COST OF BORROWING, COLLATERAL REQUIRMENT AND CONTRACTORS' RISK ATTITUDES: EVIDENCE FROM CONSTRUCTION FIRMS IN LAGOS STATE, NIGERIA

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DOI: https://doi.org/10.57233/ijamer.v2i1.18

Article Information: Received: 03/17/2026 Revised: 04/13/2026 Accepted: 04/20/2026

To Cite this Article: Ashamu, S. O., & Oladele, W. O. (2026). *Cost of borrowing, collateral requirement and contractors' risk attitudes: Evidence from construction firms in Lagos State, Nigeria*. International Journal of Accounting, Management and Economic Review, 2(1). https://doi.org/10.57233/ijamer.v2i1.18

Abstract
This study examines the relationship between cost of borrowing and contractors' risk attitudes, as well as the effect of collateral requirements on contractors' risk attitudes among selected building and civil construction firms in Lagos State, Nigeria. A cross-sectional survey research design was adopted. The population comprised 69 registered construction firms, from which 37 firms were selected. A total of 250 respondents participated using judgmental and convenience sampling techniques. Data were collected through structured questionnaires. The reliability of the instrument was confirmed using Cronbach's alpha coefficients (cost of borrowing = 0.821; collateral requirements = 0.742), indicating acceptable internal consistency. Descriptive statistics and inferential techniques (correlation and regression analysis) were employed. The findings revealed a moderate positive correlation between cost of borrowing and contractors' risk attitudes ($r = 0.412$, $p < 0.01$). In addition, collateral requirements significantly predicted contractors' risk attitudes, explaining 25.8% of the variance ($R^2 = 0.258$, $p < 0.001$). The results suggest that higher borrowing costs are associated with increased risk sensitivity, while stringent collateral requirements significantly influence contractors' willingness to undertake projects. The study concludes that financing conditions play a critical role in shaping contractors' risk behaviour. It recommends more flexible lending frameworks, including reduced collateral requirements and improved access to construction financing, to enhance project participation and performance.

Keywords:Cost of borrowing, collateral requirements, contractors' risk attitudes, construction firms, project finance

1.Introduction

Project finance is an essential method for financing large-scale infrastructure and building projects worldwide. It generally entails non-recourse or limited recourse financing arrangements, wherein lenders depend predominantly on the anticipated cash flows produced by a particular project rather than the overall assets of the sponsoring entity (Adegoke & Ayodeji, 2022; Rao, 2018). This funding method has gained significance in developing economies, as governments depend on private sector involvement to address infrastructure deficiencies. In Nigeria, especially in swiftly expanding urban areas like Lagos State, project finance is essential for facilitating infrastructure

and construction growth (Raghu & Piyush, 2023). Access to project finance in Nigeria is sometimes limited by elevated borrowing prices and rigorous collateral stipulations. These financial limitations profoundly affect contractors' decision-making processes and their capacity to engage in construction projects. Elevated interest rates augment the total cost of capital, and stringent collateral requirements restrict access to credit facilities. Often, these restrictions impose significant financial strain on construction companies, therefore impacting their ability to compete for projects, grow operations, or engage in large-scale expenditures (Mishkin, 2021; Brealey et al., 2023). Construction projects are intrinsically linked to considerable risks and uncertainties, such as cost overruns, delays, technical difficulties, and market volatility. These uncertainties influence contractors' risk preferences, which can be classified as risk-averse, risk-neutral, or risk-seeking. Risk attitude significantly impacts contractors' assessment of project opportunities, their reactions to financial limitations, and their strategic decision-making in uncertain circumstances (Huang & Leung, 2023; Ribes & González-Pachón, 2021). Although financing conditions significantly influence contractor behavior, empirical research regarding the impact of specific financial elements, particularly borrowing costs and collateral requirements, on contractors' risk attitudes in the Nigerian construction sector is scarce. The gap is particularly significant in Lagos State, where elevated building activities and financing difficulties often lead to project delays and inefficiencies. Therefore, this study aims to:

i. Examine the relationship between cost of borrowing and contractors' risk attitudes.
ii. Evaluate the effect of collateral requirements on contractors' risk attitudes.

