

Frameworks for remuneration of construction consultants during unwarranted project time overrun in Nigeria

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Abstract:

This study postulates frameworks for remuneration of consultants in the event of construction project unwarranted time overrun. Compensation clauses in Nigeria, standard bidding documents (SBD) for procurement of works 2011 version for clients, contractors, and consultants were examined and compensation frameworks for consultants were postulated in case of unwarranted time overrun. The target population constituted Architect, Quantity Surveyors, Structural Engineers, and Mechanical cum Electrical Engineers. Primary data were obtained through a structured questionnaire by random sampling technique. Secondary data were obtained from conditions of contract and extant literature. Primary data were analyzed using frequency distributions aided by Microsoft excel 2016 version and results presented in tables. The study is limited to building projects funded with Tertiary Education Trust Fund (Tetfund) in Nigeria. Liquidated and ascertained damage (LAD) and interest on delayed payment calculated after the statutory 28 days duration for payment are all covers for the contracting parties. However, there is no provision in the standard bidding documents for compensating consultants in the event of unwarranted time overrun. The study thereby postulates measures for compensating consultants during unwarranted time-overrun. These include payments to consultants by the defaulter through 10% of the cost of works yet to be executed at the expiration of the contract period Man-Month approach and agreement between the consultants and the culprit.

Keywords: Construction, consultants, time overrun, remuneration

1 Introduction

Project time overrun is inimical to the performance of construction projects in Nigeria and the world over (Ade-Ojo and Babalola, 2013; Nasser, 2013). This results in adverse multiplier outcomes both to the client and the contractor. Ade-Ojo *et al.* (2013) identified a decline in the anticipated profit of the contractor and delay in the client taking custody of the project as a product of time overrun. Odeh and Battaineh (2001) adjudged 28 factors that necessitate time overrun and concluded that the most outstanding factors responsible for time overrun were the contractor's inexperience and the client's shillyshally attitude in decision making. Kadiri and Shittu (2015) cited Ameh and Osegbo (2011) and observed that time overrun in Nigeria construction sites could allude to the client, contractor, and external factors, which include; a glitch in the client's ability to honour payments certificate, contractor's ineffective project implementation. Majid (2006) also identified 16 significant proponents of time overrun, which clients and contractors cause. Kadiri *et al.* (2015) opined that both the positions of contractors and consultants (client's agent) agreed that time overrun mostly occurred due to financial

hitches, inadequate project details, and clients' intrusion. From the foregoing, it stands out that time overrun as pitching a tent, so to speak, with construction projects in Nigeria. It appears that Nigeria standard bidding document for procurement of works (SBD), (2011) edition provides a cover for both the client and contractor in the event of defaulting in payment and unwarranted time overrun, but with no known cover for the consultants who are essential to the entire procurement process.

This study thereby postulates frameworks for remuneration of consultants in the event of construction project unwarranted time overrun in Nigeria. The aim of the study was achieved by examining the compensation clauses in the standard bidding documents for procurement of works 2011 version for client, contractor, and consultants, examining time performance of Tetfund sponsored projects in Nigeria and assessing suggestive compensation module for compensation of consultants during time overrun. Based on these, frameworks were postulated.

2 Review of Nigerian Standard Bidding Document (SBD) for Procurement of Works - 2011 Version

2.1 Unwarranted Time Overrun (UTO) Defined

For this study, unwarranted time overrun refers to any period after a justifiable extension of time was/were granted during construction wherein liquidated, and ascertained damage is deemed to apply.

2.2 Tertiary Education Trust Fund (Tetfund) Sponsored Projects

Tetfund sponsored projects are construction projects supported by the dedicated fund by the federal government of Nigeria. The beneficiaries include mainly tertiary institutions (universities, polytechnics, monotechnic, colleges of education) and other government parastatals.

2.3 Compensation Plan for Client during (UTO) in Nigeria

Three unavoidable factors moderate construction works; time, cost, and quality (SBD, 2011). If the contractor's actions or inactions result in unwarranted extended time, the conditions of the contract provide a compensation plan for the client. SBD (2011) *sections 46.1*,

"States that except in case of Force Majeure, as provided under GCC Clause 41, a delay by the Contractor in the performance of its Completion obligations shall render the Contractor liable to the imposition of liquidated damages under GCC Clause 68, unless an extension of time is agreed upon, according to GCC Sub-Clause 46.2."

