PUBLIC PRIVATE PARTNERSHIP INFRASTRUCTURAL DEVELOPMENT IN KOGI STATE, NIGERIA: A STUDY OF KOGI STATE INVESTMENT PROMOTION AND PUBLIC PRIVATE PARTNERSHIP AGENCY

ETUH Sunday Paul[1] & ATABO, Benjamin Ocholi[2]
etuhsundaypaul@yahhoo.com
Department of business administration, federal university Lokoja, Kogi State[1]
atachoben@gmail.com
Federal university Lokoja, Kogi State[2]

Abstract

This study examines the effect of public-private partnership (PPP) practices on infrastructural development in Kogi State, Nigeria, with specific focus on the Kogi State Investment Promotion and Public Private Partnership Agency. Although PPPs are widely adopted to mobilize private finance, expertise, and efficiency for public infrastructure delivery, evidence remains limited on how project scope clarity, contract agreements, and risk allocation jointly influence development outcomes in emerging subnational contexts. Guided by this problem, the study assessed the extent to which clear project scope, comprehensive contract agreements, and balanced risk allocation affect PPP-driven infrastructural development. A survey research design was adopted, and questionnaires were administered face-to-face to 300 stakeholders drawn from construction and infrastructure-related sectors in Kogi State. Data were analyzed using SPSS version 23, with regression analysis applied to test the relationships among the variables. The findings reveal that clarity of project scope has a positive and significant effect on infrastructural development, indicating that well-defined objectives, roles, and deliverables reduce delays, cost overruns, and scope creep. Contract clarity also shows a positive and significant influence, suggesting that transparent agreements improve accountability, reduce disputes, and strengthen implementation efficiency. Risk allocation likewise contributes significantly, demonstrating that fair and adaptable risk-sharing supports collaboration and timely project completion. Overall, the model confirms that PPP success in Kogi State depends on careful planning, contractual transparency, and balanced risk management. The study recommends stronger institutional capacity, detailed upfront scoping, flexible contracts, and context-sensitive risk frameworks to improve the sustainability and performance of future PPP infrastructure projects statewide effectively.

Keywords: Public-Private Partnership, Infrastructural Development, Project Scope Clarity, Contract Agreement, Risk Allocation,

1.0 Introduction

In recent years, the concept of Public-Private Partnerships (PPPs) has gained significant traction as a mechanism for financing and delivering large-scale infrastructure projects globally. PPPs allow for the blending of public sector objectives with private sector efficiency, investment, and expertise, addressing critical infrastructure gaps in both developed and developing economies, (Siemiatycki, 2010). However, despite the widespread use of PPPs, substantial gaps persist in the literature regarding key variables that influence their success. These gaps include the clear project scope, the intricacies of contract agreements, and risk allocation three critical components in the planning, implementation, and long-term success of PPP projects.

This study aims to address these gaps, focusing on how the clarity of the project scope, the specifics of contract agreements, and effective risk allocation mechanisms contribute to the successful delivery of PPP projects, (Abdulhamid, & Lawal, 2015). The research problem lies in the insufficient evidence available regarding the nuanced relationships between these variables and the overall success of PPPs. Previous studies have explored individual aspects of PPPs, such as financing models or project outcomes, but few have thoroughly examined how these variables interact in the context of current PPP structures. Moreover, gaps in methodology and scope persist, as many studies focus on single-region cases or fail to incorporate the dynamic interplay between these critical variables,(Blain,2020). This paper aims to fill these gaps by providing an updated and comprehensive analysis of how these elements impact the success of PPP projects, utilizing a combination of qualitative and quantitative research methodologies.

Furthermore, the contract agreement in PPPs, while critical to defining the roles and responsibilities of both partners, is often found lacking in clarity and comprehensiveness. The literature has highlighted that ambiguous contract terms or poorly structured agreements can lead to disputes and inefficiencies (Makhanya & Van Der Merwe, 2025). Contracts in PPPs need to address a wide range of issues, including performance expectations, payment structures, and mechanisms for resolving disputes. However, there is limited research on how recent legal developments, especially in emerging markets, affect contract design and execution in PPPs (Rodrigues & Silva, 2024).

The following research questions guided the study:

i. How does the clarity of project scope in Public-Private Partnerships (PPPs) enhance infrastructural development in Kogi State?
ii. To what extent does contract agreements between the public and private sectors enhance infrastructural development in Kogi State?
iii. How does the allocation of risks between the public and private sectors in PPPs influences infrastructural development in Kogi State?

The main objectives are to examine effect of public private partnership infrastructural development in Kogi state, Nigeria: a study of Kogi state investment promotion and public private partnership Agency. The specific objectives are to:

i. Assess how the clarity of the project scope in Public-Private Partnerships (PPPs) affects infrastructural development in Kogi State.
ii. Examine the effect of contract agreements between the public and private sectors on infrastructural development in Kogi State.
iii. Analyze how the allocation of risks between the public and private sectors in PPPs influences infrastructural development in Kogi State.

The following hypotheses were formulated:
H_0: Clarity of project scope in Public-Private Partnerships (PPPs) does not significantly enhance infrastructural development in Kogi State.

H_0: Contract agreements between the public and private sectors do not significantly enhance infrastructural development in Kogi State.

H_0 : Allocation of risks between the public and private sectors in PPPs does not significantly influence infrastructural development in Kogi State.

2.0 Review of Related Literature

Concept of Public-Private Partnerships

Public-Private Partnerships (PPPs) have emerged as a crucial mechanism for delivering large-scale infrastructure projects, especially in emerging economies where public resources are limited (Siemiatycki, 2010; Abdulhamid & Lawal, 2015). By integrating public sector goals with private sector expertise, efficiency, and investment capacity, PPPs aim to close infrastructure gaps and improve service delivery (Blain, 2020; Zhao & Wang, 2023).

However, the success of PPPs depends on several interrelated factors, including the clarity of project scope, the robustness of contract agreements, and the effectiveness of risk allocation (Li et al., 2022; