

## RISK FINANCING STRATEGY AND PROJECT SUCCESS: EVIDENCE FROM BUILDING CONTRACTORS IN LAGOS STATE, NIGERIA

Sunday Adekunle ADULOJU<sup>1</sup>, Oluwaleke Ebenezer AKINDIPE<sup>2</sup>  
*Department of Actuarial Science & Insurance, University of Lagos,  
Nigeria, Email: ksaduloju@gmail.com*  
*Department of Actuarial Science & Insurance, University of Lagos,  
Nigeria, Email: lekelymome8@gmail.com*

**How to cite:** ADULOJU, S.A., & AKINDIPE, O.E. (2022). "Risk Financing Strategy and Project Success: Evidence from Building Contractors in Lagos State, Nigeria." *Annals of Spiru Haret University. Economic Series*, 22(1), 551-570, doi: <https://doi.org/10.26458/22135>

### Abstract

*The aim of the study is to evaluate the significant effect of risk financing strategy on project success among building contractors in Lagos State with focus on risk transfer strategy and risk retention strategy on project success among building contractors in Lagos State, Nigeria. This study employed a descriptive survey research design. The population of the study comprises all registered builders in Lagos State which are 2,422 builders. The study adopted a convenience sampling method. The total sample used for the study is 170 respondents. The study employed a structured questionnaire as its instrument of data collection. Data collected were analysed using Statistical package for social science students (SPSS) and regression analysis. The regression result showed a strong positive relationship between risk transfer strategy and project success among building contractors in Lagos State which is indicated by the R value (.701) at 5% significance level and it is statistically significant at .000 which is less than ( $P < 0.05$ ). The second hypothesis regression result showed a strong positive relationship between risk retention strategy and project success among building contractors in Lagos State which is indicated by the R value (.701) at 5% significance level and it is statistically significant at .000 which is less than ( $P < 0.05$ ). It was concluded that the compliance level of the contractors with regards to the stipulation of section 64(1), No.37*

## Issue 1/2022

*of Insurance Act 2003 was very low compared to their high level of awareness with the stipulation. The compliance level was less than 20% compared to the awareness level that was more than 20%. It was recommended that all built environment stakeholders should become more involved in the implementation of risk management. Their early involvement will facilitate a better understanding of each party's roles and enhance collaboration and communication within the Nigerian construction industry.*

**Keywords:** *financing strategy; contractors; environment stakeholders; risk management; construction industry.*

**JEL Classification:** G32, G34

### Introduction

Construction activities, like all human endeavours, are fraught with risk, and the risks are numerous and varied (Ede, 2016). In order to reduce the impact of uncertain events, risk management is incorporated into the planning, arranging, and controlling of activities and resources. Because of the time and cost associated with construction projects, construction risk has gotten a lot of attention (Akintoye & MacLeod, 2017). The collapse of buildings has been a source of great concern for everyone in Nigeria, despite the fact that these structures are important contributors to any nation's development. As a result, when a structure collapses, it fails to perform the functions that it is supposed to for the people and the government. A structure is considered collapsed if the entire structure or a portion of it has collapsed and can no longer fulfil the purpose for which it was constructed (John, 2017). When a building collapses, it elicits strong emotional responses from all segments of the population, resulting in significant economic, human, and material losses for the country. There have been numerous building collapses in recent years, the majority of which are uninsured (Obodoh, 2019).

In Nigeria, the number of building failures and collapses has increased to alarming levels, and stakeholders must wake up and stop dismissing these recurring events (Akinyemi, 2016). It has resulted in the unnecessarily loss of lives and destruction of people's property on several occasions, making it a major source of concern because it jeopardizes our great nation's development. According to the Nigerian Institute of Building (NIOB), Lagos State accounts for 60% of all reported building collapses in Nigeria. Because affected individuals are evicted from their homes and businesses are destroyed on a regular basis. Building collapse

is a common occurrence throughout the world, but it is more common and devastating in developing countries. It is a major issue in Nigeria, with the majority of incidents occurring in Lagos, the country's largest city. In fact, it has become a common occurrence in Nigeria, even among ordinary citizens. Every stage of the building construction process, from initial investment appraisal to construction and use, has been established as being fraught with risks for all parties involved. There have been numerous building collapses in recent years, and the majority of them are uninsured, as confirmed by the commissioner of insurance in a 21-story building on Gerard Road in Ikoyi recently collapsed, necessitating the federal government's call for compulsory insurance enforcement. Most building contractors appear to be uninterested in risk financing strategies that involve transferring or retaining risk so as to ensure the safety and completion of construction projects. As a result, the research aims to look into risk financing strategies and project success among building contractors in Lagos. The aim of the study is to evaluate the significant effect of risk financing strategy on project success among building contractors in Nigeria in Lagos State.

