

Common Prompters and Deterrents to Adoption of Insurance Policies as a Measure of Construction Risk Mitigation in South East Nigeria

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ABSTRACT

Risk in construction is a major problem in many construction organization, the risk is inherent considering that it requires a lot of input from varied participants and that it take place in open. No amount of planning can completely overcome the occurrence of risk, thus the need to identify common promoter and deterrent to the adoption of Insurance policies as risk mitigation strategy. The field survey entailed the distribution of questionnaires to construction professional in 60construction firms with 50 returned well filled. Data collected was analyzed using SPPS version 16.0. The result revealed among others that; the major deterrent to the adoption of insurance arrange in their order of severity are 'high premium cost experience by the firms', 'lack of awareness of the insurance', and 'lack of enforcement of the Act' arranged in the order of severity. Consequently, it can be deduced that absolute awareness of the insurance has not yet been achieved among contractors, the study shows that out of various risk mitigating mechanism in construction great importance was place on insurance cover but not all category of project are covered. Hence there is need for increase in the level of awareness of insurance, insurance company should try as much as possible to minimize the premium cost

Keywords: Deterrent, Insurance and Risk mitigation

I. Background of the Study

It's understood that risks are inherent in construction projects, that no amount of planning can absolutely overcome the occurrence of risk on the inability to control chance events. . Construction projects involve numerous unpredictable and complex processes which are plague with risk. Size can be one of the major causes of risk, so can change in political or commercial planning, other factors carrying risk with them include complexity of construction project, location, speed of construction and familiarity with the type of work. The level of risk in construction projects is due to the uniqueness of every project, the uncertainties introduce by the project stake holders, regulatory protocol, and many other factors at the start of any project. In the context of project Larson (2008) define risk an uncertain event or condition that if occurs, has positive or negative impact on a project objectives. Risk condition could include organization or project environment than enhance the risk. A risk has a one or more causes and if occurs has will have one or more impact. For example, accident may bring down a team member, or there could be change in scope requirement, market fluctuation if any of these uncertain event occurs, it will have impact to the cost, schedules, and quality of the project. Risk in construction has been the object of attention because of time and cost overrun associated with construction project. Too often these risk are not dealt with satisfactorily and the industry has suffered poor performance as a result (Tah and Carr, 2000)

According to Bailey (2017) insurance is defined as a contract where by an insurer agrees, in consideration of the premium paid by the insured to indemnify the insured against loss on the happening of certain events. The main objective of indemnity is to place the insurer, after the loss in position as before the event. Hence Construction insurance is a practice of exchanging a contingent claim for a fixed payment to protect the interests of parties involved in a construction project. Construction insurance is a major method of managing risks in the construction industry. Its primary function is to transfer certain risks from clients, contractors, subcontractors and other parties involved in the construction project to insurers, to provide contingent funding in time of difficulty. Construction insurance plays an increasingly important role in guaranteeing the success of projects, with insurers sharing losses resulting from natural disasters and other contingencies.

Liyadu (1995) postulate that by taking up insurance, a contractor eliminate the risk of suffering financially crippling losses by substituting a small definite cost (the premium) for the variability of construction losses, under a mechanism, where the unfortunate who suffer the misfortune are compensated by the fortunate many who escape loss. Queen &Satheesh, (2018) observed that construction by its very nature is a hazardous industry where collapses of buildings is becoming prevalent, accidents, fire incident, vandalism, and theft are almost common on all construction site. These generate abilities and acquire specific actions which ought to be taken care of by the insurance company.

The loss may be small or large so the impact, but one thing is sure, that if a building under construction collapse, or is damage by fire or vandalism, loss of project as a result of delay in production, compensation to infused employees and other responsibilities which the client would be ill-equipped to meet at the very time any of them might occur.

Risk in construction is a major problem in many construction organizations particularly in under-developed countries such as Nigeria, and to some extent even among the develop countries around the world such as Britain. Risk has a lot of negative impact on the client and stack holders interest into construction due to its influence of set back to their financial sources.

That is why the need to study the risk effects on construction arises, there by addressing method to counter there impact as well as educating the construction organization toward understanding the issue of insurance in general, there by highlighting the main problems associated with the insurance in construction and Providing possible solutions respectively (Emmanuel, 2020).

