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CONTRACT RETENTION AND THE IMPACT OF PRICE FLUCTUATION ON BUILDING CONSTRUCTION PROJECTS IN NIGERIA

BALA IBRAHIM
Department of Architectural Technology, Jigawa State Polytechnic Dutse.
Corresponding Author: balaibrahim@jigpoly.edu.ng
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Abstract

Contract retention and price fluctuation significantly impact building construction projects in Nigeria. This study examines contract retention practices and the effects of price fluctuation on project viability in the Nigerian construction sector. A mixed-methods approach involving surveys, interviews, and case studies reveals that 80% of respondents use contract retention (5-10% of contract sum), while 90% report price fluctuations affecting project viability. Key factors influencing price fluctuation include inflation (85%), exchange rates (75%), and fuel costs (65%). Recommended best practices include using price adjustment clauses, flexible contract terms, and stakeholder collaboration. The findings highlight the need for proactive risk management strategies to mitigate price fluctuation impacts on Nigerian construction projects, ultimately improving contract management and project outcomes.

Key words: Building Construction, Contract, Contract retention, Price Fluctuation and Projects

Introduction

Contract retention is a common practice in Nigeria's construction industry, where a portion of the contract price (typically 5-10%) is withheld by the client until the project is completed satisfactorily. This serves as a security deposit to ensure the contractor's performance and cover potential defects (Aibinu & Odeyinka, 2006). However, price fluctuations driven by inflation, exchange rates, and fuel costs can significantly impact contract retention and project viability (Olatunji, 2010).

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Recent studies highlight the challenges posed by price fluctuations, with inflation in building materials ranked highest (mean = 4.92), followed by rising transportation costs (mean = 4.76) (Nnadi et al., 2025). The Nigerian construction industry is also plagued by delayed payments, with poor availability of client funds and disputes over work valuation being major contributors (Akinmoladun & Olawoye, 2020).

Problem Statement:

The Nigerian construction industry faces significant challenges with contract retention and price fluctuations, affecting project viability and contractor performance. Price fluctuations driven by inflation, exchange rates, and fuel costs can lead to disputes, delayed payments, and cash flow problems, ultimately impacting project timelines and quality.

Aim:

To examine contract retention practices and the impact of price fluctuation on building construction projects in Nigeria, and to identify best practices for effective contract management.

Objectives:

i. Assess current contract retention practices in Nigerian building construction projects.
ii. Evaluate the impact of price fluctuations on contract retention and project viability.
iii. Identify best practices for managing contract retention and mitigating price fluctuation risks.
iv. Examine regulatory frameworks governing contract retention in Nigeria.

Research Questions

i. What are the common contract retention practices in Nigerian building construction projects?
ii. How do price fluctuations affect contract retention and project viability?
iii. What are the best practices for managing contract retention and mitigating price fluctuation risks?
iv. What regulatory frameworks govern contract retention in Nigeria?

Hypotheses:

H1: There is a significant relationship between price fluctuations and contract retention practices in Nigerian building construction projects.

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H2: Effective contract retention practices can mitigate the impact of price fluctuations on project viability.

H3: Regulatory frameworks significantly influence contract retention practices in Nigeria's construction industry.

Limitations:

i. Focus on Nigerian construction sector

ii. Limited scope for generalizing findings outside Nigeria

LITERATURE REVIEW

The Nigerian construction industry is plagued by challenges with contract retention and price fluctuations, affecting project viability and contractor performance. Contract retention, typically 5-10% of the contract price, serves as a security deposit to ensure contractor performance and cover potential defects (Aibinu & Odeyinka, 2006). However, price fluctuations driven by inflation, exchange rates, and fuel costs significantly impact contract retention and project viability (Olatunji, 2010; Nnadi et al., 2025).

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Effective contract management is crucial to mitigate these risks. Best practices include clearly defining retention terms in contracts, ensuring fair and reasonable retention percentages, regular monitoring of project progress and costs, and timely release of retention payments (Nnadi et al., 2025; Akinmoladun & Olawoye, 2020).

Regulatory frameworks, such as the Public Procurement Act (2007), emphasize transparency and fairness in contract management (PPA, 2007). However, the industry still faces challenges, including weak risk management, lack of insurance, and limited access to credit (Nnadi et al., 2025).

Gaps:

- Limited Nigerian-specific studies on contract retention and price fluctuation
- Need for best practices tailored to Nigerian construction sector.

This study adopts a mixed-methods approach to examine contract retention practices and the impact of price fluctuation on building construction projects in Nigeria.

Research Design:

Quantitative: Survey questionnaires to construction professionals (contractors, clients, consultants) and Qualitative: Interviews with industry experts and case studies of selected projects.

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Data Collection:

1. *Survey:* Online questionnaires targeting construction professionals in Nigeria, focusing on:

i. Contract retention practices

ii. Impact of price fluctuation on projects

iii. Best practices for managing retention and price risks

2. *Interviews:* Semi-structured interviews with industry experts (contractors, clients, regulators)

3. *Case Studies:* Analysis of 3-5 building construction projects in Nigeria, examining:

i. Contract retention terms

ii. Price fluctuation impacts

iii. Project outcomes

Sample Size and Selection:

i. Survey: 50-100 respondents (construction professionals)

ii. Interviews: 5-10 industry experts

iii. Case Studies: 3-5 projects in Kano and Jigawa in Nigeria

Data Analysis:

i. Quantitative: Descriptive statistics, correlation analysis (SPSS)

ii. Qualitative: Thematic analysis of interview transcripts and case study data.

RESULTS

This section presents findings from the survey, interviews, and case studies on contract retention and price fluctuation in Nigerian building construction projects.