### **Conceptual review**

#### **Risk Management and Building Construction**

The scope of building activities necessitates risk management, as each stage of construction entails some level of risk (Drakes, 2016). Risk management in the construction industry entails planning, organizing, and controlling activities and resources to minimize the impact of unplanned events. Because of the time and cost associated with construction projects, construction risk has gotten a lot of attention (Akintoye & MacLeod, 2017). Risk can come in a number of different forms, and the type of risk varies depending on the situation. Risks associated with the transportation of toxic materials, for example, cannot be managed in the same way that risks associated with space missions can. Akintoye and Macleod (2017), Raftery (2014), Williams and Heims (2019), and Toakley and Ling (2017) identified the current use of risk management techniques in the construction industry. Some of these concepts include risk premium, risk adjusted discount rate, subjective probability, decision analysis, sensitivity analysis, Monte Carlo simulation, stochastic dominance, Casper, and intuition. However, one of the most common ways for the Nigerian construction industry to manage construction risks, according to Odeyinka (2017), is to transfer them to insurance companies. It is still unknown how effective this method is at reducing construction risks in Nigeria.

## Issue 1/2022

### **Risk in Building Construction Projects**

Construction projects, according to Hamza et al., (2015), are extremely complex and can pose a threat in variety of internal and external risks. Any exposure to the possibility of loss in the construction industry is referred to as construction risk (Surety, 2014). A strict set of laws and regulations must be followed during the construction process to best avoid these risks. Unfortunately, because unknown factors will inevitably arise during the course of a project, there is no way to completely eliminate risks. One of the most effective ways to manage risks is to understand the various types of risks and how to manage them. If you can identify and categorize risks before you start a project, you can improve your risk management and avoid any potential losses. Renuka (2014) identified several types of risks in construction projects which includes technical risks, financial risks and logistical risk.

### **Concept of Builders Risk Insurance Policy**

This is a policy that covers structures in the Nigerian construction industry while they are being constructed. It safeguards the contractor's interest in materials in transit for the job, as well as the value of the property under construction, until the job is completed and accepted by the owner. The policy could be written to cover both the entire structure and the costs of remodeling or renovation projects for new construction. It can be used for a variety of projects, including room additions, decks, and kitchen remodels (Odeyinka, 2015). Builders risk insurance, also known as "course of construction," "construction all risk," and "contractors all risk insurance," is a specialized type of insurance that protects buildings and projects against repair or replacement costs during construction and, in some cases, for a period afterward. This insurance usually covers construction materials, fixtures, and appliances that are intended to become an integral part of the structure being built. (Clark and Boswall, 2015).

### **Compulsory Builders Risk Insurance Policy in Nigeria**

The National Insurance Commission "NAICOM" stated that it was acting in accordance with the provisions of the Nigeria Insurance Act (2003) and in a renewed effort to negotiate insurance use, practice, and regulations. The deadline for fully enforcing all mandatory insurance policies under various Nigerian statutes and applying penalties to this legal alert has been set for the end of March 2011. Builders' liability insurance is required by Section 64 of the Insurance Act. All

multi-story building builders must register the structure and insure it against all construction risks resulting from the builder's negligence or the negligence of the builder's servants, agents, or consultants, which negligence may result in bodily injury, loss of life, or property damage. All owners and contractors of buildings under construction with more than two floors, according to NAICOM consultant Soladoye (2012), are required to have the policy, which covers construction risks such as death or injury to site workers or members of the public, as well as property damage.

**Table 1. Some of the recent collapsed buildings and their insurance status**

S/N	Structure	Date	Location	Cause of collapse	Fatality	Insurance policy status
1	Residential under construction	June 2010	Oniru Estate, Victoria Island	Substandard materials, haphazard works.	1	Not insured
2	4 storey building structure	10 <sup>th</sup> September, 2010	28 Tinubu street Victoria Island	Structural defects	3	Not insured
3	Five-storey	June 2011	11 Aderibigbe street Maryland,Lagos	No geotechnical investigation	None	-
4	3-storey building	July 2011	Oloto street, cement road, Ebute Metta,Lagos State	Non-compliance to building standards & regulations	10	Not insured
5	3-storey building	August 2011	Orosanye street Lagos	Wrong supervision	None	Not insured
6	Building in use	November 20, 2012	Jakande estate oke afa, Isolo Lagos State	Structural failure and occupants carelessness	3	Not insured
7	A twin four storey duplex	November 3, 2013	Victoria island,Lagos	unknown	4	-
8	(SCOAN) Synagogue	12 <sup>th</sup> September,2014	Ikotun-Egbe Lagos state	Structural defects	About 116	Not insured