This research work intend to outline the challenges faced by professionals in construction industry specifically contractors in insuring construction projects with the view to suggesting possible ways through which its use could be improved.

II. Literature Review

Insurance in construction

From the legal viewpoint, insurance allocates the risks to which the project is exposed, between the parties. From an insurance aspect, risk forms the basis of insurability and premium calculation (Bunni, 2003) highlighted insurance as a risk transfer mechanism that the insured transfer from a state of uncertainty to a state of certainty at the certain cost of the insurance premium. It is a cost-smoothing mechanism, in which contractors exchange a regular known annual premium for an unknown potential loss.

In insurance, the insurance policy is a contract (generally a standard form contract) between the insurer and the insured, known as the policyholder, which determines the claims which the insurer is legally required to pay. In exchange for payment, known as the premium, the insurer pays for damages to the insured which are caused by covered perils under the policy language. Insurance contracts are designed to meet specific needs and thus have many features not found in many other types of contracts. Since insurance policies are standard forms, they feature boilerplate language which is similar across a wide variety of different types of insurance policies

The insurance policy is generally an integrated contract, meaning that it includes all forms associated with the agreement between the insured and insurer. In some cases, however, supplementary writings such as letters sent after the final agreement can make the insurance policy a non-integrated contract. One insurance textbook states that "courts consider all prior negotiations or agreements ... every contractual term in the policy at the time of delivery, as well as those written afterwards as policy riders and endorsements ... with both parties' consent, are part of written policy. The textbook also states that the policy must refer to all papers which are part of the policy. Oral agreements are subject to the parole evidence rule, and may not be considered part of the policy. Advertising materials and circulars are typically not part of a policy. Oral contracts pending the issuance of a written policy can occur (Hamzah, Wang, &Mohamad ,2015).

- i. Insurance contracts are generally considered contracts of adhesion because the insurer draws up the contract and the insured has little or no ability to make material changes to it. This is interpreted to mean that the insurer bears the burden if there is any ambiguity in any terms of the contract. Insurance policies are sold without the policyholder even seeing a copy of the contract. In (Robert Keeton) suggested that many courts were actually applying 'reasonable expectations' rather than interpreting ambiguities, which he called the 'reasonable expectations doctrine'. This doctrine has been controversial, with some courts adopting it and others explicitly rejecting it.
- ii. Insurance contracts are aleatory in that the amounts exchanged by the insured and insurer are unequal and depend upon uncertain future events. In contrast, ordinary non-insurance contracts are commutative in that the amounts (or values) exchanged is usually intended by the parties to be roughly equal. This distinction is particularly important in the context of exotic products like finite risk insurance which contain "commutation" provisions.
- iii. Insurance contracts are unilateral, meaning that only the insurer makes legally enforceable promises in the contract. The insured is not required to pay the premiums, but the insurer is required to pay the benefits under the contract if the insured has paid the premiums and met certain other basic provisions.
- iv. Insurance contracts are governed by the principle of utmost good faith which requires both parties of the insurance contact to deal in good faith and in particular it imparts on the insured a duty to disclose all material facts which relate to the risk to be covered

Early insurance contracts tended to be written on the basis of every single type of risk (where risks were defined extremely narrowly), and a separate premium was calculated and charged for each.

III. RESEARCH METHOD

Study Population and Sample Size

The target population in this work were professional involve in the construction industry practicing within Imo state and Abia State, the respondents are all experienced and practicing professionals who worked with small, medium and large scale construction firms and Also have an awareness on insurance

Sample Size

Sample size of 60 questionnaires was administered out of which only 50 were fully completed and returned. Question regarding the problem of this research work were drawn up and computed in a questionnaire soliciting information from respondents

Method of Data Collection

The methods employed for data collection in the research work are: Questionnaire survey and Literature review, with the aim of acquiring both primary and secondary date.

Questionnaire

Structured questionnaire was administered to professionals in construction firms who have reasonable knowledge related to construction matters.

Question regarding the purpose of this research work were drawn up based on selection and ranking using Likert scale principle, toward this research question.

RESEARCH TOOL

Questionnaires will be the basic tool for this study. The questionnaire will comprise of close-ended questions asking multi choice questions. The questionnaire consists of three sections, they are:

- 1. Section A; this section will request personal data of the respondents
- 2. Section B; this section contains questions risk and risk management in construction.