By addressing these objectives, the study contributes to a deeper understanding of how financial constraints influence risk behaviour among construction firms and provides valuable insights for policymakers and financial institutions seeking to improve access to construction financing and enhance sector performance.

2. 0 Literature Review

Project finance refers to a financing arrangement in which funds are raised for a specific project, and repayment is primarily dependent on the cash flows generated by that project rather than the general assets of the sponsoring firm (Adegoke & Ayodeji, 2022; Kijjambu, Musiita, & Akampwera, 2025). It is typically structured as non-recourse or limited recourse financing, thereby transferring a significant portion of project risk from sponsors to lenders and other stakeholders.Unlike traditional corporate finance, project finance isolates project-specific risks and allocates them through contractual agreements among parties involved. This structure is particularly relevant in infrastructure and construction projects, where uncertainties related to cost, time, and performance are prevalent. The ability to allocate and manage these risks effectively is central to the success of project financing arrangements (Bayer, 2025). Consequently, contractors operating within project-financed environments are often exposed to higher financial and operational risks, which can significantly influence their risk attitudes and decision-making behaviour.

Contractors' Risk Attitudes

Risk attitude refers to the disposition of individuals or organizations toward uncertainty when making decisions. It reflects how decision-makers perceive and respond to potential risks and rewards (Huang & Leung, 2023). In the construction industry, contractors' risk attitudes play a crucial role in shaping their approach to bidding, project execution, and financial

management.Contractors' risk attitudes are generally classified into three categories: risk-averse, risk-neutral, and risk-seeking. Risk-averse contractors prioritize stability and tend to avoid uncertain outcomes, even if it means sacrificing higher returns. Risk-neutral contractors make decisions based on expected outcomes without strong preference toward risk, while risk-seeking contractors are willing to undertake high-risk projects in pursuit of greater rewards (Ribes & González-Pachón, 2021).

Risk attitudes in construction are influenced by multiple factors, including financial capacity, market conditions, project complexity, and prior experience. Importantly, financial constraints such as borrowing costs and collateral requirements can significantly shape contractors' behaviour. These constraints may either discourage risk-taking due to fear of financial loss or encourage higher risk-taking as firms attempt to achieve sufficient returns under financial pressure (Huang & Leung, 2023).

Cost of Borrowing

The cost of borrowing represents the total expense incurred by a borrower in obtaining funds, typically expressed in terms of interest rates and associated financial charges. It includes both explicit costs, such as interest payments, and implicit costs, such as opportunity costs (Mishkin, 2021; Brealey et al., 2023).In the context of construction firms, the cost of borrowing is a critical determinant of project viability. High borrowing costs increase project expenses, reduce profit margins, and may limit contractors' ability to undertake new investments. Conversely, lower borrowing costs can enhance financial flexibility and encourage project participation.

The relationship between borrowing costs and risk attitude is complex. High borrowing costs may lead contractors to adopt risk-averse strategies to minimize potential financial losses. Alternatively, firms may engage in risk-seeking behaviour to generate higher returns capable of offsetting the high cost of capital. This dual effect underscores the importance of examining borrowing costs as a key factor influencing contractors' risk attitudes (Brealey et al., 2023).

Collateral Requirements

Collateral requirements refer to the assets or guarantee that borrowers must pledge to secure loans. These may include tangible assets such as land, buildings, equipment, or other financial instruments. Collateral serves as a risk mitigation mechanism for lenders by providing assurance of loan recovery in the event of default.In construction financing, collateral requirements are often stringent due to the high-risk nature of projects. Lenders may require collateral values that exceed the loan amount, thereby imposing significant constraints on borrowing firms. Such requirements can limit access to finance, particularly for small and medium-sized construction firms.

Collateral requirements influence contractors' risk attitudes by shaping their financial capacity and strategic choices. Firms with limited collateral may become risk-averse due to restricted access to funding, while others may undertake higher-risk projects to justify the opportunity cost of pledged assets. Thus, collateral plays a critical role in determining contractors' ability to secure financing and their willingness to engage in risky projects (Adegoke & Ayodeji, 2022).