## Issue 1/2022

	Church of All Nations					
9	Synagogue Warehouse Church, Lagos.	September 12,2014	Ikotun-Egbe area of Lagos state	Demolition process	4	Not insured
10	Four storey building	March 13, 2015	6 Mogaji Street Idumota Lagos island	Unknown	1	-
11	3 storey building	July 15, 2015	Ebute Metta Lagos	Structural defect	None	Not insured
12	3 storey building	October 21,2015	Swamp street Odunfa Lagos island.	Structural defect	None	Not insured
13	A five-story building under construction	March 9,2016	Lekki Lagos	Addition to the approved number of floors.	34	Not insured
14	Two storey building	March 19, 2016	Mile 12,Lagos	Structural defect	1	-
15	Residential building	April 2016	Horizon 1, Lekki Garden, Ikate.	Structural defect	18	-

Source: Lagos State Building Control Agency, 2020

### Empirical review

Human negligence in key areas of construction, such as soil investigation, incorporating extra load design, stress from winds, earthquakes, uneven terrain, use of substandard building materials, poor monitoring, and overall poor workmanship, according to Oloyede (2015), causes building collapses.

Madu, (2015) identified natural occurrences like earthquakes, tornadoes, floods, and other natural occurrences as causes of building failure. Other factors, he claims, include omission and carelessness, which leads to the use of deficient structural drawings, a lack of proper project supervision, the alteration of approved



drawings, the use of substandard materials, the Nigerian system's corruption, construction without approved drawings, and the translocation of building plans to different sites.

Adebayo (2016) believes that in the construction industry, efficiency in skill and experience is critical to producing high-quality workmanship. Ayinuola (2014) accused all parties involved in the construction industry, including clients, architects, engineers, local government town planners, and contractors, of contributing to building failures on multiple levels.

**H<sub>01</sub>:** Risk transfer strategy does not have significant effect on project success among building contractors in Lagos State, Nigeria.

**H<sub>02</sub>:** Risk retention strategy does not have significant effect on project success among building contractors in Lagos State, Nigeria.

### Research Methodology

This study was conducted using a descriptive survey research design. Because surveys are useful for describing the characteristics of a large population, they are commonly used., the descriptive survey research design was chosen (Osula, 2014). The population of this study includes all forty-one (41) licensed non-life insurance companies operating in Nigeria as at 1st of January 2019 (National Insurance Commission, 2019). The population of the study comprises all registered builders in Lagos State which are 2,422 builders (CORBON, 2020) validated by the study of (Babatunde, 2020). Lagos state was a choice of the selected building contractors because it is the state with highest number of registered builders in Nigeria and is the commercial nerve of Nigeria. It is assumed that responses obtained from the sample respondents would be representative of the opinion of all the registered building construction companies in Nigeria. The study adopted a convenience sampling method of selection and to be able to draw the right sample for the purpose of this study. 942 of the registered builders are fully functional and 281 building contractors are operative on island area of Lagos state where the study is conducted, the areas include Ikoyi, Victoria Island and Lekki phase 1. The Taro Yamani formula was applied to ascertain the sample size. The formula is given below as:

$$n = \frac{N}{1 + N(e)^2}$$

## Issue 1/2022

Where  $n$  = sample size,  $N$  = population size  $e$  = error limit  
 $N = 281$   $e = 0.05$

Therefore  $n = 165$  approximately. 5 group head of property insurance department of the big 5 insurance companies were also selected for the study (Axa Mansard Insurance, NEM insurance plc, Custodians & Alliance insurance, Mutual Benefits plc and Leadway Assurance). Therefore, the total sample used for the study is 170 respondents.

This study employed a structured questionnaire as its instrument for data collection. This instrument is relevant in collecting feedbacks from respondents based on their perceptions and opinions. Furthermore, it is suitable for collecting data from respondents within a relatively short period.

In line with extant literature, the response options provided in this study's questionnaire follow the 5-point Likert-type scale, consistent with (Binuyo, 2019). This scale, being an ordinal interval scale, is numbered from 5 to 1.

