

Effect of Claim on Selected Building Projects in Petroleum Training Institute in Nigeria

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ABSTRACT

Disputes in connection with contract as regards to what is to be paid is claim. The simplest course is to accept that anything not agreed between the contractors and the consultant at any given time is a claim. Claims are one of the problems that construction projects may face which might lead to many consequences such as payment delay, extension of time and work suspension. In view of this, the study examined the impact of claims on final cost of selected building projects in Petroleum Training Institute (PTI), Effurun, Delta state, from (2017-2020). The research design employed in this research was a historical research design. A total number of ten (17) completed projects executed within the stated period, funded from internal generated revenue (IGR) of the institute. The Purposive random Sampling (PRS) was adopted for this research. Data generated was subjected to descriptive statistical analysis and inferential analysis. It was analysed using simple percentage, mean, E. views8 software was used for the regression analysis and SPSS version20 tool was used for correlation coefficient analysis, also known as Pearson correlation. The result of coefficient of determination (R^2) is given as 0.592987. This implies that 67.35% of the increase in the final cost of building project is explained as a result of claims in the cost of project in PTI from 2017 to 2020. It was recommended that Tender specification should focus on both technical and quality aspects affecting construction input costs so as to reduce claims; there should be thorough cross checking of estimates based on updated price information in order to avoid wrong estimations.

Key words: claim, cost, building projects

INTRODUCTION

Claims are disputes over payment to be made within contract. The simplest course is to accept that anything not agreed between the contractors and the consultants at any given time is a claim [1] Claim was thus defined by [2] as a written demand or written assertion by one of the contracting parties seeking as a matter of right, the payment of money, the adjustment or interpretation of contract claims terms, extension of time or other relief with respect to the terms of the contract. Claims and change order have been linked with cost overruns [3, 4]. In most building projects, there is always a difference between the tender sum and final contract sum, the difference been caused by claims (variations, fluctuation, additional works and compensation) having considerable effect on construction cost. Construction claims always involved

the setting of arbitration panels, which are paid for [5].

Claims can be resolved in the law court whereby the services of experts; mostly the quantity surveyors are engaged to stand for the client and the contractor. Claim has always been a source of extra expenses to both the employer and the contractor. At times the amount spent on claims procurement is more than the value of financial claims. Most contract claims are made by the contractor against the employer. There may be contractor against the employer. There may however also be a claim by the employer against the contractor, by the contractor against the subcontractor and supplier or vice versa. Claims usually result in original budget being exceeded (cost overruns).[6], opined that claims are one of the problems that construction projects may face which might lead to many consequences such as

payment delay, extension of time and work suspension. Reconciling the difference between the initial and final cost estimates of projects execution in Petroleum Training Institute (PTI), Effurun, Delta State is an issue worthy of note due to huge claims arising from variations, fluctuation, additional works, compensation and many

others. Most projects are completed at a sum higher than the original contract sum due to claims thereby resulting to cost or time overruns. Construction claims involved a rigorous compilation of files and records, interpretation of contract clauses.

Literature review

General Concept of Claims

Claim was defined by [7] as a request for compensation for damages incurred by any party to a contract. The above opinion was further asserted by [8] that claim in construction industry is any measurement, rules, delays, disruption or any other matters not agreed between the contractor and the consultant at any given time. Thus, one of the contractual party or the other wishes to pursue the claim for financial recompense or on the other hand via liquidated or unliquidated and ascertained damages.

In the construction industry, claims are common and can happen as a result of several reasons that can contribute to delaying a project and/or increasing its cost [9] and [10] Claims for additional costs or for time extension occur during the course of the construction. To enhance the chances of success, contractors must understand the main causes of claims and when submitting a claim, provide enough information and present sufficient documentation. Project owners need also to follow an overall comprehensive step-by-step procedure for tracking and managing the claims submitted by contractor [11].

Once a claim has been presented, the owner and the contractor can come to an agreement concerning the claim and thereby create a change order or a modification or they disagree and create a construction contract dispute [12].