"If the Contractor fails to complete the Works by the Intended Completion Date, as extended by the Engineer as the case may be, the Contractor shall be liable to pay liquidated damages to the Employer, under GCC, Sub-Clause 68.1."

2.4 Compensation Plan for Contractor during (UTO) in Nigeria – Delayed Payment by Client

SBD (2011) provides a compensation plan for delayed payment outside the conventional twenty-eight days (28) of honoring payment requests submitted by the contractor. According to SBD (2011) section 63.1, *"If the employer makes a late payment, the contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing interest rate for commercial borrowing established in Nigeria"*.

3 Research Methodology

The study adopts positivists' position. The target population constitutes relevant Consultants (predominantly engaging in consultancy) in the Nigerian construction industry: Architect, Quantity Surveyors, Structural Engineer, Mechanical cum Electrical Engineers. Primary data were obtained through a structured questionnaire by random sampling technique using online google form due to covid-19 pandemic protocols that limit person-to-person contacts. Secondary data were obtained from standard bidding documents to procure works 2011 version and other relevant extant literature. Primary data were analyzed using frequency distributions aided by Microsoft excel 2016 version, and results presented in tables. The major setback in ascertaining the sample size for the study is that the exact number of the consultants was challenging to obtain. This is because the professional bodies do not have accurate statistics of professionals engaged by contracting firms. This study depended on the number of respondents as the sample size is 46.

3.1 Validation of the Questionnaire

The survey instrument was validated by sending the draft to three (3) seasoned relevant consultants to ascertain the relevancy of each of the enlisted questions and how these built up to the formulation of the frameworks for compensation of consultants during unwarranted time overrun for Tetfund sponsored projects in Nigeria.

4 Findings and Discussion

Questionnaires were administered to relevant professionals in the Nigerian construction industry through an online google form because accessibility to some of the respondents was limited due to the Covid-19 pandemic. These include Architects, Quantity Surveyors, Mechanical Engineers, Electrical Engineers, and Structural Engineers in no other of importance. Out of the administered questionnaire, 46 were retrieved, which constituted a 66% retrieval rate. The percentage recovered is substantial, and the information provided by the respondents are deemed to be reliable and can be generalized as the average submission of the concerned professionals in the built industry on the subject under discourse, and the findings are presented as follows.

Table 1 shows that 82.6% of the respondents were Quantity Surveyors, 10.8% were Architects, while Mechanical Engineers, Structural Engineers and Electrical Engineer were 2.2% each in the distribution. The role of Quantity Surveyor in the subject under discourse is central. They manage all aspects of construction projects' contractual and financial side; estimate and monitor costs from concept design to completion. Therefore, the table indicates that the relevant respondents were sought after and the quality of information gotten from the survey adequately addressed the topic.

The result could be easily generalized for built industry professionals affected by time overrun in projects. Respondents from academics and consulting firms were 32.6% each, 21.7% were from the contracting firm, while 4.4% and 8.7% were from government parastatal and multiple practices, respectively. These imply that opinions were collected from different sectors of engagement for a more robust and inclusive analysis. Academics and consultants that constituted 65% of the respondents are versed in the subject matter. Therefore, their experience is not in doubt, hence, the confidence that the data provided by them and other respondents are reliable.

Table 1. Background Information of the Respondents

Background of Respondents	Frequency	Percentage
<i>Professions</i>		
Architect	05	10.8
Quantity Surveyor	38	82.6
Structural Engineer	01	2.2
Mechanical Engineer	01	2.2
Electrical Engineer	01	2.2
<i>Sector of Engagement</i>		
Academics	15	32.6
Consultancy	15	32.6
Contracting	10	21.7
Government Parastatals	02	4.4
Multiple-Practice	04	6.7

Table 2 reveals that 84.8% of the respondents were not aware of any compensation plan for construction consultants when there is an unwarranted time overrun; whereas, 15.2% said they were aware. These positions posit that it is not common in Nigeria for construction consultants to be compensated for time overrun if the agreed project completion period is exceeded. This in all cases, increases the running cost of the consultants at the supervision stage, reducing their income.

Table 2. Awareness of Compensation Plan for Consultants during (UTO) in Nigeria

Awareness of Compensation Plan	Frequency	Percentage
YES	07	15.2
NO	39	84.8

In Table 3, enquiry was made to know if the respondents have ever been involved in Tetfund sponsored project(s) before and the results indicate that 47.8% have been involved while a little above half (52.2%) said they have never been involved. Usually, Tetfund project is one of such building contracts that often experience (UTO) due to bureaucratic bottlenecks that often characterize project fund disbursement and monitoring process. The results, therefore, imply that a good number of the respondents had been involved in Tetfund sponsored projects. Despite its characteristics of time overrun, there is hardly a consideration for compensation to consultants that the respondents are aware of, as can be inferred from results in Table 2.

