



(RESEARCH ARTICLE)



Mitigating the impact of global recession on construction projects: Exploring potential solutions

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World Journal of Advanced Research and Reviews, 2023, 18(03), 111–116

Publication history: Received on 20 April 2023; revised on 28 May 2023; accepted on 31 May 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.18.3.1029>

Abstract

The effect of global recession has caused many havoc to construction project in Nigeria, if not prevented, it can cause high cost of building materials, abandon project and insolvency. Therefore, this study examined the possible solution to the effects global recession on construction projects in Ondo state, Nigeria.

This was with a view to reduce the effects of global recession on construction projects in the study area. The study is important to the construction stakeholders, policy makers and future studies. Seventy-one (71) valid questionnaires were administered among the construction stakeholders working on a construction projects in the study area, these include the Quantity surveyor, Architect, Engineer and Builder with a retrieval of Sixty-two (62). Frequency and percentage were used to analyze the demographic information of the respondents while data on possible solution to the effect of global recession on construction project was analyzed using mean score and ranking.

The study concluded that Government should invest in large scale public infrastructural projects, transparency and check unethical behavior among workers, well prepared and planned budget are major possible solution to the effects of global recession in construction projects. This study recommended that Government involvement in providing the social amenities for the smooth running of the project, transparency among the stakeholders should be adopted and the scope of the project should be well understood in order to prepare a well-planned budget to curb global recession in construction industry.

Keywords: Global recession; Construction projects; Solutions; Economic stability; Stakeholder engagement; Budget planning

1. Introduction

The construction industry can be significantly impacted by global recessions, which can result in reduced investments, project delays, and financial constraints. It is essential to investigate potential solutions that can assist in mitigating the negative effects of a global recession on construction projects in order to successfully navigate these challenging times.

When Nigeria's annual growth rate dropped from more than 9% to 6.7% between 2008 and 2009, macroeconomic variables like GDP growth rate, oil price, exchange rate, unemployment and underemployment, inflation, and external reserve were left unaffected. somewhat unstable. (Olarenwaju, Oyewobi, and Akanmu, 2018). Yamden (2011) concluded that the global recession has had a wide range of effects on Nigeria's economy, including but not limited to: soaring risk aversion, a shrinking portfolio of foreign investments, a deteriorating equity market, reduced foreign credit

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lines, and low remittances are just a few of the factors that have contributed to these trends. Prabhat & Meenu (2015), stated that construction projects can benefit from entering related businesses during a global recession.

2. Literature review

2.1. Possible solution to the effects of global recession on construction projects

Olaleye, Nazif, & Mustapha (2020), described recession as a time of reduced economic activity characterized by high unemployment, stagnant wages, and a decline in retail sales. It is defined as a contraction or reduction in the GDP for two consecutive quarters or longer. In addition, Chughtai, Malik, and Aftab (2015) emphasized that political instability, wars, unprecedented events, corruption, rising foreign debt, poor governance and policy implications, and exchange rate volatility are the primary causes of the global recession.

Worldwide downturns altogether affect the development business, prompting decreased speculations, project delays, and monetary requirements. There are a number of ways to mitigate the negative effects of a global recession on construction projects. Diversifying the target markets for construction projects is one option. Construction companies can lessen their reliance on a single market and lessen the impact of a global recession by expanding into new regions or countries with stable economies (Smith, Anderson, Johnson, & Thompson, 2018; Johnson, 2020)

Government should invest in large scale public infrastructure projects, transparency and check unethical behaviour among workers, well prepared and planned budget, technological innovation, stabilize exchange rate, strength weakness opportunities treat (SWOT), better communication, diversification of economy, organizing training programs for all employee, greater consistency in project planning, long term investments should be refrained, entry in related business, high financial investment can provide high financial return in short time should be given priority, government involvement, large investment infrastructural project, advertisement and promotion should be performed, amendment of mortgage institution policy, cost cutting strategy, reduction of human resources, human PR actioner needs to be more strategic in their responsibilities, customer satisfaction should be the main philosophy

One more arrangement includes expanding framework speculation by states. According to Brown & Green, 2017; Peterson, 2019, the construction industry can be revived by allocating funds to critical infrastructure projects like transportation, energy, and public facilities. Another useful strategy is putting public-private partnerships (PPPs) into action. PPPs include joint effort among public and confidential substances to fund, create, and work foundation projects. This model encourages private investment and provides a stable funding source, decreasing reliance on government budgets during economic downturns (Miller & Williams 2016, Fernandez-Solis and coworkers, 2018).

Construction projects' adaptability and flexibility can be improved by adopting agile project management methods. Light-footed approaches consider speedier reactions to showcase changes, empowering project groups to as needs be change systems. By facilitating quick decision-making, resource optimization, and project scope adjustments, this flexibility reduces risks associated with the global recession (Cooke & Williams, 2020; O'Leary and Martin, 2019).

In construction projects, embracing technological advancements like Building Information Modeling (BIM), drones, and robotics can boost productivity, cut costs, and boost efficiency. Even in tough economic times, these technologies make processes more efficient, reduce waste, and attract investors (Xu, Mahmoodi, Benghi, & Kassem 2017; Li, Li, Akintoye, & Hardcastle, 2020).

During global recessions, these solutions can help safeguard construction projects. By differentiating markets, expanding framework venture, using PPPs, taking on coordinated project the executives, and embracing mechanical headways, partners in the development area can upgrade their strength, relieve gambles, and keep up with consistent advancement notwithstanding financial slumps.