Several attempts were made in the literature to study construction claims and determine their main causes in an attempt to avoid claims or at least reduce them. [13], conducted a survey to investigate the mechanisms that are being adopted to prepare and evaluate delay claims in the United Kingdom. [14], evaluate the effectiveness of written contract language to communicate risk appointment between contracting parties. [15] determined the most important causes of delay claims in

public utility projects in Saudi Arabia based on severity and frequency of these causes. Contract is always delayed due to financial incapacitation of the employer[8].

The reasons for claims are many but they fall mainly under the following:

1. Design and/or specification alteration, addition and omission usually referred to as variations.
2. Changes in the pricing basis usually referred to as fluctuations.
3. Loss and/or expenses arising from delays caused by changes in contract terms, unforeseen events or from a breach of the contract terms by one of the parties.

Claims are often seen as a dirty word in the employer section of the industry. It is easy to understand why this should be so because it so often results in original budget being exceeded. Most contract claims are made by the contractor against the contractor, by the contractor against the subcontractors and suppliers or vice versa, or by one of the contract/subcontractors parties against any of the professional consultants. According to [7], there are two sets of claims; justified and unjustified.

A justified claim is one properly made under the term of the contract or which does not justify criteria for a common law claim. There is nothing wrong with a justified claim since most standard forms of contracts specifically entitled the contract to apply for reimbursement of direct loss and/or expenses which he incurs as a result of certain matter specified in the contract all of which are within the direct control of the employer or of those, he must bear responsibility in law.

On the other hand, unjustified claims are those that are engineered at the onset of the project or even on occasion or during the tendering process which can cause a

great deal of trouble in the industry. They give rise to the common and unfortunately view that some contractors embark on a contract with the intension of creating conflict. It is probably not too wrong to

categorize such claim as fraudulent and the construction industry is perhaps the only one where such practices would be tolerated and treated as norms.

CLASSIFICATION OF CLAIMS

There are various ways to classify construction claims into categories. [8], classify claims as: Contractual claim

(variation, fluctuation, etc); Extra-contractual claims; Ex-gratia claims and Quantum meriut claims

Powers and Responsibilities of Participants in Building Contract in Claim Scenario According to JCT standard Form of Contract.

In construction contract, the consultant involved in the execution of the contract is empowered by the contract provision stipulated in condition of contract. However standard form of contract imposed some responsibilities in dealing with the claim for loss and/or expense the contractor may incur on the course of contract execution. The JCT 1980 standard form of contract empowered the architect to ascertain amount payable to contractor in claim situation. The form of contract however reserved the right of option to the architect either to instruct the Quantity Surveyor to carry out the function or do it by himself. [8], accepted the view that the provision in JCT 1980 empowering the architect to ascertain amount of loss and expense in not fair. He added that it is casting the architect in joint role of judge and defendant; as the architect in certain situation may initiate delays in regular progress of work which will lead to claim in the first place. The author is of the opinion that the stand adopted by the JCT 1980 form of contract worked against natural justice. Lump sum contract adopted an entirely different position in claim situation. Here the provision is that the architect/supervising officer will only instruct the Quantity Surveyor to evaluate the claim and ascertain the additional payment due to contractor. This provision is more recommendable since architect/supervising officer is restricted only in giving instruction to Quantity

Surveyor to evaluate the situation and ascertain the additional payment. The provision of clause 24 (10) gives right to the architect/supervising officer to instruct the right to such additional payment. This therefore means that decision over the matter is not based on architects' discretion thus, the Quantity Surveyor is the only participant empowered by the provisions on the condition of contract to analyse and evaluate amount payable to the contractor for loss and expenses incurred under lump sum contract. In JCT 1980, from of contract, the contractor is empowered to make written application to the architect/supervising officer stating the loss and/or expenses likely to incur directly or indirectly on the course of contract execution for which he would not be reimbursed under other provisions in the contract as a perquisite for accepting any claim for loss and/or expenses. While in lump sum contract the contractor is not obliged to carry out such function. The arrangement in this type of contract is more ideal because, the contractor who is to incur the loss/ or expense has the responsibility of ensuring that a genuine claim is articulate and presented with supporting document to the architect! Supervising officer. This will enable the architect/supervising officer to instruct the Quantity Surveyor to assess the contractors claim and situation surrounding the claim