METHOD OF DATA ANALYSIS

The data acquired from the field survey will be analyse using; Descriptive statistic frequency, Frequency distribution tables and mean weight. The data was arranged in a table and percentage out of each question determined. For those have to do with ranking, the mean weight will be determined as: Mean weight $(M_w) = \frac{\sum fx}{\sum f}$

Where f= frequency of the respondent and x= is the ranking scale of respondent.

IV. DATA, PRESENTATION, ANALYSIS AND DISCUSSION

Data Presentation and Analysis

Table 1 presents the percentage response gotten from the distribution of the questionnaires. From the Table it can be deduced that out of a total of 60 questionnaires distributed 50 were returned satisfactorily filled which represent a response rate of 83.33 percent.

Table 1: Percentage Response

Questionnaire	number	percentage (%)	
Distributed	60	100	
Returned	50	83.33%	

Source: Field Survey, 2018

Respondent Level of awareness

Table 2, presents the analysis of the level of awareness of insurance policies among the professionals, the type of projects indemnified with insurance in the firms and the percentage of the total project as premium. The table reveals that largest proportion of the respondents were aware of insurance policies 34.0% of the total, the next indicate that they were averagely aware of the policies 32% of the total. The lease percentage of respondentswere those whom claim to be totally aware of the policies (15) making 30.0% of the total respondents, and the least proportion of the respondent out of the total respondents indicate that they were not aware of the policies (2) making 4% of the total

The table highlight that highest proportion of the respondents covers large scale projects with insurance making 70% of the total, followed by the respondents that covers medium scale projects making 20% of the total. The least proportion of the respondents cover small scale projects with insurance making 10% of the total respondents

The table reveals that largest proportion of the respondents indicates that they pay 5%-10% of the total budget as a premium cost making 40% of the total, the next group falls under 1%-5% making 28% of the total, and 10%-20% making 18% of the total, However the least proportion of the respondents falls above 20% making 6% of the total.

Table 2: Respondent Level of awareness

S/N	Profile	Option	1		Frequency (No)	Percentage (%)
1	level of Awareness of insurance	a)	Totally awar	е	15	30.0
	policies	b)	Aware		17	34.0
		c)	Averagely a	ware	16	32.0
		d)	Not aware		2	4.0
		Total			50	100
2	Type of project indemnified with insurance in the firm	a)	Small projects	scale	05	10.0
		b)	Medium projects	scale	10	20.0
		c)	Large projects	scale	35	70.0
		Total			60	100
3	percentage of total project budget	a)	1% - 5%		14	28.0
	paid as premium	b)	5% - 10%		20	40.0
		c)	10% - 20%		9	18.0
		d)	Above 20%		7	14.0
		Total			60	100

Source: Field Survey, (2018)

Percentage of Project Averagely Covered With Insurance Annually

Table 3 shows the percentage of project covered with insurance by construction firms on annual bases. The table reveals that largest proportion of the respondents falls within 5%-10% group making

48% of the total, the next groups are 1%-5% making 28% of the total followed by 10%-20% making 20% of the total and the least fall within above 20% making just 2% of the total respondents.

Table 3:Percentage of Project Averagely Covered With Insurance Annually

Types of project	frequency	percentage (%)	
1% - 5%	14	28.0	
5% -10%	24	48.0	
10% - 20%	10	20.0	
Above 20%	2	4.0	
Total	50	100.0	

Source: Field Survey, 2018

Some Major Problems Associated With Insurance When Use As A Tool for Mitigating Risk

Table 4: Some Major Problems Associated With Insurance When Use As A Tool for Mitigating Risk In Construction.

S/N	Problems	∑F	∑FX	MEAN	RII	RANK
1	Lack of implementation	50	138	2.76	0.55	4 th
2	Lack of enforcement	50	178	3.52	0.71	2 nd
3	Unconcern attitude	50	155	3.1	062	3 rd
4	Delay of payment of claims	50	200	4.0	0.80	1 st

Source: field Survey, 2018

Where 1=least problem, 2=less problem, 3=moderately problem, 4=problem, 5=main problem

Table 4: shows ranking of some major problems associated with insurance when use as a tool for mitigating risk in construction, it could be seen from the table that, delay of payment insurance claim (RII= 0.80) was identified as the most reoccurring problem. This was closely followed by 'lack of enforcement of the insurance Act' (RII=0.71), 'unconcern attitude toward insurance' (RII= 0.62) and 'lack of implementation of the Act' (RII= 0.55), which ranked second, third and fourth respectively. Details of the ranking is as presented in the Table.