Theoretical Framework

This study is based on Prospect Theory, which elucidates how humans make decisions in situations of risk and uncertainty. Prospect Theory posits that individuals assess outcomes in relation to a reference point and demonstrate varying risk preferences based on their perception of being in a state of gain or loss. This theory posits that decision-makers exhibit risk aversion in the context of potential profits while adopting a risk-seeking posture when confronted with potential losses. In construction finance, contractors confronted with elevated borrowing rates or rigorous collateral demands may view themselves as operating at a loss, thereby heightening their propensity for risk-seeking behavior. Conversely, improved financial conditions may promote cautious or balanced decision-making. The relevance of Prospect Theory to this study lies in its ability to explain how financial pressures influence contractors' risk attitudes and decision-making processes under uncertainty (Huang & Leung, 2023; Ribes & González-Pachón, 2021).

Empirical Review

Empirical studies have examined various factors influencing contractors' risk attitudes in the construction industry. Taofeeq, Adeleke, and Hassan (2019) investigated factors affecting contractors' risk attitudes in the Malaysian construction industry and identified financial risks as one of the most significant determinants of contractor behaviour. Their study revealed that financial constraints, including access to capital and cost-related pressures, play a critical role in shaping decision-making among contractors.Similarly, studies in finance literature have shown that borrowing conditions significantly affect firm behaviour and investment decisions. High borrowing costs and limited access to credit can constrain firms' ability to undertake projects and may alter their risk preferences (Mishkin, 2021; Brealey et al., 2023).

Despite these contributions, existing studies have largely focused on general risk factors without specifically examining the direct relationship between cost of borrowing, collateral requirements, and contractors' risk attitudes, particularly in developing economies such as Nigeria. This gap highlights the need for empirical investigation into how these financial variables influence contractors' behaviour in the construction sector.

Kijjambu, Musiita, & Akampwera,(2025)studied the effect of financial risk management on the financial performance of construction enterprises concentrating on three dimensions: risk identification, risk assessment and evaluation, and risk management strategy. The study demonstrated that all three financial risk management components were favorably associated with financial performance, Risk identification demonstrated a significant but uncertain relationship with financial performance as well as whereas risk assessment and evaluation revealed the robust association also, there is significant positive relationship with Risk management strategy.The study suggests that financial risk management greatly enhances financial performance, principally when organizations invest in comprehensive assessment and evaluation of risks and use organized mitigation measures.Shibani,et al, (2022). Identify, define and assess the most significant risks present in the Lebanese construction industry with distinct attention on the classify into financial and economic risk and in the end make a conclusion in this regard. Questionnaire survey among Lebanese construction industry was employed. Their result suggested that that the construction business in Lebanon is susceptible to several risk sources, internal and external, and the most prominent ones are financial risks such as volatility of the currency, inflation, and loss of solvency.

Nnadi, E, O, E andNajjobyo, J. (2025). examined the impact of poor cost estimation, material price fluctuations, and payment delays on constructionproject performance and financial health in Nigeria, the study employed quantitative analysis, data was collected through online survey of 74 construction professionals, the finding noted that errors in the Bill of Quantities (BOQ) significantly damage professional reputation, as well as the underestimating project costs resulted in high risks, mainly projectdelays and funding shortages that could result in bankruptcy. Also, suggested that another challenge encounter by contractors are financialloss due to reduced profit margins from underestimation, Material cost fluctuations and others. The study recommended enhancing costing processes, strengthening stakeholder communication, and limiting payment delays through increased contract management and financial controls.

3. Methodology

This study employed a cross-sectional survey research approach, facilitating data gathering from a population at a singular moment in time. This method is suitable for analyzing correlations between variables and evaluating hypotheses in social science research (Creswell & Creswell, 2018). It allows the researcher to efficiently collect quantitative data from a substantial number of respondents and assess the correlations across variables (Grey, 2017; Wilson, 2014).The study's population consisted of 69 registered building and civil construction enterprises in Lagos State, Nigeria (Obialo, 2023). Thirty-seven firms were chosen from this demographic to participate in the study.