Research Methodology

The research design employed in this research was a historical research design. Historic research design involves examining past events to draw conclusion and make predictions about the future. In this study, the population has been drawn from projects executed by Petroleum Training Institute, Effurun, Delta state from 2017-2020. A total number of ten (17)

completed projects executed within the stated period, funded from internal generated revenue (IGR) of the polytechnic. The Purposive random Sampling (PRS) was adopted for this research where each element of the frame has an equal probability of selection. This minimizes bias and simplifies of results particularly the variance between

individual results which is a good indicator of variable in the overall population; this makes it relatively easy to estimate accuracy of results. In view of this the purpose random sampling was adopted. Data generated was subjected to descriptive statistical analysis and inferential analysis. It was analysed using

simple percentage, mean, E.views8 software was used for the regression analysis and SPSS version20 tool was used for correlation coefficient analysis, also known as Pearson correlation. One-sample test was used to analyse the hypothesis. The presentation of data was done using tables, graphs and charts.

Research Findings and Discussions

The research thus examines the impact of claim on final cost of building projects in Petroleum Training Institute (PTI), Efurun, Delta state, from (2017-2020). The project

information of selected completed projects in PTI were gathered and presented in the table below.

Table 1: selected projects information in PTI

S/ N	Project Title	Commencem ent Date	Amount certified contractor	Final contact to sum	Claim cost
1	Construction of water scheme reticulation phase 1 at Osubi	3 rd February 2017	₦123,336,774	₦126,499,255.94	3,162,481.94
2	Provision of surface Overhead Water Tank Treatment Plant and Boreholes (Lot A7)	26 th April 2017	₦217,655,376.75	₦227,659,518	10,004,141.25
3	Construction of 300 Seat Lecture Theatre	20 th April, 2017	₦72,045,676.50	₦94,395,189	22,349,512.5
4.	Extension of clearing and reconstruction of Existing drainage to the sport complex and maintenance of sport stadium at the main campus	9 th July, 2018	₦185,004,020	₦140,251,106.25	44,752,913.75
5	Extension of Clearing and Reconstruction of Existing Drainage to the Sports Complex and Maintenance of Sports Stadium at the Main Campus	9 th July, 2018	₦140,251,106.25	₦185,004,020	44,752,913.75

6	Nnadi and Rahmat Construction of Concrete pavement along NDDC Female Hostel LOT (A1)	20 th December, 2018		₦ 54,215,300	₦ 58,247,385	4,032,085
7	Construction of Water Scheme Reticulation phase 2 (Distribution and buildings connection)	24 th December, 2018		₦ 126,444,643.75	₦ 166,814,865.00	40,370,221.25
8	Construction of second entrance/gate house, fence, box culvert and linking drainage	10 th 2018	June,	₦ 188,596,046.94	₦ 243,664,934.54	55,068,887.6
9	Construction of exhibition and conference centre	10 th 2020	June,	₦ 97,491,998.57	₦ 249,931,899.78	152,439,901.21
10	External works for construction of 3nos borehole, water source head works and treatment plant	10 th 2020	June,	₦ 153,684,954.05	₦ 211,255,094.00	57,570,139.95
11	Extension of drainage construction to discharge point	10 th 2020	June,	₦ 113,113,801.17	₦ 226,227,602.34	113,113,801.17
12	Renovation works on corrosion studies centre	June, 2020		₦ 139,837,731.70	₦ 153,646,934.00	13,809,202.3
13	Construction of External Works for 300 Seat Lecture Theatre	January, 2020		₦ 64,285,709.19	₦ 82,238,546.25	758,099,757.06
14	Supply and installation of Ino generating set	10/06/2020		₦ 100,045,110.02	₦ 105,126,131.00	5,081,020.98
15	Procurement and installation of solar street light	10/06/2020		₦ 102,745,987.87	₦ 118,167,612.00	15,421,624.13

