

EFFECTIVENESS OF FINANCE ALLOCATION STRATEGIES: A COMPARATIVE EVALUATION OF PUBLIC AND PRIVATE BUILDING PROJECTS IN AKWA IBOM STATE

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ABSTRACT

Purpose: Given the indispensability of finance to any construction process, this research aimed at carefully evaluating the effectiveness of various finance allocation strategies in public and private building projects in Akwa Ibom State. The set objectives of this study include to discretely assess the effectiveness of major financing allocation strategies in public and private building projects, and comparatively deduce which strategies are more effective in each sector.

Design/methodology/approach: To collect the data required for analyses, 120 copies of structured questionnaire were administered to construction professionals that have previously handled private and public building projects in Akwa Ibom state. Out of the 120 copies of questionnaire purposively distributed, 103 (85.8%) were returned. Descriptive statistical methods were used to carry out the data analysis.

Findings: Results of this study indicate that the investigated milestone payment method and concession methods (BOOT, BOO, BOT), are more effective in the public building projects than in the private. In contrast, the direct labour (DL) payment method is inferred to be more effective in the private projects than in public projects. In addition, honouring of interim payment certificates (IPCs) has been established to be more delayed in public building projects than in the private projects; and overruns in time and cost are more experienced in public building projects than in the private projects.

Research limitations/Implications: Whereas, the three major towns (Uyo, Ikot Ekpene and Eket) were assessed, the study would have preferred to cover more local governments and compare their financing strategies in the public and private projects. However, the three local governments are considered to have greater construction works and data collected from them were significant.

Practical implications: Consequent on the findings of this research, though the milestone payment method is more effective in the public sector, its use in the private sector enables a more organised scheme of construction activities. This will also help in guiding both the client and contractor on when to expect funds – in milestones.

Originality/value: Previous researches on the project finance allocation strategies, focused on Nigeria as a whole; whereas, this study assessed how public and private building projects are financed in Akwa Ibom state.

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1. INTRODUCTION

Management of the financial aspect of any project is one key aspect of project management that involves planning, budgeting, financial reporting, auditing, and control of the physical progress of the project, with the aim of achieving predetermined objectives of cost, time, quality, scope and client satisfaction (Claudia, 2005).

Whereas, finance is the circulatory system of every economic project, Kamoche (1996) posited that it is the force that brings about the cooperation and coordination of the various interrelated units of a project. It directs the smooth flow of construction activities and plays a catalytic role of promptly accomplishing the set goal(s) of any project. More so, Anthony (2002) opined that the top three reasons for construction failure are: faulty project estimation, inadequate working capital and lack of requisite expertise. These factors collectively denote poor cash management.

Further, a study by Oyedele (2013) revealed that in building cities of developing countries, construction project finance constitutes a herculean task. Accordingly, research by Jonathan (2001) revealed that there are several construction project financing methods used in the Nigerian construction industry. These range from the Direct Labour Payment method; The Milestone Payment Method and The Concessions [The Build-On-Operate-Transfer (BOOT), Build-Own-Transfer (BOT), Build-Own-Operate (BOO)]. Unfortunately, as these financing methods are basically project-specific (Abdul Rashid et al., 2006), some have worked well in some projects, while in others, they have failed. This, according to Oyedele (2013), has placed the industry in a state of uncertainty regarding the most appropriate financing method for each project type; and underscored the need to tackle this problem by identifying means of financing construction projects to meet set project objectives. Hence, selection of the most appropriate financing method is critical for both the client and other project participants, as it is an important factor that contributes to the overall client's satisfaction (Muriro & Wood, 2010) and can shape the performance of the project (Mustapha, Naoum, & Aygun, 1994).

Suffice it that private and public building projects have discrete financing prospects and problems; hence, the need to appraise the financing activities of both sectors separately. Understanding the construction financing strategies and defining what to do with available funds, in both the public and private projects, constitute the beginning of the process of managing the finance needed for the delicate process of building construction.

According to Reddy (2011), financial management is concerned with three activities: (i) anticipating long-term and short-term funds; (ii) acquiring the requisite financial resources, and (iii) allocating the available funds to best options that are capable of maximizing shareholders' goals.