Factors mitigating the use of insurance cover for projects by construction industry

Table 5 The table show the degree of importance of some factors that militate the use of insurance cover for construction projects by construction firms, from the table it could be deduce that the 'high premium cost experience by the firms is the most important factor weighing 4.56, the next factors are lack of awareness of the insurance and lack of enforcement of the Act weighing 4.08 and 3.9 respectively which are important factors, while the moderate problems is lack of implementation of the insurance Act, however the less problems is bid to reduce contract sum weighing 1.86.

Table 5: Factors mitigating the use of insurance cover for projects by construction industry

Factors	∑F	∑FX	MEAN	RII	RANK
High premium cost	50	228	4.56	0.91	1 st
Lack of awareness	50	204	4.08	0.82	2 nd
Lack of implementation	50	155	3.1	0.62	4th
Lack of enforcement	50	195	3.9	0.78	3 rd
Bid to reduce contract cost	50	93	1.86	0.37	5 th
	High premium cost Lack of awareness Lack of implementation Lack of enforcement	High premium cost 50 Lack of awareness 50 Lack of implementation 50 Lack of enforcement 50	High premium cost 50 228 Lack of awareness 50 204 Lack of implementation 50 155 Lack of enforcement 50 195	High premium cost 50 228 4.56 Lack of awareness 50 204 4.08 Lack of implementation 50 155 3.1 Lack of enforcement 50 195 3.9	High premium cost 50 228 4.56 0.91 Lack of awareness 50 204 4.08 0.82 Lack of implementation 50 155 3.1 0.62 Lack of enforcement 50 195 3.9 0.78

Source: field Survey, 2018

Where 1=least important, 2=less problem, 3=moderately important, 4=important, 5=most important

Factors in encouraging the use of insurance in construction

Table 6 shows the degree of importance of some approaches through which the use of insurance in construction can be encourage, the table reveals that the most important approach that will be employed to increase the utilization of insurance by construction firms is reduction of premium cost weighing 4.68, the next are the enforcement of the act, minimizing bureaucracy claim payment and increasing insurance coverage which are important weighing 4.28, 4.24 and 3.86 respectively, while the moderately important are the implementation of the Act, changed in concern attitude of the firms and increasing the awareness of the Act weighing 3.3, 3.02 and 2.8 respectively

Table 6Factors in encouraging the use of insurance in construction

S/N	Approaches	∑F	∑FX	MEAN	RII	RANK
1	Reduction of premium cost	50	234	4.68	0.94	1 st
2	Enforcement of the Act	50	214	4.28	0.86	2 nd
3	Increasing insurance coverage	50	193	3.86	0.77	4 th
4	Implementation of the Act	50	165	3.30	0.66	5 th
5	Making the Act to be known	50	140	2.80	0.56	7 th
6	Min. bureaucracy claim payment	50	212	4.24	0.85	3 rd
	Construction firms	50	151	3.02	0.60	6 th

Source: field Survey, 2016

Where 1=least important, 2=less important, 3=moderately important, 4=important, 5=most important

Insurance coverage policies employed by construction industry

Table 7: shows the degree of usage of some of the insurance policies employed by construction company, the table reveals that the most frequent policy use by construction company is construction all risk insurance weighing 4.68, the moderately frequent are plant all risk insurance, commercial general liability, workmen compensation, erection all risk insurance, and builders all risk insurance weighing 3.46, 3.24, 3.0, 2.86 and 2.76 respectively, while the less frequent policy are theft and burglary, professional liability and controlled insurance plan (wrap up) weighing 2.24, 2.4 and 1.76 respectively

Table 7: Insurance coverage policies employed by construction industry (degree of usage)