Data collected will be analysed using Statistical package for social science students (SPSS) which expresses the data in tables, frequencies and percentages while regression analysis will be used to test the hypotheses formulated in order to evaluate the significant effect of risk financing strategy among building contractors in Lagos State, Nigeria. The regression equation will be

$$Y = a + bX$$

Where:

$a$  = intercept

$b$  = slope or gradient

$X$  = Risk financing strategy

$Y$  = project success

## Results and discussion

The Analysis of the bio- data of the respondents, the analysis was done with respect to gender, age, Work experience, educational qualification and position at work. The results are presented in tables:



Table 4.2. Bio data analysis

VARABLES		FREQUENCY	PERCENTAGE (%)
<b>GENDER</b>	Male	120	70.6
	Female	50	29.4
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>AGE (YEARS)</b>	18 but less than 30	86	50.6
	30 but less than 40	27	15.9
	40 but less than 50	40	23.5
	50 but less than 60	10	5.9
	60 and above	7	4.1
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>EDUCATIONAL QUALIFICATION</b>	Bachelor's degree/HND	13	7.6
	Master's degree	53	31.2
	Doctorate degree	81	47.6
	Professional certificate	12	7.1
	OTHERS(ND,SSCE,etc)	11	6.5
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>WORK EXPERIENCE (YEARS)</b>	Less than 5 years	23	13.5
	5 yrs but less than 10 yrs	39	22.9
	10 yrs but less than 15 yrs	62	36.5
	15 yrs and above	46	27.1
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>BUSINESS SIZE CLASSIFICATION</b>	Small	45	26.5
	Medium	86	50.6
	Large	39	22.9
	<b>Total</b>	<b>170</b>	<b>100</b>
	<b>POSITION IN BUSINESS</b>	Owner	78
Partner		40	23.5
Supervisor		37	21.8
Others		15	8.8
<b>Total</b>		<b>170</b>	<b>100</b>
<b>RISK MANAGEMENT GUIDELINE</b>	Yes	96	56.5
	No	74	43.5
	<b>Total</b>	<b>170</b>	<b>100</b>
<b>INSURANCE POLICY</b>	Yes	63	37.1
	No	107	62.9
	<b>Total</b>	<b>170</b>	<b>100</b>

Source: Field survey 2022

## Issue 1/2022

Table 4.2 above shows that 70.6% of the respondents were male while 29.4% of the respondents were female. It can also be seen that 50.6 % of the respondents were between the ages of 18 but less than 30years, 15.9% were between the ages of 30 but less than 40 years old, 23.5% respondents were between the ages of 40 but less than 50 years, while 5.9% of the respondents were between the ages of 50 but less than 60 years, and 4.1% of the respondents ranged in age from 60 years old. Table 4.1 above shows that 7.6% represent Bachelor's degree/HND, 31.2% of the respondents were master's degree, 47.6% of the respondents were holders of doctorate degree while 7.1% of the respondents were professional certificate holders and 6.5% represent other qualifications (SSCE, ND, GCE)

It can also be seen that 13.5% of the respondents are at less than 5 years work experience, 22.9% are at 5 years but less than 10 years work experience, 36.5% of the respondents are at 10 years but less than 15 years work experience and 27.1% of the respondents are at fifteen years and above work experience. Table 4.2 also shows that, 26.5% of the respondents are small business size, 50.6% of the respondents are medium business size and 22.9% of the respondents are large business size. The table also shows that, 45.9% of the respondents are owners, 23.5% of the respondents are partners, while 21.8% of the respondents are supervisor and 8.8% of the respondents are others.

It can also be seen that 56.5% of the respondents have risk management guideline for managing risk while, 43.5% of the respondents does not have risk management guideline for managing risk. Table 4.1 also shows that, 37.1% of the respondents have insurance policy and 62.9% does not have insurance policy.

### **Descriptive Analysis of Research Variables**

Section B of the questionnaire will be analysed using frequency tables and simple percentages and the test of hypotheses will be done using chi square.

In the Table 4.3 above which is to explain the building construction risk management process; the risk transfer strategy shows that 47 of the respondents representing 27.6 percent strongly agreed that they have insurance policy for all building constructions that they do, 37 respondents representing 21.8 percent agreed that they have insurance policy for all building constructions that they do even though 51 respondents representing 30 percent are undecided about them having insurance policy for all building constructions that they do. It also shows that 33 respondents representing 19.4 percent strongly agree that Construction insurance policy gives confidence in the process of building construction, 61

respondents representing 35.9 percent agree that Construction insurance policy gives confidence in the process of building construction.