Also, as noted by Zuofa & Ochieng (2014), in appreciating the importance of a thorough understanding of the finance anticipation, acquisition and allocation strategies in Nigerian project delivery, Section 4 (2) (b) of the Nigerian Public Procurement Act 2007 stipulates that all procurements shall be based only on procurement plans supported by prior budgetary appropriations; and no procurement proceedings shall be formalized until the procuring entity has ensured that funds are available to meet the

obligations. Despite this provision, Okereke (2012) and Ewa (2013) still highlighted varying levels of failure, partly attributable to inadequate budgetary allocations in most government projects.

To this end, in view of the cost failures of projects attributable to poor financial management in Nigeria, this study seeks to provide insight into how effective the finance allocation methods are in Akwa Ibom State. The required data shall be sourced from Ministries of work, Construction companies, Contractors and Consultants in Akwa-Ibom State.

1.1. Objectives of the study

The aim of this study is to evaluate the effectiveness of various financing strategies in public and private building projects in Akwa Ibom State. To achieve this, the study shall concentrate on the following objectives:

- i. To evaluate the setbacks associated with planning, acquiring and allocation of construction funds in both the private and public sectors
- ii. To evaluate the effectiveness of the finance allocation strategies in public and private projects.
- iii. To undertake a comparative assessment of the finance allocation strategies in public and private projects in Akwa Ibom State.

1.2. Research hypotheses

H₀: There is no significant variation in the effectiveness of the finance allocation strategies between the public and private building projects.

2. LITERATURE REVIEW

The concept of finance is as old as mankind. From history, the trade by barter method of giving a good or service for goods or services was once the main means of transaction. However, as cowries were introduced, transactions gradually gained a more defined pattern, eventually leading to the use of cash, as seen today. In the construction industry, finance is one of the top preconditions for realizing any set goal or objective. It is an indispensable requirement for any successful construction process.

Several definitions and explanations have been given to the concept of finance. According to Ojiuko (2001), finance as a term can be defined as the management of the flow of money through an organisation, which could be a Corporation, School, Bank, Church or Government agency, as well as claims against money. More so, finance, according to Osubor (2003), is money, how it is acquired and used. Thus, a study of finance shall include the study of the elements of finance including its nature, creation, regulation and problems. On the other hand, financial Management is concerned with anticipating long-term and short-term assets; acquiring financial resources; and allocating funds in business – the three key activities of finance as discussed hereafter (Reddy (2011).

2.1. Finance anticipation

A careful financial planning or forecasting of cash flow makes possible the smooth flow of funds during a construction period, and avoidance of any financial setback that may arise. Since all phases of financial planning are interrelated, financial planning ensures a

systematic optimum use of finance. If a forecast indicates that a shortage of cash will develop at a certain point within the contract period, the financial plan should incorporate how to borrow or sell real asset to supplement the cash flow. In more explicit terms, financial planning aims at laying down the direction in which a financial move should be made, taking into account the resources that are available and projecting towards supplementing the unavailable resources.

2.2. Finance acquisition

As opined by Hendrickson & Au (2003), funding of building projects differs sharply by types of owner and the type of facility under construction. Accordingly, building project funding may be separated into two distinct groups namely: public funding and private funding (Jonathan, 2001). Public Sources of funds for building projects may include: allocations from higher levels of governments, special bonds, loans, tax receipts, general revenue collections, donations, sponsorships, lease agreements, parking fees, amongst other sources. For the private sources of funds for building projects, individuals or corporations planning to undertake a construction project may use their retained or personal earnings, bonds, donations from relatives or friends, sponsorship from Non-Governmental Organizations or Government, pension funds, insurance companies, investment trusts, commercial banks, *etc.* As inferred by Jonathan (2001), Ojiuko (2001) and Kanu & Okezie (2005), there are two main approaches to accessing finance for building projects: Traditional and Modern.