S/N	Policies	∑F	∑FX	MEAN	RII	RANK
1	Construction all-risk	50	234	4.68	0.94	1 st
2	Plant all-risk	50	173	3.46	0.69	2 nd
3	Workmen compensation	50	150	3.0	0.60	4 th
4	Theft and burglary	50	112	2.24	0.45	8 th
5	Professional liability	50	140	2.40	0.48	7 th
6	Controlled insurance plan (wrap up)	50	212	1.76	0.35	9 th
7	Commercial general liability	50	162	3.24	0.65	3 rd
8	Erection all risk insurance	50	143	2.86	0.57	5 th
9	Builders all risk insurance	50	138	2.76	0.55	6 th

Source: field Survey, 2016

Where 1=least frequent, 2=less frequent, 3=moderately frequent, 4=frequent, 5=most frequent

V. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

- i. Various stake holders face severe problems in carrying out complex construction work due to the unsatisfactory attitude of insurance.
- ii. Responses from the survey were analyzed using frequencies and mean values.
- iii. The reliable risk mitigating tool was found to be insurance, though it associated with certain number of various problem such as lack of enforcement, high premium cost, delay of payment of claim, however the utilization of insurance cover can be encourage by reasonable reduction of predetermined premium.

5.2 Conclusions

The construction industry is proved to several risks in which the contractor or client cannot shoulder alone when it happens. There is therefore a need for the contractor to take up insurance to cover these risks. But from the survey carried out, the absolute awareness has not yet sink into contractors. The study shows that, out of various risks mitigating mechanism in construction, great importance was place on the use of insurance cover, but not all category of projects are covered with insurance. The paper highlight major problems associated with insurance to be lack of implementation of the Act, lack of enforcement of the Act, delay of payment of claims, high premium but great importance was placed on delay of payment of claim and high premium. Which are the main factors mitigating the use of insurance cover by construction firm, the study highlights some of the approaches through which the use of insurance can be encourage; great importance was placed on reduction of high premium as well as enforcement of the Act. The study also shows the various policies adopted by construction firm, where construction all risk insurance policy is the most frequently used.

5.3 Recommendations

- i. Insurance companies should endeavor to carry out proper documentation and make their policies well known and understood by operators of the construction companies.
- ii. Insurance companies should try as much as possible to honor settlement of claim as at when due. In general, government should monitor, control and enforce insurance Act.
- iii. Insurance company should minimize the premium to reasonable amount which will increase the desire of construction firm toward employing insurance cover.
- iv. Level of awareness of insurance of insurance should be increase to create understanding of the administration of insurance services in the industry.
- v. The government should implement and make it mandatory for construction companies to undertake at least one of the established insurance policies as it applies to the construction industry
- vi. Provisions for the inclusion of insurance cover should be also be made compulsory for all categories of project and its administrative framework be strengthened.

REFERENCES

- [1.] Bailey, J. (2017). Health insurance and the supply of entrepreneurs: New evidence from the Affordable Care Act. *Small Business Economics*, *49*(3), 627-646.
- [2.] Bunni, N. G. (2003). Risk and insurance in construction. Routledge.
- [3.] Dada, J.O. and Jagboro, G.O. (2007) an evaluation of the impact of risk on project cost overrun in Nigerian construction industry, journal of financial management of property and construction

- [4.] Emmanuel, N. I., Effiong, O. B., Ozoh, C. S., Chidi, U., &Ayodeji, O. O.(2020) AN ASSESSMENT OF PROJECT MONITORING PRACTICES ON CONSTRUCTION SITES IN ABUJA NIGERIA.
- [5.] Hamzah AR, Wang C, Mohamad FS (2015) Implementation of risk management in Malaysian construction industry: case studies. J ConstrEng
- [6.] Larson G.I (2008) project management: the managerial process MC Graw Hill international edition united states of publication
- [7.] Queen M, Satheesh Kumar S (2018) A study on insurance in construction industry. Int Res J EngTechnol (IRJET) 5(4):3991–3393
- [8.] Sola, A. J., Arowojolu-Alagwe, T., Taiwo, E. M., & Abiodun, B. T. (2013). Adequacy of builders risk insurance policy in Nigeria building industry. *PM World Journal*, 2(XI), 1-12.
- [9.] Tah, J. H., &Carr, V. (2000). A proposal for construction project risk assessment using fuzzy logic. *Construction Management & Economics*, *18*(4), 491-500.