



ECONOMIC DOWNTURN: POLICIES ADOPTED BY CONSTRUCTION PROFESSIONALS IN THE MANAGEMENT OF CONSTRUCTION COST ESCALATION IN NIGERIA

I.M. Oyemogun¹; D.T. Dabwor² & S. Aboh¹

¹Department of Building, University of Jos

²Department of Economics, University of Jos

Email: egooye@yahoo.co.uk

ABSTRACT

This study was carried out to identify management policies adopted by construction professionals in the management of construction cost escalation in economic downturn in Nigeria. A questionnaire survey was conducted and twenty-seven (27) factors were identified, categorized into five (5) groups, evaluated and ranked according to respondents' perspectives. Four hundred (400) questionnaires were distributed as follows: 35 to Surveyors, 79 to Builders, 85 to Civil engineers, Architects 122 and 79 to Contractors and their opinion about management policies ranges from cost management, cost increment, cost control and cost regulation. The outcome of these analyses showed that all the respondents agreed that construction projects escalation in economic downturn should be manage through cost. However, the analysis indicated that the top three (3) factors that have the highest ranked index affecting construction cost escalation in economic downturn are government policy and high inflationary trends as one, political interferences and contractor collusion with corporate extortion as two and fraudulent contract and procurement management practices as three. Based on these findings, this study recommended the need for direct government intervention on taxes, single interest rate for borrowing, stabilization of the exchange rate and innovations by construction professionals in pre-construction and construction phase.

Keywords: Economic downturn, construction cost escalation, construction cost overruns, construction cost management.

INTRODUCTION

Construction cost is a vital element of every infrastructural development. The prevailing economic downturn has resulted in escalating cost of construction through increase in the prices of building materials which has made the option of affordability a mirage (Stephen, 2016). A construction management approach or strategies will assist developers and professionals on the type and magnitude of construction projects, the resources to use and also type of contractual arrangement out of available ones to adopt in the management of construction cost escalation; and that construction cost estimates and/ budget are becoming difficult to achieve as cost of construction consistently maintains an upward trend as a result of economic downturn (Abimbola, 2017). Nicholas (2012) also corroborated that economic downturn is the scarcity of funds and the high cost of accessing funds, which is worsened in Nigeria's circumstances by the decrease and fluctuations in the value of naira against dollar/pounds leading to escalating cost of construction and difficulty in managing construction project budget and estimate. The review of previous researches shows that economic downturn has an impact on construction stakeholders (Savills, 2016), on construction cost (Abimbola, 2017), on



construction market (Nicholas, 2012), on prices of building materials ((Eichengreen, 2010, on housing consumption (Damis, 2016) and on share values of the construction companies quoted on the Nigerian stock exchange (Al-amin, 2017). Therefore, this research intends to examine the management of construction cost escalation in economic downturn in Nigeria with a view of looking at management strategies, innovations and construction project financing options to manage construction cost escalation in economic downturn.

Causes of Construction Cost Escalation in Economic Downturn

The economic downturn is responsible for the escalating cost of construction, the results of major budget shortfalls, project failure and increase in number of abandoned projects. Savills, (2016) opines that the escalating construction cost had been due to drastic changes in the value of the foreign exchange especially the Naira versus U.S. Dollar relationship and frequent increase in pump price of petrol accompanied by economic downturn. Marchesan and Formoso, (2017) identified some of the causes as include; labour, equipment and material, inflation, construction demand and market conditions, political instability, unfavorable government policy and economic downturn. Some of the strategies for controlling construction costs includes:

a. Inventory Management

At least half of your costs can be lost from poor handling of materials. Set yourself apart from the competition by accessing the best resources to help you manage your inventory. One of the fastest ways to bleed money is a mismanaged inventory system.

b. Expert Estimation

Having an accurate cost assessment before the project begins is a great way to keep your money in check. You want to clearly identify every task, what materials it will require, the labour involved, and how long the task should take.

c. Avoid Delays

We know this sounds like an impossible ask, but delays are a huge factor in proper project execution. You can avoid delays by making sure your team is always working in a safe and responsible way. Injuries and mishaps can push a project's deadline later and later, especially if there's a serious incident.

d. Tactical Labour

Hiring multitalented workers can be a challenge as well as a benefit. You, of course, want extremely talented staff members on your payroll, but you have to make sure you're delegating effectively. Make sure you're maximizing the potential of each worker. First, find out what specialties each worker has.

e. Constant Communication

Any construction professional will tell you that communication is everything on site, and there is a reason for that. Most major mistakes can be avoided with a little clarification.



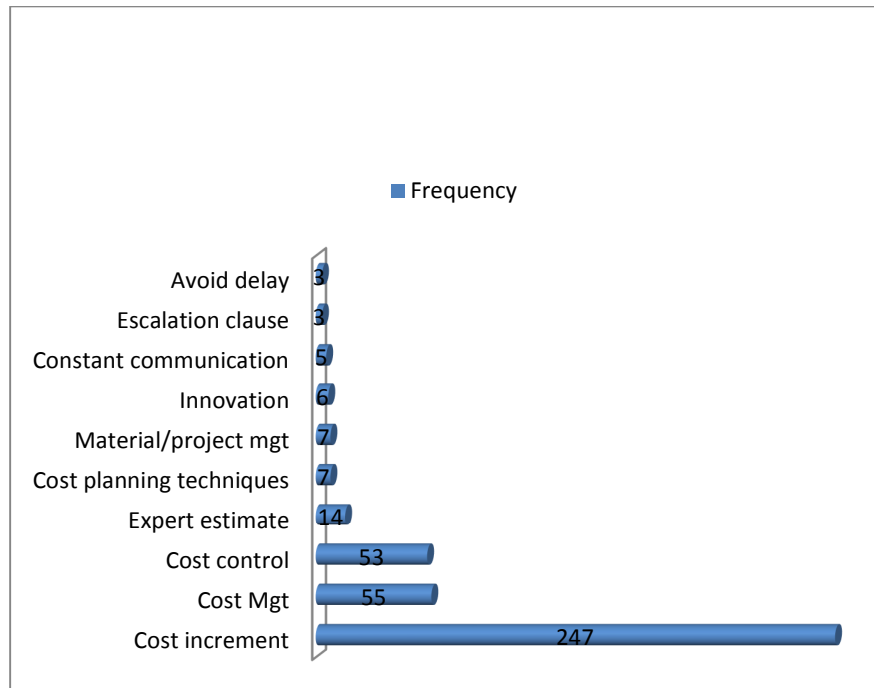
Find what works for your team. If you know your staff members can't always mail back right away, maybe walkie-talkies are the way to go.

