3	18	13.5	86	64.7	3.82

**N=133**

Findings show that the respondents strongly agreed that legal contracts are signed with third parties, particularly when things happen that could delay projects (M=4.24). The respondents also agreed that; the firm is in partnership with others for risk handling (M=4.03), the firm insures project items such as construction equipment to ensure no circumstances will result to delay in projects (M=3.99), the project managers pay insurance premiums on certain of the project deliverables to prevent the project scope from being impacted (M=3.87), there is a system that ensures risk is transferred to minimize financial stress (M=3.86), the project managers outsource tasks that, if carried out by the project team, might cause delays (M=3.82), and most tasks that could impede a project team's progress are outsourced (M=3.81). Respondents disagreed that all project risks are carefully documented before any transfer (M=2.19).

The findings imply that although the project managers transfer project risks, there is poor documentation of the transfer which may raise legal tussles, or the firm may incur costs that they were initially trying to avoid through risk transfers. There are however suitable risk transfer strategies which include insuring construction equipment, timely payment of insurance to ensure no project delay, and outsourcing high risk project activities. Findings support Bacon

(2023) that transferring techniques include outsourcing project activities and adjusting risk exposure to changing market environment.

**Risk Acceptance**

The second objective was to examine effect of risk acceptance on performance of real estate development projects in Nairobi City County, Kenya. Respondents were asked to tick on the extent to which they agree/disagree with statements related to risk acceptance. Findings are presented in Table 2.

**Table 2: Risk Acceptance**

Key: SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean.

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
The firm sometimes takes no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them.	18	13.5	14	10.5	3	2.3	25	18.8	73	54.9	3.91
The firm advocates for use of alternative plan to avoid any circumstances that result to project delay	18	13.5	18	13.5	6	4.5	56	42.1	35	26.3	3.54
The firm always anticipates a project to have risks	18	13.5	6	4.5	7	5.3	39	29.3	63	47.4	3.92
Team ensures it has realistic budgets which anticipate risks hence prudent management of risks	77	57.9	15	11.3	6	4.5	19	14.3	16	12.0	2.11
The firm promotes the use of alternate plans to prevent any situations that cause project delays	10	7.5	11	8.3	9	6.8	40	30.1	63	47.4	4.02
The project manager has enough knowledge on risk analysis process	35	26.3	8	6.0	6	4.5	7	5.3	77	57.9	3.62
The management is continuously updated on the anticipated risks and retention tactics	10	7.5	6	4.5	25	18.8	43	32.3	49	36.8	3.80
Utilizing the right technologies facilitates accepting and retaining risks.	0	0	37	27.8	22	16.5	25	18.8	49	36.8	3.65

N=133

Results show the study respondents agreed that; the firm promotes the use of alternate plans to prevent any situations that cause project delays (M=4.02), the firm sometimes takes no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them (M=3.91), the firm always anticipates a project to have risks (M=3.92), the management is continuously updated on the anticipated risks and retention



tactic (M=3.80), utilizing the right technologies facilitates accepting and retaining risks (M=3.65), the project manager has enough knowledge on risk analysis process (M=3.62), and the firm advocates for use of alternative plan to avoid any circumstances that result to project delay (M=3.54). Respondents disagreed that the team ensures it has realistic budgets which anticipate risks hence prudent management of risks (M=2.11).

Findings imply that some project risks are not mitigated; rather, the project managers devise ways to accommodate the risks in the projects. This may involve changing the project plans if the costs of mitigating risks prove to be more than the costs of changing the project plan. Findings are in agreement with Mariusz, Adnan and Oino (2019) that although there are various risk management practices employed in project managers to mitigate the impact of risks, some project managers accept the loss or benefit of a risk or develop a contingency plan after the emergence of a risk.

**Project Performance**

Respondents were asked to tick on the extent to which they agree/disagree with statements related to performance of real estate development projects in Nairobi County, Kenya. Findings are presented in Table 3.