**Table 4.3. Building construction risk management process; risk transfer strategy**

S/N	Statement	SA (%) 5	A(%) 4	U(%) 3	D(%) 2	SD(%) 1	Total (%)
1	We have insurance policy for all building constructions that we do	47 (27.6)	37 (21.8)	51 (30)	20 (11.8)	15 (8.8)	170 (100)
2.	Construction insurance policy gives confidence in the process of building construction	33 (19.4)	61 (35.9)	14 (8.2)	42 (24.7)	20 (11.8)	170 (100)
3	Most building contractors do not have construction policy because it is too expensive	58 (34.1)	27 (15.9)	11 (6.5)	43 (25.3)	31 (18.2)	170 (100)
4	Builders risk policy is relevant to building construction projects	18 (10.6)	26 (15.3)	39 (22.9)	54 (31.8)	33 (19.4)	170 (100)

Source: Field survey 2021

From Table 4.4 above which to find out the risk retention strategy shows 25 respondents representing 14.7 percent strongly agreed that they consider experience in choosing the project team management members, 36 respondents representing 21.2 percent agree with the fact that they consider experience in choosing the project team management members.

It can be seen in the table that 14 respondents representing 8.2 percent strongly agree with the fact that communication and coordination between parties (clients, consultants and contractors) is very sound, 43 respondents representing 25.3 percent agree with the fact that communication and coordination between parties (clients, consultants and contractors) is very sound, 36 respondents representing 21.2 are undecided with the fact that communication and coordination between parties (clients, consultants and contractors) is very sound.

Issue 1/2022

**Table 4.4. Risk Retention Strategy**

5	We consider experience in choosing the project team management members	25 (14.7)	36 (21.2)	18 (10.6)	33 (19.4)	58 (34.1)	170 (100)
6	We revise design documents and drawings to ensure compliance to building standards	43 (25.3)	41 (24.1)	27 (15.9)	36 (21.2)	23 (13.5)	170 (100)
7	Communication and coordination between parties (clients, consultants and contractors) is very sound	14 (8.2)	43 (25.3)	36 (21.2)	46 (27.1)	31 (18.2)	170 (100)
8	Decision making process is scrutinized to avoid errors during construction	37 (21.8)	28 (16.5)	49 (28.8)	32 (18.8)	24 (14.1)	170 (100)
9	Test and inspection of materials and labour are thoroughly done in every phase of the building construction	36 (21.2)	22 (12.9)	41 (24.1)	19 (11.2)	52 (30.6)	170 (100)

Source: Field survey 2021

Table 4.5 shows that 47 respondents, or 27.6%, strongly agree that punitive measures imposed on contractors for non-compliance with Insurance of Buildings Under Construction is poor, while 37 respondents, or 21.8 percent, agree that punitive measures imposed on contractors for non-compliance with Insurance of Buildings Under Construction is poor. The table also shows 32 respondents representing 18.8 percent strongly agree that most building contractors are not aware of the construction policy, 15 respondents representing 8.8 percent agree that most building contractors are not aware of the construction policy, 46 respondents representing 27.1 percent are undecided as to if most building contractors are not aware of the construction policy, while 28 respondents representing 16.5 percent disagree that most building contractors are not aware of the construction policy, and 49 respondents representing 28.8 percent strongly disagree that most building contractors are not aware of the construction policy.

**Table 4.5. Awareness of building construction policy by building contractors**

10	Punitive Measures imposed on Contractors for non-compliance with Insurance of Building under construction is poor	47 (27.6)	37 (21.8)	51 (30)	20 (11.8)	15 (8.8)	170 (100)
11	Most building contractors are not aware of the construction policy	32 (18.8)	15 (8.8)	46 (27.1)	28 (16.5)	49 (28.8)	170 (100)
12	Construction policy is not compulsory for all types of construction	41 (24.1)	38 (22.4)	24 (14.1)	16 (9.4)	51 (30)	170 (100)
13	Most building contractors have apathy for construction policy despite the awareness	28 (16.5)	48 (28.2)	47 (27.6)	36 (21.2)	11 (6.5)	170 (100)
14	Most builders have alternative for construction insurance	34 (20)	53 (31.2)	26 (15.3)	18 (10.6)	39 (22.9)	170 (100)

Source: Field survey 2021

It can also be seen from the table that 41 respondents representing 24.1 percent strongly agree that construction policy is not compulsory for all types of construction, 38 respondents representing 22.4 percent agree that construction policy is not compulsory for all types of construction. The table also shows that 28 and 48 respondents representing 16.5 percent and 28.2 percent strongly agree and agree respectively with the fact that most building contractors have apathy for construction policy despite the awareness.

Table 4.6 above is to find out the project success of building construction. In material related factors, it can be seen that 11 respondents representing 6.5 percent strongly agree that quality of materials used influence building project success. It can also be seen that 39 and 26 respondents representing 22.9 percent and 15.3 percent strongly agree and agree respectively that change in material type and specifications affects building project success. The table also shows that 20 and 37 respondents representing 11.8 percent and 21.8 percent strongly agree and agree respectively to the fact that compliance of materials to specifications affect building project success.

**Table 4.6. Project Success of Building Construction**

Building project success factors	Measuring scales					TOTAL (%)
	SA (%) 5	A (%) 4	U (%) 3	D (%) 2	SD (%) 1	
<b>Material related factors</b>						
Quality of materials used influence building project success	11 (6.5)	31 (18.2)	58 (34.1)	43 (25.3)	27 (15.9)	170 (100)
Change in material type and specifications affects building project success	39 (22.9)	26 (15.3)	18 (10.6)	33 (19.4)	54 (31.8)	170 (100)
Compliance of materials to specifications affect building project success	20 (11.8)	37 (21.8)	15 (8.8)	47 (27.6)	51 (30)	170 (100)
<b>Labour and equipment related factors</b>						
Labour performance and productivity affect building project success	52 (30.6)	22 (12.9)	41 (24.1)	19 (11.2)	36 (21.2)	170 (100)
Availability and efficiency of equipment affect building project success	49 (28.8)	46 (27.1)	15 (8.8)	28 (16.5)	32 (18.8)	170 (100)
<b>Finance related factors</b>						
Cost estimation accuracy helps in achieving project success	53 (31.2)	13 (7.6)	11 (6.5)	81 (47.6)	12 (7.1)	170 (100)
Source of finance for the building project affect project success	54 (31.8)	33 (19.4)	39 (22.9)	18 (10.6)	26 (15.3)	170 (100)
<b>External related factors</b>						
Changes in building construction regulations affect project success	28 (16.5)	11 (6.5)	47 (27.6)	36 (21.2)	48 (28.2)	170 (100)
Government permits are difficult to get	18 (10.6)	36 (21.2)	25 (14.7)	33 (19.4)	58 (34.1)	170 (100)
We experience civil disturbances at the construction sites	51 (30)	15 (8.8)	47 (27.6)	20 (11.8)	37 (21.8)	170 (100)

Source: Field survey 2021



**Test of Hypotheses**

**Hypothesis One**

H<sub>01</sub>: Risk transfer strategy does not have significant effect on project success among building contractors in Lagos State, Nigeria.

**Regression**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.701 <sup>a</sup>	.000	-.021	1.439	.000	.000	1	48	.995	2.928

a. Predictors: (Constant), Risk transfer strategy

b. Dependent Variable: Project success among building contractors

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.000	1	.000	.000	.995 <sup>a</sup>
Residual	99.380	48	2.070		
Total	99.380	49			

a. Predictors: (Constant), Risk transfer strategy

b. Dependent Variable: Project success among building contractors

The regression result above showed a strong positive relationship between risk transfer strategy and project success among building contractors in Lagos State which is indicated by the R-Value (.701) at 5% significance level and it is statistically significant at .000 which is less than ( $p < 0.05$ ).

Issue 1/2022

### Coefficient<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. (Constant)	3.177	.481		6.599	.000
Risk transfer strategy	.001	.141	.001	.007	.995

b. Dependent Variable: Project success among building contractors

### Hypothesis Two

**H<sub>02</sub>:** Risk retention strategy does not have significant effect on project success among building contractors in Lagos State, Nigeria.

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.811 <sup>a</sup>	.000	-.021	1.439	.000	.000	1	48	.995	2.928

a. Predictors: (Constant), Risk retention strategy

b. Dependent Variable: Project success among building contractors

### ANOVA<sup>b</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.000	1	.000	.000	.995 <sup>a</sup>
Residual	99.380	48	2.070		
Total	99.380	49			

a. Predictors: (Constant), Risk retention strategy

b. Dependent Variable: Project success among building contractors

The regression result above showed a strong positive relationship between risk retention strategy and project success among building contractors in Lagos State which is indicated by the R value (.811) at 5% significance level and it is statistically significant at .000 which is less than ( $P < 0.05$ ).

### **Discussion of Findings**

The R value (.701) at the 5% significance level indicated a strong positive relationship between risk transfer strategy and project success among building contractors in Lagos State, which is statistically significant at .000, which is less than ( $P < 0.05$ ). The R value (.701) at the 5% significance level indicated a strong positive relationship between risk retention strategy and project success among building contractors in Lagos State, which is statistically significant at .000, which is less than ( $P < 0.05$ ).

Previous research backs up this conclusion (Beuselinck & Manigart, 2016; FASB, 2015; Beest, 2016). Risk financing strategy, according to the findings, aids builders in mitigating unplanned risk. The findings also revealed that the quality of risk financing strategy could account for 62 percent of the variation in project success among building contractors in Lagos, Nigeria. This result has never been examined before, to the best of the researcher's knowledge. The vast majority of studies that used the effect of risk management on construction work as a theoretical foundation in their conceptual models have confirmed the importance of risk financing strategy on project success among builders in Lagos State, at least in theory. (See, for example, Beuselinck and Manigart, 2017; FASB, 2013; Beest, 2018; Mamic, Sacar, and Oluic, 2013). Furthermore, the research shows that the effect of risk transfer or retention strategy varies depending on the size and experience of the company, not the type of business. Many studies back up this conclusion (Chalaki et al., 2017; Huang, Rose-Green and Lee 2018).

### **Conclusion and recommendations**

A number of risks exist in the construction industry that the contractor or client cannot bear on their own. As a result, the contractor will need to buy insurance to protect himself from these dangers. The majority of contractors and clients, however, are still unaware of the law's existence and enforcement, according to the survey's findings. It is critical to emphasize that contractors must purchase contractors or builders all risk insurance, as described in this paper, in order to

## Issue 1/2022

avoid all risks and disputes. The National Insurance Commission should collaborate with relevant professional bodies such as NIOB, CORBON, COREN, ARCON, NIQS, and Planning authorities that are involved in the development process of building property in order to improve the overall implementation process. Contractors should view insurance as an additional tool for improving the construction and housing industries, and develop the habit of entrusting insurance experts by participating in their policies when the need arises. Offenders should be punished to serve as a deterrent to others, in order to stem the tide of building collapses.

The findings of this study will aid in the implementation of more effective financing strategies, which will benefit the construction industry as a whole. The following recommendations are made in order to achieve this goal: Because the majority of respondents rated their understanding of risk financing strategy for building construction as intermediate, risk financing strategy workshops for building constructions would be a reasonable suggestion to further educate all parties involved in construction projects. With adequate training opportunities in place, increased knowledge of the subject and awareness of the importance of risk management throughout the construction project life cycle can be achieved. The stakeholders in the built environment should be more involved in risk management implementation. Their early involvement will improve collaboration, togetherness and communication within the Nigerian construction industry environment by facilitating a better understanding of each party's roles in risk management in construction. The research findings are used to make recommendations to construction contractors on how to deal with the industry's major risks and how to improve their risk financing strategy practice. Also in order to facilitate quality work, the mindset of accepting the lowest bid should be reconsidered. Because the cheapest bids are not always the best, particularly when it comes to risk management, some criteria should be used to choose. More research is needed to determine the extent to which certain risk factors or sources, such as material price fluctuations, inclement weather, political risks, and so on, have an impact. Construction organizations must form effective communication links in order to realize the benefits of partnerships and alliances, which is critical to reducing construction risk. Insurance companies should also make every effort to ensure that their policies are well-documented and understood by construction industry operators. Insurance companies should do everything they can to resolve claims as quickly as possible. The government is also expected to keep a close eye on the

insurance act and enforce it so that builders risk insurance is used frequently on projects.