Impact of Economic Downturn on Construction Industry

The construction market in Nigeria have been more sensitive to the effects of the economic downturn in the country than other sectors of the economy, with trend generally reflecting in the number of construction permits, construction starts and completions dates and general increase in the number of abandoned projects (Agri, Mailafia & Umejiaku, 2017). The current instability in the construction market and other macroeconomic uncertainty and fluctuations as a result of economic downturn reflects the links between construction industry and wider economy which have important implications for construction delivery and sub-national economic performance, but the precise impact depend on the strength of the economy. As the downturn continues, the construction sector is experiencing an increase in number of abandoned projects, job losses by construction workers and professionals, closure of some firms as a result of low patronage, loss in share value of firms in NSE, reduction in GDP contribution of the sector to the nation's economy (Savills, 2016).

Research Design

The research involves the intensive use of publications, literatures from both private and government agencies. In order to achieve the aim of the research, a well-structured questionnaire was administered to project stakeholders and professionals such as Quantity Surveyors, Builders, Civil Engineers, Architects, Contractors and Consultants from small, medium and large scale construction firm with some level of construction management experience of not less than 3years in the industry because of the recession, downturn and other economic intrigues that takes place within this period. The study is meant to reflect on the entire country, but due to the dominance of Lagos, Abuja, Rivers and Kaduna because majority of the targeted companies have their offices in these states and are operating in other states within the country as well. Abuja is the capital city of Nigeria; Lagos is the largest city while Rivers and Kaduna states have high level of construction activities and also secondary data from Central Bank of Nigeria, Federal Office of Statistics (FOS), Nigeria stock exchange (NSE) and Federal Inland Revenue Services (FIRS) for some lagging economic indicators from first quarter of 2014 to the first of 2019 in order to assess the impact of economic downturn on construction cost escalation with the aim of determining management strategies that can best be adopted for construction cost escalation in economic downturn in Nigeria.



Management strategy adapted by firms in controlling cost escalation

The figure shows the management strategy adopted in controlling cost escalation in economic downturn by construction firms. Cost increment, cost management and cost control are the major management strategies adopted by construction firms in the management of escalating construction cost in economic downturn. This shows that various professionals and construction firms adopt different management policies options for construction cost escalation in economic downturn and cost increment/ increase seems to be that best policy option since there is no any form of direct government intervention. However, it should be noted that increase in cost of projects may not necessarily imply value added to project.

Construction management strategies with greatest impact on construction cost escalation in economic downturn

Construction management factors	Frequency	Percentage(s)
Inventory Management	25	6.3
Expert Estimation	232	58
Avoid Delays	42	10.5
Tactical Labour	13	3.3
Constant Communication	86	21.5
Others (Specify)	2	0.5
Total	400	100

Source: Questionnaire field work

The table shows the construction management strategies with greatest impact on construction cost escalation in economic downturn. Expert estimation and inventory management has the highest impact on construction cost in economic downturn. This



shows that there is a little variation in the opinion of most professionals and construction firms on the impact of management strategies on construction cost escalation in economic downturn.

Calculated Chi Square Parameters

X _{CAL}	A	DF	X _{TAB .99}	X _{TAB.95}
1,067.411	99% OR 95%	16	5.812	7.962

HYPOTHESIS:

Null Hypothesis (H₀)

There is a significant difference in the opinion of most construction professionals on management strategies in economic downturn on construction cost escalation.

Alternative Hypothesis (H₁)

There is no significant difference in the opinion of most construction professionals on management strategies in economic downturn on construction cost escalation.

Chi-Square = 1,067.411

Decision

To reject H₀: The calculation of Chi-Square value must be equal to or larger than the theoretical or table Chi-Square value at the specific α (or probability level). We therefore accept H₁. There is no significant difference in the opinion of most construction professionals on management strategies in economic downturn on construction cost escalation.

CONCLUSION

The result of this study shows that cost of construction have perpetually been on an escalating trend because construction cost increment/ increase is the major strategy adopted by most firms and professionals in the industry for the management of cost in economic downturn in Nigeria. Also the points obtained through projections from the seasonal variation model portends continuous escalating cost of construction as a result of the economic downturn in the near future, and the continuous escalating cost of construction has a positive linear relationship with construction cost management strategies whether in the category of projects executed by local and small contractors or multinationals as regressed in the study and the methods that can help firms in the control of this cost escalation varies from cost management, cost increment, cost control and cost regulation while decreasing the interest rate on borrowing and reduction of import duties on building materials can be adopted by the government as a policy to help construction industry in the management of escalating cost of construction. The trend in escalating cost of construction has been minimal between 2013 and 2015 compared to 2016 to 2019, if the value of economic downturn lagging indicators can be lowered and maintained, it is help the escalating cost of construction and the availability of construction contracts and government as a matter of policies can adopt a direct intervention in the sector through regulations, incentives and liberalization of procurement process, reduction of import duty