**Table 3: Project Performance**

*Key: SD=Strongly disagree, D=Disagree, NS=Not Sure, A=Agree, SA= Strongly agree, M=Mean.*

Statements	SD		D		N		A		SA		M
	F	%	F	%	F	%	F	%	F	%	
Projects are carried out within the stipulated budget	11	8.3	84	63.2	7	5.3	28	21.1	3	2.3	1.90
Projects are carried out within the stipulated time schedule	81	60.9	3	2.3	10	7.5	23	17.3	16	12.0	2.17
Projects executed are of intended quality	18	13.5	16	12.0	6	4.5	11	8.3	82	61.7	4.08
Project stakeholders are satisfied	15	11.3	6	4.5	15	11.3	39	29.3	58	43.6	3.89

**N=120**

Findings show that the project staff agreed that projects executed are of intended quality (M=4.08), and project stakeholders are satisfied (M=3.89). They however disagreed that projects are carried out within the stipulated time schedule (M=2.17), and projects are carried out within the stipulated budget (M=1.90). The findings indicate that the projects face time and budgeted overruns although they meet the intended project quality. Findings support the Kenya Institute of Management (KIM, 2020) survey that approximately 30% of real estate development projects in Nairobi experienced delays, leading to increased project costs and reduced investor confidence. Kitoto (2019) also found that at least 70% of the real estate projects in Nairobi County are completed late while 50% experience more than 20% budget overrun.

**Correlation Analysis**

Correlation indicates the strength and significance of the relationship between the study variables. Correlation findings are presented in Table 4.

**Table 4: Coefficient of Correlation**

Variables		Project performance	Risk transfer	Risk acceptance
Project performance	Pearson Correlation	1		
	Sig. (2-tailed)			
Risk transfer	Pearson Correlation	.777**	1	
	Sig. (2-tailed)	.000		
Risk acceptance	Pearson Correlation	.835**	.975	1
	Sig. (2-tailed)	.000	.000	

\*\* . Correlation is significant at the 0.05 level (2-tailed).

Findings show that there is

a strong significant relationship between risk transfer and project performance (r=0.777, p=0.000), and a strong significant relationship between risk acceptance and project performance (r=0.835, p=0.000). Findings are in agreement with;

Macharia and Kirui (2018) that risk transfer significantly affects performance of construction projects, and Njuguna (2019) that risk acceptance had a positive and significant effect on the performance of the projects

**Regression Analysis**

**Table 5: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
	Constant/Y Intercept	5.249	.324		
Risk transfer	.611	.251	.548	4.953	.016
Risk acceptance	1.526	.248	1.377	6.153	.000

Based on the results in Table 5, the equation

$$\text{Project performance} = 5.249 + 0.611 (\text{risk transfer}) + 1.526 (\text{risk acceptance}).$$

According to the results, a change in risk transfer change would cause a change in project performance by a factor of 0.611, and a change in risk acceptance would cause a change in project performance by a factor of 1.526. Results further show that risk acceptance (t=6.153, p=0.000) had the strongest effect on project performance, followed by risk transfer (t=4.953, p=0.016)

**Conclusion**

Project risks are transferred to other parties through outsourcing some project activities. This ensures that the costs incurred as a result of risks are not catered for by the firm rather by the professionals taking up the project activities. Legal contracts are signed with third parties that take up outsourced project roles. Premium insurances are paid on time to ensure that the projects risks are well covered and that projects wouldn't be delayed by any risk.

Project risks are accepted by a firm that promotes the use of alternate plans to prevent any situations that cause project delays, the firm sometimes takes no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them. There are no realistic budgets for anticipate risks hence prudent management of risks.

**Recommendations**

The firms' management should ensure that all projects are insured. This will ensure that project funds are not used to cater any losses incurred in case of work accidents or any other

unfortunate event. All project risks should be documented before transferring risks for accountability. The company should also outsource some project activities to avoid incurring costs associated with repeating some tasks that may not be accomplished as outlined in the project design.

The project management managers should set a realist budget to manage project risks. This will ensure the project funds are not used to cover costs incurred when managing risks. The project design should be flexible to ensure that it accommodates changes that will not have much interference with project time and budget. A flexible project plan will also help to prevent any situation that causes project delay. The firms should also invest in technology that would help to accept and retain risks. They should also engage the project stakeholders to ensure that also accept the project risks and the change in projects to improve on their satisfaction with project outcomes.

### Areas for Further Study

A similar study on project risk management strategies in real estate development projects funded by the government should be conducted, since the study focused on projects implemented by private developers in Kenya. = The study shows that the project risk management strategies studied contribute to 73.9% on performance of real estate development projects in Nairobi County, Kenya. A further study is recommended to establish the other project risk management strategies in that contribute to 26.1% of performance of real estate development projects in Nairobi County, Kenya.

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