A total of 296 questionnaires were disseminated among the chosen firms. Nevertheless, 250 legitimate replies were obtained and utilized for analysis, indicating a response rate of roughly 84.5%. The unit of analysis for this study is the individual respondent, namely construction professionals within firms, rather than the firm itself.The research utilized both judgmental and convenience sampling methods. Judgmental sampling was employed to identify participants with pertinent knowledge and expertise in construction project financing, whereas convenience sampling was utilized based on the accessibility and willingness of respondents to engage. While these non-probability sampling methods are appropriate for exploratory and field studies, they constrain the generalizability of the results. Consequently, the findings of this study must be approached with caution when drawing broader conclusions.

Primary data were obtained via a structured questionnaire. The questionnaire had closed-ended questions aimed at assessing the principal variables of the study, including Cost of borrowing Collateral requirements, and contractors' risk attitudes.

Responses were quantified with a five-point Likert scale, spanning from:1 = Strongly Disagree (SD) 2 = Disagree (D) 3 = Undecided (U) 4 = Agree (A) 5 = Strongly Agree (SA). This method permitted quantitative analysis and supported hypothesis testing.

Validity and Reliability of Instrument

Content validity of the instrument was ensured through expert review and alignment with existing literature. Subject-matter experts evaluated the questionnaire items to confirm that they adequately captured the constructs under investigation.

Reliability
The reliability of the research instrument was assessed using Cronbach's alpha coefficient, which measures internal consistency of scale items. The results are presented below.

Variable	Number of Items	Cronbach's Alpha
Cost of Borrowing	5	0.821
Collateral Requirements	5	0.742

All values exceed the minimum acceptable threshold of 0.70, indicating satisfactory internal consistency (Creswell & Creswell, 2018).

Data collected were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequencies and percentages, were used to summarize respondents' demographic characteristics and responses. Inferential analysis involved the use of Pearson correlation to examine the relationship between cost of borrowing and contractors' risk attitudes, while simple linear regression was applied to assess the effect of collateral requirements on contractors' risk attitudes. All analyses were carried out using the Statistical Package for Social Sciences (SPSS).

Model Specification

To ensure clarity and consistency, the regression model is correctly specified as follows:

$$CRA = \beta_0 + \beta_1 CR + \varepsilon$$

Where:

CRA = Contractors' Risk Attitudes (Dependent Variable)
CR = Collateral Requirements (Independent Variable)
β_0 = Intercept
β_1 = Coefficient of Collateral Requirements
ε = Error term

Ethical Considerations
Participation in the study was voluntary, and respondents were assured of the confidentiality and anonymity of their responses. Data collected were used strictly for academic purposes.

4.0 Results and Discussion of Findings

Analytical Descriptions of Participants Opinions

Table 2:

Participants' Bio-Data Information

Variable	Response Label	Frequency	Percentages (%)
Age	18 but less than 30	76	30.4
	30 but less than 40	110	44.0
	40 but less than 50	56	22.4
	50 but less than 60	8	3.2
	Total	250	100
Marital Status	Single	101	40.4
	Married	133	53.3
	Separated	8	3.2
	Widow	8	3.2
Educational Qualifications	Bachelor's degree/HND	102	40.8
	Master's Degree	132	52.8
	Doctoral Degree	8	3.2
	Professional Certificate	8	3.2
	Total	250	100
Experience	1- 5 years	102	40.8
	6 – 10 years	108	43.2
	11 – 15 years	32	12.8
	Above 16 years	8	3.2
Firms' types	Civic engineering construction firm	49	19.6
	Road and Bridge construction firm	75	30.0
	Building construction firm	125	50.0
	Total	250	100
Project average	Below 100 million	66	26.6
	100 million – 500 million	136	54.4
	500 million – 1 billion	40	16.0
	Above 1 billion	8	3.2
	Total	250	100

Ownership structure	Partnership	53	23.6
	Limited liability firm	175	70.0
	Government Agency	16	6.4
	Total	250	100
Position	Manager Director	8	3.2
	Project manager	86	34.4
	Site Manager	66	26.4
	Quantity survey	64	25.6
	Account	17	6.8
	Others	9	3.6
	Total	250	100

Source: Field survey (2025).