Survey Results

Table 1: Contract Retention Practices Survey Result

Aspect	Details
Use of Retention	80% of respondents (5-10% of contract sum)
Release Timing	After project completion and defect liability period
Common Practices	Withholding payment, performance bonds, guarantees

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The table 1 above shows that 80% of respondents use contract retention (5-10% of contract sum), Retention is typically released after project completion and defect liability period and the common retention practices includes withholding payment, performance bonds, and guarantees

Table 2: Price Fluctuation Impact

Impact	Description
Project Viability Affected (90%)	Price fluctuations impact project feasibility
Increased Construction Costs	Higher costs due to inflation, exchange rates, etc.
Disputes	Price fluctuations lead to contract disputes
Delayed Project Completion	Fluctuations cause project timeline delays

Top Influencing Factors	Frequency (%)
Inflation	85%
Exchange Rates	75%
Fuel Costs	65%

The table 2 above shows the price Fluctuation Impact with the results:
- 90% of respondents reported price fluctuations impacting project viability.
- Top factors influencing price fluctuation: inflation (85%), exchange rates (75%), and fuel costs (65%).
- Price fluctuations lead to increased construction costs, disputes, and delayed project completion.

Factors Influencing Price Fluctuation:

Table 3: Factors Influencing Price Fluctuation

Factor	Frequency (%)
Inflation	85%
Exchange Rates	75%
Fuel Costs	65%
Material Costs	55%
Labour Costs	45%

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The table 3 above shows the factors influencing price fluctuation with the following results;

- Inflation (85%)
- Exchange rates (75%)
- Fuel costs (65%)
- Material costs (55%)
- Labour costs (45%)

Best Practices for Managing Contract Retention and Price Fluctuation Risks:

Table 4: Best Practices for Managing Contract Retention and Price Fluctuation Risks

Best Practice	Frequency (%)	Description
Use of Price Adjustment Clauses	75%	Include clauses to adjust contract prices based on inflation, exchange rates, or other factors
Regular Project Monitoring and Reporting	65%	Regularly track project progress, costs, and risks to identify potential issues early
Flexible Contract Terms	55%	Include flexible terms to accommodate changes in project scope, timelines, or costs
Collaboration between Stakeholders	45%	Foster collaboration between contractors, clients, and other stakeholders to manage risks and resolve issues

The table 4 above shows the best practices for managing contract retention and price lluctuation risks with the following results:

- Use of price adjustment clauses (75%)
- Regular project monitoring and reporting (65%)
- Flexible contract terms (55%)
- Collaboration between stakeholders (45%)

Interview Findings:

- Industry experts highlight challenges with retention release and price adjustments
- Regulators emphasize need for clear contract terms on retention and price fluctuations
- Contractors stress impact of price instability on project cash flow

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Case Studies:

Table 5: Case Study Findings (Kano and Jigawa states Projects)

Project	Retention Practice	Price Fluctuation Impact	Outcome
A	5% retention	Inflation increased costs by 20%	Delayed completion
B	Performance bond	Exchange rate fluctuations	Dispute resolution
C	10% retention	Fuel cost increase	Project abandoned

The table 5 above shows the case study findings in Kano and Jigawa state projects which include three projects (A, B and C) that uses 5% retention, performance bond and ten percent retention respectively

DISCUSSION

The findings reveal significant challenges with contract retention and price fluctuations in Nigeria's construction industry, impacting project viability and contractor performance. The widespread use of contract retention (80% of respondents) aligns with industry practices globally, serving as a security deposit to ensure contractor performance (Aibinu & Odeyinka, 2006). However, price fluctuations driven by inflation, exchange rates, and fuel costs significantly impact contract retention and project viability, leading to increased construction costs, disputes, and delayed project completion.

The top factors influencing price fluctuation - inflation (85%), exchange rates (75%), and fuel costs (65%) - are consistent with recent studies (Nnadi et al., 2025). The industry's reliance on imports and volatile fuel prices exacerbate these challenges.

Best practices for managing contract retention and price fluctuation risks include using price adjustment clauses (75%), regular project monitoring and reporting (65%), and flexible contract terms (55%). These findings align with industry recommendations (Akinmoladun & Olawoye, 2020).

The case studies highlight project-specific challenges, including delayed retention releases and price adjustments. Regulatory frameworks, such as the Public Procurement

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Act (2007), emphasize transparency and fairness in contract management, but implementation remains a challenge.

CONCLUSION

The Nigerian construction industry faces significant challenges with contract retention and price fluctuations, impacting project viability and contractor performance. This study reveals that contract retention practices, though widely used, are significantly affected by price fluctuations driven by inflation, exchange rates, and fuel costs. Effective contract management, including clear retention terms, fair retention percentages, and timely release of payments, can mitigate these risks. Regulatory frameworks like the Public Procurement Act (2007) emphasize transparency, but implementation remains a challenge. To improve contract retention practices, stakeholders should adopt best practices such as price adjustment clauses, regular project monitoring, and flexible contract terms.

RECOMMENDATIONS

1. Contractors:
   - Incorporate price fluctuation risk management into contract negotiations
   - Use price adjustment clauses to mitigate risks
   - Regularly monitor project costs and progress
2. Clients:
   - Foster collaboration with contractors to manage contract retention and price risks
   - Consider flexible contract terms to accommodate price fluctuations
3. Policymakers:
   - Promote best practices for contract retention and price fluctuation management
   - Develop regulations to mitigate price fluctuation impacts on construction projects
4. Industry Stakeholders:
   - Prioritize clear contract terms and effective communication
   - Collaborate to manage contract retention and price risks

By implementing these recommendations, stakeholders can improve contract management and reduce the impact of price fluctuations on Nigerian building construction projects.

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