2.2.1 Traditional approach

According to Jonathan (2001), prior to the colonial periods, several informal approaches to financing building projects were adopted in different parts of the country. In the old Cross River State, there existed the Itu Age Grade Association (IAGA), village development schemes and Town Unions of people living outside their places of birth. Others were the social club contributions, and the Ibiaku Uruan moneylenders association, who contributed either by cash or mainly by providing labour on members' construction sites, following the association circle of turns. Today, most of these areas have been traced to the present Akwa Ibom State. These approaches were successful in providing finance for construction and its delivery in the traditional setting. However, with the complexity of economic activities, these methods faded away and were replaced by the modern methods Akanji (1998).

2.2.2 Modern methods

For both the public and private sectors, building construction is mainly funded using existing cash reserves, periodic cash acquisitions or sourcing funds from external sources. In Nigeria, finance houses that support construction projects operate within the statutory guidelines stated by the Federal Government. Among these are:

- a. The Federal Mortgage Bank of Nigeria (FMBN) – they regulate the real estate development market, and are empowered by the Federal Government's promulgation of Decree no. 3 of 1991, through the adoption of the National Housing Policy in 1990 (Ojiuko, 2001).
- b. Commercial banks – These mainly lend on short-term basis (with relatively high interest rates), because they have to meet up with withdrawals of customers at no

notice. This has generally limited their success in financing building project (Jonathan, 2001).

- c. Merchant Banks – They hold little cash reserves, and unlike commercial banks they offer bridging loans or interim funds to real estate developers at very competitive rates of interest, usually on short-term basis (Kanu and Okezie, 2005).
- d. Specialized Development Bank – According to Kanu and Okezie (2005), this category includes the Nigerian Industrial Development Bank (NIDB), Urban Development Banks, etc. They are established to grant long-term loans that could last up to 25 years for industrial, commercial, agricultural and housing developments. Though perfect for building project funding, their success has also been very limited, due to inadequate funding and diversion of the available funds into the short-term projects that yield quicker interest.
- e. Insurance Companies – Life funds of Insurance companies are long-term savings in form of amenities or endowment policies that can only mature at the occurrences of certain known events like death, accident or retirement. The long-term sources of funds enable insurance companies to primarily invest on long-term capital assets like investments in real estate, mortgage and debentures (Ojiuko, 2001). Unfortunately, insurance companies have not played a significant role in housing schemes in Nigeria (Kanu and Okezie, 2005).
- f. Pension Fund – The National Pensions Fund collects funds from employers and employees towards employee's retirement. This gives them access to long-term funds and put them in good position to finance building projects (Kanu, 2001).
- g. International Financial Institutions – The World Bank is a multinational lending organization, consisting of several closely related institutions, including the International Bank of Reconstruction and Development (IBRD), and The International Finance Corporation (IFC) (Anyanwu, 2003). The World Bank provides loans to developing countries to help reduce poverty and financial investments that contribute to economic growth. The World Bank has financed several Housing estates in Nigeria and these are mainly large public building Projects.
- h. Housing Schemes – By 1979, it had become evident that despite the huge profit made by big companies in Nigeria, there was total neglect of the need for the companies to provide shelter for their workers (Onabule, 1992). This compelled the promulgation of employees housing scheme (special provision) decree 54 of 1979. The main provision of the decree is that any employer with up to 500 employees should provide a minimum of 50 housing units out of which three quarters shall be available to non-executive staff. The decree put in place a structure for identification of such category of employees and implementation of the decree. It also provided for the establishment of a housing loan bank by the state. This program was considered very laudable in the sense that it improved the provision of housing to the middle and lower ranked workers in Nigeria. Unfortunately, satellite town in Lagos is the only reminiscent of the implementation of the decree. The problem of ownership, after retirement of staff occupying properties, made nonsense of the decree (Ojiuko, 2001).

Generally, it is advisable to borrow as little as possible, as no financing mechanism is always unambiguously without some inherent risks (Hendrickson and Au, 2003).

2.3. Finance allocation

As noted by Jonathan (2001), in Nigeria, the major finance allocation strategies include: The Direct Labour Payment method; The Milestone Payment Method and The Concessions [The Build-On-Operate-Transfer (BOOT), Build-Own-Transfer (BOT), Build-Own-Operate (BOO)].