The demographic data presented in Table 2 provide insights into the characteristics of the respondents. The results show that the majority of respondents (44.0%) fall within the age bracket of 30-39 years, followed by 30.4% within 18-29 years. This indicates that most respondents are within the economically active and professionally productive age group.

In terms of educational qualifications, a significant proportion (52.8%) possess master's degrees, while 40.8% hold bachelor's degrees or Higher National Diplomas. This suggests that the respondents are well-educated and capable of providing informed opinions on construction financing and risk-related issues.Regarding work experience, most respondents (43.2%) have between 6-10 years of experience, followed by 40.8% with 1-5 years. This reflects a relatively experienced workforce within the construction sector in Lagos State.Additionally, the majority of respondents (70.0%) are employed in limited liability firms, while building construction firms constitute the largest segment (50.0%) of the sampled organizations. These characteristics indicate that the data were obtained from knowledgeable professionals actively involved in construction project delivery.

Descriptive Analysis of Research Variables

Table 3:

Cost of Borrowing

Variables	Scale Level					Mean	Std Dev.
	SD	D	U	A	SA		
	1	2	3	4	5		
High interest rates significantly influence our company's decision to take on new projects or investment (Interest rate)	-	3.2	13.2	69.6	14	3.94	.631
Our company prefers loan repayment periods of 10 years or more to manage cash flow effectively (Loan repayment period)	-	3.2	10.4	70.0	16.4	3.99	.631

The total debt service cost of our loans significantly impacts our company's cash flow management (Total debit service cost)	-	-	16.8	57.2	26.0	4.09	.649
our company's credit rating plays a crucial role in determining the interest rates we qualify for when seeking loans (Credit rating)	-	-	13.2	66.8	20.0	4.07	.573

Source: Researchers' Computations, 2025.

The results in Table 3 indicate that respondents generally agree that cost of borrowing significantly influences construction firms' financial decisions. High mean values (ranging from 3.94 to 4.09) suggest strong agreement that factors such as interest rates, loan repayment periods, total debt service cost, and credit ratings affect project financing decisions. The relatively low standard deviation values (0.57-0.65) indicate a high level of consensus among respondents. This implies that cost-related financial factors are widely recognized as critical determinants of contractors' decision-making in the construction sector.

Table 4:
Collateral Requirements

Variables	Scale Level					Mean	Std Dev.
	SD	D	U	A	SA		
	1	2	3	4	5		
The value of collateral required by lenders significantly influences our company's ability to secure loans for projects (Value of Collateral Requested)	-	-	36	40.4	23.6	3.88	.764
A high collateral-to-loan ratio is a major concern for our company when negotiating loan terms with lenders (Collateral-to-Loan Ratio)	-	-	27.2	46	26.8	3.99	.736
Lenders typically require immovable properties (e.g. land or buildings) as collateral for construction loans, which affects our company's ability to access credit (Type of Collateral Required)	-	-	16.4	70.4	13.2	3.97	.544
Lenders often require collateral for construction loans, which can be a significant obstacle for our company's project financing (Frequency of Collateral Requirement)	-	-	19.2	53.6	26.8	4.07	.679

Source: Researchers' Computations, 2025.

Table 4 shows that respondents also agree that collateral requirements significantly affect access to finance. Mean values close to 4 indicate general agreement across all items. However, a notable proportion of respondents (36%) remained undecided regarding the value of collateral required, suggesting some level of uncertainty or variation in experiences among firms. This may reflect differences in firm size, asset base, or lending conditions. Overall, the findings indicate that collateral requirements are a major constraint in construction financing and play an important role in shaping contractors' financial behaviour.