## REFERENCES

- [1] Adebayo, S. (2016). Religious building collapses: The heavy price of short cuts in places of worship and pilgrimage site construction. *Procedia Engineering*, 196 (June), 919–929. <https://doi.org/10.1016/j.proeng.2017.08.025>
- [2] Akintoye, A. S. and MacLeod, M. J. (2017). Risk analysis and management in construction. *International Journal of Project Management*, 15(1), 31- 38.
- [3] Akinyemi, S. (2016). Modelling Global Risk Factors Affecting Construction Cost Performance. *International Journal of Project Management*, 21, pp. 261-269.
- [4] Ayinuola, J. (2014). Building Collapse in Nigeria: Issues and Challenges Building Collapse in Nigeria: *Issues and Challenges. Conference of the International Journal of Arts & Sciences*, 9(1), 99–108.
- [5] Babatunde, H. (2020). The risk ranking of projects: a methodology. *International Journal of Project Management*, 19(3), 139- 145.
- [6] Beest, R. (2016). *Project risk management*. McGraw-Hill, New York.
- [7] Beest, R. (2018). Risk Management Practices in the Nigerian Construction Industry- A Case Study of Yola. *Journal of Engineering Sciences*, 7(3), 1-6.
- [8] Beuselinck, M and Manigart, D. (2016). Modelling global risk factors affecting construction cost performance. *International Journal of Project Management*, 21(4), 261-269.
- [9] Beuselinck and manigart (2017). Understanding internally generated risks in projects. *International Journal of Project Management*, 23(8), 584-590.
- [10] Binuyo, M. (2019). Risk management in small construction projects. Department of Civil and Environmental Engineering. Licentiate thesis, (Luleå: LTU).
- [11] Chalaki, S. (2017). Top Management Teams, Global Strategic Posture and the Moderating Role of Uncertainty. *Academy of Management Journal*, 44(1), pp. 533-545.
- [12] Clark, C. and Boswall, T. (2015). *Jardin Insurance Service Construction Bonds and insurance* (7th ed.) “Jardin” at pp 46- 48
- [13] Corbon . (2020). “Risk Management: The undiscovered Dimension of Project
- [14] Drakes, O. (2016). *Management of Small Construction Projects*, McGraw-Hill, New York.
- [15] Ede, A. (2016). Structural Stability in Nigeria and worsening Environmental Disorder: the way forward. *The West Africa Built Environment Research Conference (WABER), Accra, Ghana*.
- [16] Ede, A. (2016). Building Collapse in Nigeria: the Trend of Casualties in the Last Decade (2000 -2010). *International Journal of Civil & Environmental Engineering IJCEE-IJENS IJENS I J E N S*, 10 (January 2010), 6–32.

## Issue 1/2022

- [17] FASB (2013). *Risk exposure in designbuild contracts*. *Byggt teknik*, 1, 33-34. (in Swedish).
- [18] FASB (2015). *Risk Management and Construction*. Blackwell Scientific Publications, London. general meeting of Nigerian institute of Building Extra Ordinary General Meeting National
- [19] Hamza, A. (2015). *Project Management – A Multi-Disciplinary Approach*, South Africa.
- [20] Huang, V., Rrose- green, M. and Lee, B. (2018). *Risk management*. Capstone Publishing, Oxford. Institute of Building Extra Ordinary General Meeting.
- [21] John, K. (2017). Risk Management and Trends of US Construction. *Journal of construction Engineering and Management*, 422-429.
- [22] Madu. O. (2015). Assessment of Building Collapse in Lagos Island, Nigeria. *American Journal of Sustainable Cities and Society*, 1(7). <https://doi.org/10.26808/rs.aj.i7v1.04>
- [23] Mamic, K., Sacar, N. and Oluic, F. (2013). *A Systematic Approach to Risk Management in Construction*. *St. Survey*, 19(5), pp. 245-252. 71
- [24] Nigerian Insurance Act. (2003). *Compulsory Building Insurance: Another perspective*
- [25] Obodoh, N. (2019). Policies, challenges, reforms and Nigerian deposition to insurance contracts.
- [26] Odeyinka, H.A. (2017). An Evaluation of the use of Insurance in Managing Construction Risk.
- [27] Odeyinka, H.A. (2015). *The effect of risk and its management on construction projects' cost*, M.Sc. thesis, University of Lagos.
- [28] Odeyinka, R. (2017). Construction Delays and Their Tausative Factors in Nigeria. *Journal of Construction Engineering Management*, 132(7), pp. 667-677.
- [29] OECD. (2013), *perspective on global development 2013*; social cohesion in a shifting world, OECD publishing, [http://dx.doi.org/10.1787/persp\\_glob\\_dev-2013-en](http://dx.doi.org/10.1787/persp_glob_dev-2013-en)
- [30] Oloyede, D. (2015). The insurance industry and Nigeria economy. *Nigerian Journal of Accounting Research*, 1(2), 50-56
- [31] Osula, L. (2014). *Surveys. Research Methods: Guidance for Postgraduates*, Edward Arnold, London, pp. 115-124.
- [32] Raftery, M. (2014). Judgmental risk analysis process development in construction projects. *Building and Environment*, 40(9), 1244-1254.
- [33] Renuka, S. (2014). Risk analysis in fixed-price design-build construction projects. *Building and Environment*, 39(2), 229-237.
- [34] Soladoye, Y. (2012). *Insurers and the buildings: A synergistic Approach to the Nigerian*
- [35] Surety, N. (2014). A proposal for construction project risk assessment using fuzzy logic. *Construction Management & Economics*, 18(4), 491-500.
- [36] Toakley, A.R. and Ling, S.M.C. (2017). Risk management and the building procurement process in *Proceedings of the Innovation and Economics in Building Conference*, Brisbane, Australia, September, pp. 63–7.