2.3.1 The milestone payment method

As the name “milestone” goes, payments are made at concrete or key segments/stages called milestones. This payment method requires that a contractor/constructor commences a construction process with a mobilization advance or a personal income. As noted by Akpabio (2003) the Nigeria Institute of Architect (NIA) Form of Contract does not require the employer to mobilize the contractor with funds before commencement of work; though some employers (especially Government) grant mobilization advances (usually 10% or more of the contract sum), to enable the contractor procure materials and equipment for the job. To avoid the risk of misappropriation, employers often demand and obtain from the contractor, a performance bond, issued by a reputable insurance company, to the effect that should the contractor fail to satisfactorily execute the contract, the employer will be indemnified by the insurance company up to the value stated in the bond. These arrangements must be spelt out in the contract for effective implementation.

The interim payment certificate (IPC)

As contained in the NIA Form of Contract (Clause 30.1.1), the employer shall pay the contractor regularly, once a month or as often as may be prescribed by the contract (Akpabio 2003). In addition, for any payment to be made, the architect is required to issue a certificate stating the amount due to the contractor. This certificate is called Interim Payment Certificate or IPC for short. At each project milestone, work progress must be valued by a quantity surveyor, before any Interim Certificate is honoured. The contractor is entitled to payment of the certified sum within 28 days or the period stated in the “Agreement for honouring certificates” (Akpabio 2003). Prompt payment of IPC is good for any contract, because the contractor needs steady cash flow. If the IPC is delayed, the contract may be delayed or abandoned, and by the time the contract eventually resumes, prices may have gone up and the employer would require to pay even more.

Valuation of IPC

The aim of contract administration is not only to ensure that buildings are erected in accordance with the design and specifications, but also that money paid out to the contractor at any stage is commensurate with the work done or materials delivered to the site. Before an IPC is prepared, it is the duty of the Quantity Surveyor to visit the site and measure works done or materials brought to site or stored in an approved store outside the site. The Quantity Surveyor’s valuation certificate should not be confused (even if it looks like) the Architects payment certificate (Akpabio, 2003). The Quantity Surveyor’s valuation is only a recommendation, since the Architect will eventually use same to issue the IPC.

2.3.2 Concession financing strategies

In the concession financing strategies, also known as the “total package options” (Walker and Hampson, 2003), the owner of a building project either receives the completed building or derivable services from the property. In the concession procurement method, the building

owner normally delegates all responsibilities of design, construction and finance to an outside consultant in a Concession arrangement. As noted by Ramus, Birchall & Griffiths (2007), within this method is a payment mechanism to allow the contractor to be reimbursed the construction finance and maintenance costs. As noted by the authors, *“the payments will not normally commence until the work is finished and operational”* (Ramus, et. al., 2007, p. 43). In addition, as defined by Merna and Smith (as cited in Merna & Njiru, 2002, p.92), the concession method entails:

“the granting of a concession by a principal, usually a government, to a Promoter, sometimes known as a Concessionaire, who is responsible for the construction, financing, operation and maintenance of a facility, over a period of the concession before finally transferring the facility, at no cost to the principal, in a fully operational condition. During the concession period the Promoter owns and operates the facility and collects revenues in order to repay the financing and investment costs, maintain and operate the facility and make a margin of profit.”

Thus, in order for a concession operation to succeed, the client shall provide a set of unambiguous performance specifications to the contractor and have confidence in the capacity of the contractor to carry out the project (Claudia, 2005). The concession method is carried out through the mechanism of the Build-On-Operate-Transfer (BOOT), Build-Own-Transfer (BOT), Build-Own-Operate (BOO), etc. In all the three concession methods, the “B” represents “build”, the first “O” represents “operate”, the second “O”, “own”, and the “T”, “transfer” (Walker and Hampson, 2003). In the BOOT, the client contracts to design, build, operate, own for some time and transfer the facility back to the owner. Furthermore, in the BOT arrangement, the facility is built, operated to the point where a transfer of the facility will not affect its performance, then a transfer is made to the client for full ownership and operation. The last concession method (BOO) involves operating the designed and built facility to a point where the facility is eventually owned by the contractor, only when certain set conditions of ownership and operation are fully met.

2.3.3 The direct labour payment method

This is where a client uses the services of in-house human resources to carry out a construction process, that is, workers of an organisation, instead of contracting the service or the project out. The direct labour payment system thus involves engaging the tradesmen directly, without necessarily forming a team, and paying for their services, based on their work output. As noted by Oyedele (2013), the client takes all the project risks and manages the cash flow. According to the author, the deficiency of direct labour is that the client may not be knowledgeable about construction and will end up spending more than a professional would have. In contrast, the benefit of this method is that in-house professionals gain more practical experience and exposure, thereby becoming more proficient in their various fields. It also helps to save time that would have been used writing tenders and negotiating with contractors. It suffices to state that payments in this method is not limited to labour, but to materials, ancillaries, amongst others.

3. METHODOLOGY

Primary data were exclusively used for this assessment, and the research instrument was questionnaire. Specifically, 120 structured copies of the questionnaire were administered to construction professionals who have handled private and public building projects in Akwa Ibom state, 40 for each major town in Akwa Ibom State, namely: Uyo, Eket and Ikot Ekpene, as shown in Table 1. The questionnaire copies were given to Architects, Builders, Engineers and Quantity Surveyors, as these were considered to have knowledge of the subject. The 120 copies were administered across the three senatorial districts of Akwa Ibom State to ensure that a significant number of construction professionals responded to the questionnaire. In each town, construction professionals in the Ministry of Works and Construction companies, as well as Contractors and Consultants, were administered the questionnaire.

The questionnaire has three segments. The first part captured the details of the respondents such as the field of specialization, if they previously handled any buildings project; if yes, which sector – private or public building projects, etc. The second part of the questionnaire helped to collect data on setbacks associated with finance anticipation, acquisition and allocation; while the third part of the questionnaire focused on the effectiveness of the various finance allocation methods.

The summated four-point scale was used to measure the degree of effectiveness of the finance allocation strategies. They are: “E” for Effective (4 points), “P” for Partially effective (3 points), “U” for Undecided (2 points), and “I” for Ineffective (1 point). It is noteworthy that the degree of effectiveness were actually measured on three main parameters: “Effective”, “Partially Effective”, and “Ineffective”. The fourth parameter “Undecided” was included to cover respondents who may wish to be neutral or choosing not to select any of the three major parameters of effectiveness; thus the use of the four-point scale.

4. DATA PRESENTATION AND ANALYSIS

4.1. Data presentation

Given that copies of the questionnaire were distributed to construction professionals in the three senatorial districts of Akwa Ibom State, Table 1 reveals a summary of the outcome of this exercise, in terms of the number of towns covered, the construction sectors visited, number and percentages of questionnaires administered and returned.

It can be seen from Table 1 that out of the 120 copies of the questionnaire distributed, 103 were returned and these represent 85.8% of the distributed copies of the questionnaire. In Uyo, out of the 40 copies of the questionnaire distributed, 38 were returned, representing 94.43%. In Eket, 30 out of the 40 copies of the questionnaire were returned, representing 73.33%, and lastly 35 of the 40 copies of the questionnaire distributed in Ikot Ekpene were returned, signifying 87.77% of the number distributed.

Table 1: A summary of the responses to the questionnaire distributed in the three major towns of Akwa Ibom State

Towns	Construction Sectors	No. of Copies of the questionnaire distributed	No. Returned	Percentage returned (%)	No. not returned	Percentage not returned (%)
Uyo	Ministry of Work	10	9	90	1	10
	Construction companies	15	14	93.3	1	6.7
	Consultancy firms	15	15	100	0	0
Uyo Total =		40	38	94.43	2	5.57
Eket	Ministry of Work	10	6	60	4	40
	Construction companies	15	10	66.7	5	33.3
	Consultancy firms	15	14	93.3	1	6.7
Eket Total =		40	30	73.33	10	26.67
Ikot Ekpene	Ministry of Work	10	9	90	1	10
	Construction companies	15	11	73.3	4	26.7
	Consultancy firms	15	15	100	0	0
Ikot Ekpene Total =		40	35	87.77	5	12.23
Grand Total =		120	103	85.18	17	14.82

Table 2: Summary of the responses to the questions on the effectiveness of the finance allocation strategies in public building projects

Public Building Projects	E	I	P	U
Effectiveness of the milestone payment system in public building projects	56	18	10	7
Effectiveness of the direct labour payment system in public building projects	33	26	24	8
Effectiveness of the BOOT in public building projects	29	20	17	25
Effectiveness of the BOO in public building projects	32	13	11	35
Effectiveness of the BOT in public building projects	25	20	16	30

Table 3: Summary of the responses to the questions on the effectiveness of the finance allocation strategies in private building projects

Private Building Projects	E	I	P	U
Effectiveness of the milestone payment system in private building projects	32	4	29	26
Effectiveness of the direct labour payment system in private building projects	58	19	10	4
Effectiveness of the BOOT in private building projects	13	17	25	36
Effectiveness of the BOO in private building projects	16	18	22	35
Effectiveness of the BOT in private building projects	8	25	19	39

Tables 2 and 3 depict a summary of the responses to how effective the finance allocation strategies are in the public and private building projects respectively.

4.2. Data analysis

Two methods of analysis were adopted for the analysis of the collected data, they include:

- i. The sample mean
- ii. The Chi-Square

4.2.1 Sample mean

The sample mean is calculated for each scaling item by multiplying the frequency of response under each category with the nominal values of the responses and dividing the sum of the values obtained under each response category with the number of respondents who gave response to the item. That is:

$$M_r = \frac{\sum nF}{Nr}$$

Where M_r = Mean of response, $\sum$ = Summation, n = Nominal Value, F = Frequency of response under each category. Nr = Number of respondents to the item; that is, number of valid questionnaires (103). The nominal values for this analysis are based on the Code; thus: Effective (E) = 4, Partially effective (P) = 3, Ineffective (I) = 2, and Undecided (U) = 1.

Based on the above information, the sample mean calculation was carried out, and results of the analysis for both the public and private sectors are revealed below.

Table 4: Summary of the sample means revealing the effectiveness of various finance allocation strategies in public building projects

Public Building Projects	nF				$\sum nF$	Sample Mean
Effectiveness of the milestone payment system in public building projects	224	54	20	7	305	2.96
Effectiveness of the direct labour payment system in public building projects	132	78	48	8	266	2.58
Effectiveness of the BOOT in public building projects	116	60	34	25	235	2.28
Effectiveness of the BOO in public building projects	128	39	22	35	224	2.17
Effectiveness of the BOT in public building projects	100	60	32	30	222	2.16

As revealed in Table 4, the highest mean score is 2.96, this indicates that the milestone payment system is more effective than the direct labour payment system (with a sample mean of 2.58) in public building projects. In addition, the table shows that the three Concession systems (BOOT, BOO and BOT) are less effective in the public building projects.

Table 4: Summary of the sample means revealing the effectiveness of various finance allocation strategies in private building projects

Private Building Projects	nF				$\sum nF$	Sample Mean
Effectiveness of the milestone payment system in private building projects	128	12	58	26	224	2.17
Effectiveness of the direct labour payment system in private building projects	232	57	20	4	313	3.04
Effectiveness of the BOOT in private building projects	52	51	50	36	189	1.83
Effectiveness of the BOO in private building projects	64	54	44	35	197	1.91
Effectiveness of the BOT in private building projects	32	75	38	39	184	1.79

Table 4 shows that the direct labour payment system with a mean score of 3.04, is more effective than the milestone payment system (with a mean score of 2.17), in private building projects. Accordingly, the table reveals that the three Concession systems (BOOT, BOO and BOT) are less effective in private building projects.

4.2.2 The Chi-Square method

The chi-square method is adopted to test the variation of effectiveness among the assessed finance allocation strategies in the public and private building projects. The Chi-square formulae is revealed below:

$$\chi^2 = \sum \left\{ \frac{(F_o - F_e)^2}{F_e} \right\}$$

Where χ^2 = Chi-square, $\sum$ =Summation, F_o = Observed frequency and F_e = Expected frequency. The degree of freedom = (df) = (r - 1) (c - 1) at 0.05 (i.e. 95% level of significance). $\chi^2 T$ = Chi-square Table, while $\chi^2 C$ = Chi-square Calculated.

Decision rules

If $\chi^2 T > \chi^2 C$ = Accept

If $\chi^2 C > \chi^2 T$ = Reject

The degree of freedom = (r - 1) x (c - 1) = 4.

From the chi-square table, the $\chi^2 C$ = 9.49

Table 5: Chi – square analysis table

F_o	F_e	$(F_o - F_e)$	$(F_o - F_e)^2$	$(F_o - F_e)^2/F_e$
305	280.76	24.24	587.68	2.09
266	307.29	-41.29	1705.25	5.55
235	225.03	9.97	99.38	0.44
224	223.44	0.56	0.32	0.00
222	215.48	6.52	42.54	0.20
224	248.24	-24.24	587.68	2.37
313	271.71	41.29	1705.25	6.28
189	198.97	-9.97	99.38	0.50
197	197.56	-0.56	0.32	0.00
184	190.52	-6.52	42.54	0.22
				17.65

Table 5 shows a $\chi^2 T$ of 17.65. This is higher than the table chi-square value ($\chi^2 C$) of 9.49. This result supports the position that there is significant variation in the effectiveness of the finance allocation strategies between the public and private building projects. Thus, we reject the null hypothesis (H_0) and accept the alternative (H_1).

5. DISCUSSION OF RESULTS

Findings of the study revealed that in public projects, financial planning is relatively poor, and deviation of the actual cash flow from the projected is often significant. In addition, honouring of interim certificates (IPCs) has been established to be often delayed in public building projects than in the private projects. Further, overruns in time and cost are more experienced in public building projects than in the private projects.

Accordingly, the findings of this research show that the milestone payment method and the concession methods investigated (BOOT, BOO, BOT), are more effective in the public building projects than in the private. This finding that the concession methods are more effective in the public sector is consistent with the result of a study conducted by Vives & Benavides (2009) that conceded that the concession procurement strategies were more effective in Turkey's public construction projects than in the private projects.

In generals, the major reason why the public sector mainly adopts the milestone payment system as a principal means of funding its projects is because of its highly regulated and inflexible structure (Herbert, 2013). The goal being to ensure transparency in the public sector, where financial audits are carried out periodically. This does not mean that private sectors do not adopt the milestone method as a means of funding its project, rather, because of its more flexible structure, some transactions are carried out based on trust instead of following formal conditions of contracts. Thus, as established from the findings of this research, and consistent with the opinion of Oladiran, Ogunsanmi and Onukwube (2007), the direct labour (DL) payment system is more effective in the private projects than in the public projects. This is because most clients consider the direct labour payment system as a way of measuring the performance of work and controlling potential financial misappropriations.

6. CONCLUSION

This study succinctly identified and explained the project finance allocation strategies or the various methods of paying for construction works, both in the public and private sectors. These strategies include the milestone payment method, the Direct labour payment system and the Concession methods (BOOT, BOO, BOT), etc.

It suffices to note that though project procurement entails the process of acquiring various resources (work, materials and cost) for the delivery of the project, this study focused only on an aspect of the financial management of a project – finance allocation strategies. This helped to comprehensively study how projected and acquired funds are spent to deliver construction projects, and who actually pays for the final product (the client or the contractor).

Based on the results of the data collected, it is established that the milestone payment method is more effective in the public sector; the direct labour (DL) payment method is more effective in private projects; and lastly, the three Concession methods under consideration (BOOT, BOO, BOT) are more effective in the public building projects than in the private.

7. RECOMMENDATIONS

Based on the findings of this research, it is recommended that before embarking on any building construction project, proper financial planning should be carried out, especially using a project management software, to ensure precision and comprehensive financial assessment. Whereas, the aim of every construction project is to complete the project within set cost, time, etc., clients and contractors should not commence any project that does not have certainty of enough cash (available or projected) to complete such project. From the research, though the milestone payment method seems to be more effective in the public sector, however, this method should also be more adopted in the private sectors, to enable a more organised scheme of construction activities. This will also help in guiding both the client and contractor on when to expect the release of funds – in milestones. Also, the private sector is considered to mostly use the direct labour payment method because it is considered the most convenient and less expensive finance allocation strategy. However, more frequent application of the direct labour payment system in the public sector will help in-house professionals gain more practical experience and exposure, in so doing, become more proficient in allocation of funds for construction purposes.

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