Table 3. Involvement of Respondents in Tetfund Sponsored Projects

Involvement in Tetfund Projects	Frequency	Percentage
YES	22	47.8
NO	24	52.2

Table 4 presents a multi-choice question that permitted respondents to choose more than one option from the list provided. 36.1% prefer the person-month rate, 54.1% favors that agreement between the consultants and the culprit (consultant or client) should be the module for compensation. In comparison, 9.8% suggest that 10% of the unexecuted work as the yardstick for compensation. This implies that the majority support that agreement between the consultant and the culprit as the most appropriate yardstick for compensation in the event of unwanted time overrun.

Table 4. Module for Compensating Consultants during (UTO) in Nigeria

Module	Frequency	Percentage
Man-Month Rate	22	36.1
10% of Cost of Un-Executed Works	06	9.8
Agreement between Consultants and the Culprit	33	54.1

From Table 5, 65.2% of the respondents believe that the method for assessing unwarranted time overrun should be included in the letter of commissioning and award of contract. 15.2% refute the idea, while 19.6% are indifferent. This implies that most consultants prefer the method of assessing compensation to be spelt out on the letter of commission given to them. This will enable the parties to know in advance what obtains in the event of unwarranted time overrun. Where such applies, the parties will be guided appropriately as the implication for delay on the part of the parties to the contract is already known.

Table 5. Inclusion of Compensation Module in Letter of Commissioning and Award

Respondents Positions	Frequency	Percentage
YES	30	65.2
NO	07	15.2
NOT SURE	09	19.6

In Table 6, 78.3% of the respondents opine that Tetfund sponsored projects often result in time overrun. In comparison, 15.2% posit that they were not sure if the project often experience time overrun. Perhaps the indifferent respondents were part of the people who have not been involved in such projects before. 6.5% assert that Tetfund projects are constructed to time. This implies that unwarranted time overrun is a problem peculiar to Tetfund projects in Nigeria.

Table 6. Assessment of Construction Period for Tetfund Sponsored Projects

Assessment of Construction Period	Frequency	Percentage
Often Experience Time-Overrun	36	78.3
Projects are Constructed to Time	03	6.5
Not Sure	07	15.2

From Table 7, 17 respondents posit that the module for remuneration of consultants be implemented by professional bodies, 19 responses supported that BPP should undertake the implementation while 10 responses opted for sponsored bill in the National Assembly. Judging from the responses, Bureau of public procurement was chosen by majority of respondents to implement the module for remuneration of consultants in the event of unwarranted time overrun.

Table 7. Implementation of Module for Remuneration of Consultants during (UTO)

Implementation	Frequency	Percentage
Through Professional Bodies (PB)	17	37
Bureau of Public Procurement (BPP)	19	41
Sponsored Bill in the National Assembly (NA)	10	22