Table 5:
Contractors' Risk Attitudes

Variables	Scale Level					Mean	Std Dev.
	SD	D	U	A	SA		
	1	2	3	4	5		
Our company is comfortable with taking on projects that have a moderate to high level of uncertainty to potential financial exposures (Risk tolerance)	-	-	10	68.2	20.8	4.108	.545
Our company has a history of taking bold decisions on project, even in uncertain market conditions (Risk propensity)	-	-	26.8	39.6	33.6	4.068	.776
Our company prioritise project stability by predicting over potential high returns, even if it means passing up some opportunities (Risk aversion)	-	-	29.6	56.4	14	3.844	.643
Our company evaluates project opportunities based on their expected outcomes, without being overly concerned about potential risks or returns (Risk neutrality)	-	-	12.8	60.8	24.4	4.136	.612
Our company is willing to take on high-risk project if they offer potentially high returns (Risk taking)	-	-	-	76.8	23.2	4.232	.423

Source: Researchers' Computations, 2025.

The results in Table 5 show generally high mean scores (3.84-4.23), indicating that respondents exhibit varying degrees of risk tolerance, risk propensity, risk neutrality, and risk-taking behaviour.Therefore, combining them into a single composite measure may obscure important differences in risk orientation.Despite this limitation, the results suggest that contractors in Lagos State demonstrate a relatively strong willingness to engage in moderately risky projects, particularly when potential returns are high.

Relevant Hypotheses Test
Regression, and correlation was used to measure the relationship between the independent variable and dependent variable of hypotheses 1 to 3 and proper interpretation and analysis were used to explain the hypothesis testing

Analysis of Research Hypothesis one
H_{01}: The cost of borrowing has no relationship with the risk attitude of selected building and civil construction firms in Lagos State.

Table 6:
Correlations

		Cost of Borrowing	Contractors' Risk Attitudes
Cost of Borrowing	Pearson Correlation	1	.412**
	Sig. (2-tailed)		.000
	N	250	250
Contractors' Risk Attitudes	Pearson Correlation	.412**	1
	Sig. (2-tailed)	.000	
	N	250	250

Source: Researcher (2025). **. Correlation is significant at the 0.01 level (2-tailed).

The relationship between cost of borrowing and contractors' risk attitudes was examined using Pearson's product moment correlation.The results (Table 6) indicate a moderate positive correlation between cost of borrowing and contractors' risk attitudes ($r = 0.412$, $p < 0.01$). This relationship is statistically significant at the 1% level.This implies that changes in borrowing costs are associated with changes in contractors' risk attitudes. Specifically, higher borrowing costs tend to influence how contractors approach risk in project decision-making.Since $p < 0.01$, the null hypothesis is rejected.

Analysis of Research Hypothesis two

H_{01}: Collateral requirements have an effect on risk attitudes of selected building and civil construction firms in Lagos State.

Table 7.

Collateral requirements vs risk attitudes of of selected building and civil construction firms

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.508[a]	.258	.155	1.29951	.157	60.270	1	323	.000

a. Predictors: (Constant), Contractors Risk Attitude
b. Dependent Variable: Collateral Requirements

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.317	1	11.317	86.380	.000[b]
	Residual	32.491	248	.131		
	Total	43.807	249			

a. Dependent Variable:Collateral Requirements
b. Predictors: (Constant), Contractors Risk Attitude

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.923	.229		8.406	.000	2.335	2.790
	Risk Control Techniques	.532	.057	.508	9.294	.000	.044	.074

a. Dependent Variable:Collateral Requirements

Source: Researchers' Computations, 2025.

A simple linear regression analysis was conducted to examine the effect of collateral requirements on contractors' risk attitudes. The model summary indicates a moderate relationship ($R = 0.508$), with a coefficient of determination ($R^2 = 0.258$). This implies that 25.8% of the variation in contractors' risk attitudes is explained by collateral requirements. The ANOVA results show that the model is statistically significant $F(1, 248) = 86.38$, $p < 0.001$), indicating that the model provides a good fit for the data. The regression coefficient ($\beta = 0.508$, $p < 0.001$) indicates that collateral requirements have a positive and significant effect on contractors' risk attitudes. This suggests that increases in collateral requirements are associated with changes in contractors' risk behaviour. Since $p < 0.001$, the null hypothesis is rejected.