16	Nnadi and Rahmat Renovation of three-bedroom flat - block af/10 & bq (bill 15)	10/06/2020	₦ 32,916,486.7 8	₦ 34,649,728. 41	1,733,241.63	Source:
17	Renovation of call duty staff quarters - block 1 (bill 16)	10/06/2020	₦ 26,310,033.7 5	₦ 27,218,733. 04	908,699.29	
Total			1,937,980,75 7.29	2,450,998,55 4.55	513,017,797 .26	

Researchers field survey, 2022

Table 2: Regression analyses aimed at estimating the impact of claim on final cost of selected building projects in Petroleum Training Institute (PTI), Effurun, Delta state, Nigeria from (2017-2020)

$$Y = a + bX$$

Dependent Variable: FCSBP

Method: Least Squares

Date: 09/07/22 Time: 13:17

Sample: 1 17

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FCSBP	57717943	1.80E+08	0.313723	0.6872
CLAIMS	0.156672	0.947455	0.152808	0.7908
R-squared	0.592987	Mean dependent clm		77975175
Adjusted R-squared	0.591675	S.D. dependent Clm		2.37E+08
S.E. of regression	2.51E+08	Akaike info criterion		40.69779
Sum squared resid	5.05E+17	Schwarz criterion		40.75831
Log likelihood	-206.4889	Hannan-Quinn criter.		40.63140
F-statistic	0.023966	Durbin-Watson stat		2.403105
Prob (F-statistic)	0.790809			

Source: Eviews8 Computation

Where,

X= CLAIM = Claim (Independent variable)

Y= FCSBP = Final cost of selected building project (dependent variable)

Explanation of Regression Results

The variables employed for the regression analysis are final cost sum as the dependent variable, and claim as the independent variables. The estimated coefficient value for the parameters; β_0 and β_1 , are 57717943 and 0.156672 respectively. The constant term (b_0) is estimated at 57717943, which implies that

the model passes through the point 57717943 mechanically, if the independent variables (claim) equal to zero, final cost of selected building project would be equal to 57717943. The estimated coefficient for variation (b_1) is 0.156672 and this implies that if other variables affecting the final cost of selected building

project are held constant, a unit increase in claims will bring about a 0.156672 increase in the final cost of building project on the average. The result of coefficient of determination (R^2) is given as

SUMMARY, CONCLUSION AND RECOMMENDATION

This study was conducted for the purpose of investigating the impact of claims on final cost of selected completed building projects in Petroleum Training Institute (2017-2020). The random sampling technique was used for gathering data, and direct oral interview through a well-structured survey design with drawn up questions was used as the instrument for collecting data. In the light of this, the findings of this research were summarized as follows: From the survey of the 17 projects carried out in Petroleum Training Institute (2017-2020), construction cost overrun from claim cost can be attributed to variations and fluctuations resulting in increased scope of work, design modification and increased cost of labour and materials respectively. The conclusions that can be drawn from the findings shows that about 67.35% increase in cost of the 17 surveyed projects in Petroleum Training Institute are attributed to variation and fluctuation claims which are the most frequent types of claims experienced on these projects. A strong positive relationship also exists between cost of claims and final contract sum, indicating that these claims impact significantly on the final contract sum of

0.592987. This implies that 67.35% of the increase in the final cost of building project is explained as a result of claims in the cost of project in PTI from 2017 to 2020.

the building projects in Petroleum Training Institute (2017-2020).

Based on the findings of this research, the following policy recommendations are proposed:

1. Tender specification should focus on both technical and quality aspects affecting construction input costs so as to reduce claims.
2. There should be thorough cross checking of estimates based on updated price information in order to avoid wrong estimations.
3. Tenders should be evaluated on whole life costs rather than capital costs alone. This is the best practice, but often tenders are evaluated/awarded as directed by the client to suit his/her objectives and available funds, sometimes without regarding the ultimate long-term economics.
4. Much focus should be placed on the factors causing construction claims in order to reduce the extent of construction cost overrun and generate confidence within the construction industry.
5. Clients should clearly identify their requirements and needs in order to know what they can achieve within their financial capability.

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