4.1 Conceptual Framework for Compensation of Consultants During (UTO) for Tetfund Projects in Nigeria

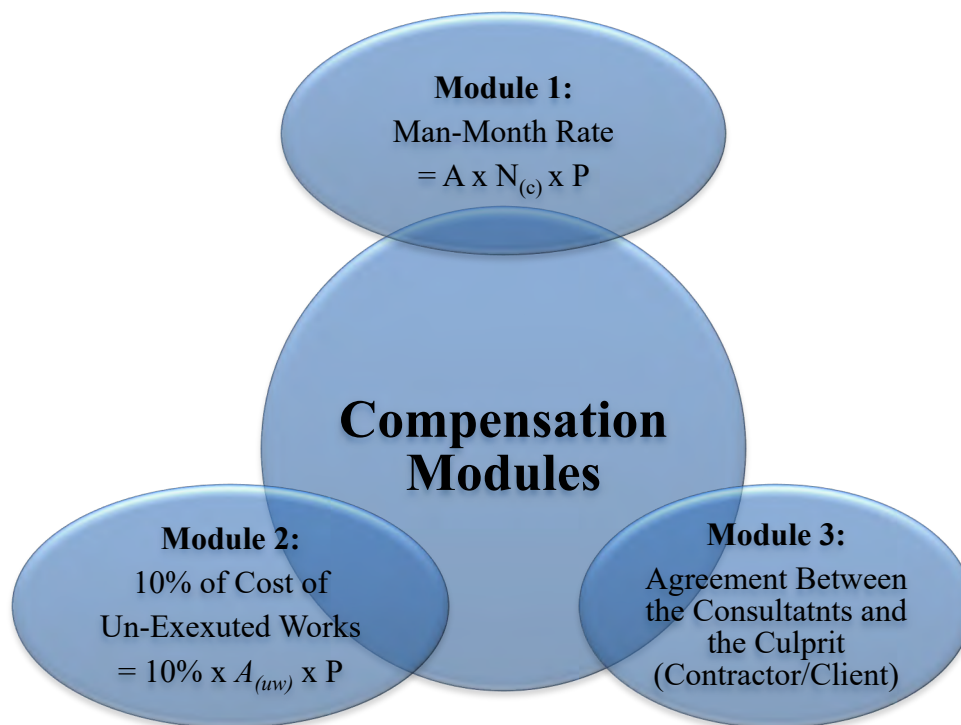


Figure 1. Postulated Conceptual Frameworks for Compensation of Consultants During (UTO)
(Source: Author's Perception, 2021)

4.1.1 Formation of the Nested Frameworks

Module 1 - Man – Mouth Rate: Stipulates an option for consultants' compensation during unwarranted time overrun during construction project execution.

$$\text{Man – Mouth Rate} = A \times N_{(c)} \times P$$

A = Amount Payable to a consultant According to Rank, $N_{(c)}$ = Number of Consultant(s) and P = Period agreed upon

Module 2 - 10% of Cost of Un-executed Works: Stipulates second option for consultants' compensation during unwarranted time overrun during construction project execution.

$$10\% \text{ of Cost of Un-executed Works} = 10\% \times A_{(uw)} \times P$$

$A_{(uw)}$ = Amount of un-executed works and P = Period agreed upon

Module 3 - Agreement Between the Consultants and the Culprit (Contractor/Client):

Stipulates third option for consultants' compensation during unwarranted time overrun during construction project execution. This implies that the consultants and the culprit (Client or Contractor) will have to agree on modalities different from module 1 and 2.

Frameworks for compensation of consultants during unwarranted time overrun is the focus of the study. The study did not invent the wheel by examining the time performance of construction projects in Nigeria but Tetfund sponsored construction projects. The findings of this study agree with other previous studies (Ade-Ojo and Babalola, 2013; Nasser, 2013) whose sponsorship are likely from different sources. Thirty-six (36) out of the forty-six (46) respondents agreed that Tetfund in Nigeria always experience time overrun. While client and contractor have clauses in the SBD (2011) as cover during time overrun, no known clause for the consultants. This is not unlikely because time overrun has become a usual practice in project execution within the Nigerian construction industry. To worsen the situation, both parties to contract (client and contractor) are not willing to press for compensation which is contagious to the consultants. This laxity is also encouraging unhealthy contractual relationship as some client though not willing to claim liquidated and ascertained damages but would choose to delist the name of such contractor on the list of their preferred contractors and do this by introducing time performance clause in the invitation to tender as part of yardsticks for prequalification. This study thereby identified Man-Month Rate, 10% of Cost of Un-Executed Work and agreement between the consultants and the culprit (client or contractor) as frameworks on which consultants can claim for unwarranted time overrun. Even though it is suggested that such compensation frameworks should be included in the letter of commissioning of consultants and letter of award and the bureau of procurement as prefer means of implementation, the advocacy of such may likely as to be sponsored or moved through national bodies of the affected construction professionals.

5 Conclusion and Further Research

This study postulates frameworks for compensation of consultants during unwarranted time overrun of Tetfund sponsored projects in Nigeria. Man-Month Rate, 10% of Cost of Un-Executed Works and agreement between the consultants and the culprit (client or contractor) are possible modules on which consultants can claim for compensation for unwarranted time overrun. This is necessary as Tetfund sponsored projects experience time overrun in most time. The inclusion of any of the modules of compensations as indicated in the framework would likely serve as a deterrent to be lackadaisical by the contracting parties in carrying out their contractual obligations. The study recommends a further study on the time performance of Tetfund sponsored projects in Nigeria undertaking by corporate, private sectors to ascertain any compensation module(s) if any, for consultants in such setting if unwarranted time overrun occurs.

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