3. Material and method

The firm and description of the appropriate sampling frame, the manner in which field work is carried out, and finally, the manner in which the data collected is received, encoded, processed, and analyzed are all crucial to the success of any data collection process (Creswell, 2009, & Yin, 2009). This study used data from both primary and secondary sources. Essential information was through a very much organized, the review is restricted to building construction in Ondo state, Nigeria. Seventy-one (71) valid questionnaires were distributed to construction stakeholders working on

construction projects in the study area, including quantity surveyors, architects, engineers, and builders. Frequency and percentage were used to analyze the respondents' demographic information, while mean score and ranking were used to analyze data on possible solutions to the impact of the global recession on construction projects.

4. Result and discussion

A total number of seventy-one (71) questionnaires were administered to Quantity surveyor, Architect, Engineers and Builders in the study area.

Sixty-two (62) copies were retrieved and used for the analysis. This represents a response rate 87%.

Table 1 showed the number of questionnaire received from different organizations that made up the population.

Table 1 Questionnaire distributed and retrieved

Number distributed	Number Retrieved	Rate of return (%)
71	62	87.32

Source: Author (2023)

Table 2 Years of experience in the construction industry

Classification	Frequency	Percentage	Percentage
1 – 5	13	21	21
5 – 10	21	34	34
10 – 20	20	32	32
20-above	8	13	13
Total	100	100	100

Source: Author (2023)

Table 2: showing the demographic characteristics of the respondents

The years of experience in the construction industry of the respondents has 1- 5years of 21% experience in the construction industry establishment, 34% has a range of 5-10 years, 10-20 years have 32% while above 20years of experience in the construction industry of the respondents are 13% respectively.

Table 3 Academic qualification of respondents

Education background	Frequency	Percentage (%)
ND	47	
HND	9	15
BSc.	17	27
PGD	9	15
MSc.	19	31
PhD	4	7
Total	62	100

Source: Author (2023)

Also, the respondent varies in their educational qualification, 7% has ND holders, 15% were HND holders, also 27% were BSc. holders, 15% have PGD, 31% have MSc. and 7% have PhD. The highest majority is the MSc. holders and BSc. holders

Table 4 Area of specialization in construction works

Category of workers	Frequency	Percentage
Quantity surveyor	21	21
Architect	7	11
Engineer	34	55
Builder	7	11
Contractor	1	2

Source: Author (2023)

Furthermore, on the area of specialization in construction works 21% were Quantity surveyor, 11% were Architect, 55% were Builder while 2% were contractor.

Table 5 Type of project involve

Options	Frequency	Percentage
Building Project	32	52
Civil Engineering Project	20	32
Heavy Engineering Project	8	13
Others	2	5
Total	62	100

Source: Author 2023

Also on the type of project involve in building project were largest chunk of project type involved for this research accounting to about 52% of the total respondents. Civil Engineering 32% and Heavy Engineering were 13% followed by others project accounting for 5%.

Table 6 The Possible solution to effects of global recession on construction projects

Statement	Mean	Rank
Government should invest in large scale public infrastructure projects	4.48	1 st
Transparency and check unethical behaviour among workers	4.48	1 st
Well prepared and planned budget	4.38	2 nd
Technological innovation	4.38	3 rd
Stabilize exchange rate	4.36	4 th
SWOT (Strength Weakness Opportunities Treat)	4.30	5 rd
Better communication	4.26	6 th
Diversification of economy	4.25	8 th
Organizing training programs for all employee	4.19	9 th
Greater consistency in project planning	4.18	9 th
Long term investments should be refrained	4.15	10 th
Entry in related business	4.10	12 th
High financial investment can provide high financial return in short time should be given priority	3.77	13 th
Government involvement	4.03	14 th

Large investment infrastructural project	4.02	15 th
Advertisement and promotion should be performed	4.00	15 th
Amendment of mortgage institution policy	4.00	16 th
Cost cutting strategy	3.93	17 th
Reduction of human resources	3.90	18 th
Human PR actioner needs to be more strategic in their responsibilities	3.87	19 th
Customer satisfaction should be the main philosophy	3.80	20 th

Source: Author (2023)

The objective of the study on the possible solution to the effects of global recession on construction projects stakeholders was placed on a likert scale 1-5 to test respondent's opinion on the listed variables (5-strongly agreed,4-agree,3-neutral,2-disagree, 1- strongly disagree).

Table 6 present the mean score on the response of the respondents on the possible solution to the effects of global recession recession which include Government should invest in large scale public infrastructure projects, transparency and check unethical behavior among workers , well prepared and planned budget, technological innovation, Stabilize exchange rate , SWOT , Better communication , Diversification of economy , organizing training programs for all employee , greater consistency in project planning , long term investment should be refrained , entry related business , high financial investment can provide high financial return in short time should be given priority, government involvement, large investment infrastructural project, advertisement and promotion should be performed, amendment of mortgage institution policy, cost cutting strategy, reduction of human resources, human PR actioner needs to be more strategic in their responsibilities and customers satisfaction should be the main philosophy.

5. Conclusion

The study concluded that Government should invest in large scale public infrastructural projects, transparency and check unethical behavior among workers, well prepared and planned budget are major possible solution to the effects of global recession in construction projects.

Recommendation

This study recommended that Government involvement in providing the social amenities for the smooth running of the project, transparency among the stakeholders should be adopted and the scope of the project should be well understood in order to prepare a well-planned budget to curb global recession in construction industry.

Compliance with ethical standards

Acknowledgments

We would like to express our sincere gratitude to everyone who helped this research study to a successful conclusion.

Disclosure of conflict of interest

We, the authors, declare that we have no conflicts of interest in this study from all of the journals to which we have submitted our manuscript.

Statement of informed consent

Before participating in this study, each participant gave their informed consent, was aware of their rights and potential risks, as well as the research's purpose and procedures, and voluntarily agreed to take part.

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