Discussion of Findings

The findings of this study provide important insights into the relationship between financial constraints and contractors' risk attitudes in the construction sector. The moderate positive relationship between cost of borrowing and risk attitudes suggests that financing conditions play a significant role in shaping contractors' decision-making. This aligns with financial theory, which posits that the cost of capital influences firm behaviour and investment decisions (Brealey et al., 2023; Mishkin, 2021). Similarly, the finding that collateral requirements significantly explain 25.8% of the variation in contractors' risk attitudes highlights the importance of asset-based lending constraints. This result supports previous studies that emphasize the role of financial risk in influencing contractor behaviour (Taofeeq et al., 2019). However, the explanatory power of the model ($R^2 = 0.258$) indicates that other factors not included in this study such as firm size, project type, managerial experience, and market conditions also play a substantial role in determining contractors' risk attitudes. Furthermore, the study highlights a conceptual limitation in measuring risk attitudes as a single composite variable, given the multidimensional nature of risk behaviour. Future research should consider analyzing risk dimensions separately to obtain more precise insights.

5.0 Conclusion and Recommendations

This study investigated the correlation between borrowing costs and contractors' risk preferences, along with the impact of collateral stipulations on these risk preferences among construction enterprises in Lagos State, Nigeria. The results indicated that the cost of borrowing has a moderate and statistically significant correlation with contractors' risk attitudes. This indicates that borrowing conditions significantly influence contractors' perceptions and responses to project risks. According to financial theory, elevated borrowing rates intensify financial strain on companies and affect their decision-making processes (Brealey et al., 2023; Mishkin, 2021). Moreover, the study revealed that collateral requirements exert a substantial positive influence on contractors' risk attitudes, accounting for approximately 25.8% of the variance in risk behavior. This underscores the significance of lending conditions in influencing contractors' capacity and inclination to engage in construction projects. The discovery aligns with previous research highlighting the influence of financial limitations on contractor behavior (Taofeeq et al., 2019). The study suggests that financial constraints, including elevated borrowing prices and rigorous collateral requirements, are crucial factors influencing contractors' risk attitudes in the construction industry. These limits affect both access to capital and strategic project decisions, as well as the risk-taking behavior of organizations.

Based on the findings of this study, several recommendations are proposed to improve financing conditions and enhance contractors' risk management in the construction sector. First, there is a need for financial institutions and policymakers to develop more flexible and construction-friendly financing frameworks. This can be achieved through the reduction of excessive collateral requirements, the introduction of credit guarantee schemes, and the expansion of access to long-term, low-interest financing facilities. Such measures would ease the financial burden on construction firms and promote greater participation in infrastructure development. In addition, efforts should be made to moderate lending interest rates within the construction sector. Given that borrowing costs significantly influence contractors' risk attitudes, reducing interest rates would help alleviate financial pressure on firms and encourage more balanced and informed risk-taking behaviour (Mishkin, 2021). Lower borrowing costs would also enhance project feasibility and

improve overall sector performance. Furthermore, construction firms are encouraged to diversify their sources of finance in order to reduce overdependence on traditional bank loans. Exploring alternative financing options such as equity financing, joint ventures, public-private partnerships, and development finance institutions can improve financial flexibility and resilience. This diversification would enable firms to better manage financial risks associated with high borrowing costs. It is also important for construction firms to adopt sound financial management practices. Techniques such as cost-benefit analysis, sensitivity analysis, and comprehensive risk assessment should be integrated into decision-making processes. These practices will help firms better understand the financial implications of borrowing and improve their ability to manage project-related risks effectively (Brealey et al., 2023). Finally, firms should focus on optimizing their ability to meet collateral requirements by ensuring proper documentation, valuation, and management of their assets. At the same time, industry associations should engage with financial institutions to advocate for more flexible and realistic collateral policies that reflect the operational realities of the construction sector.

Acknowledgement
This work was supported financially by Tertiary Education Trust Fund (TET Fund), Nigeria

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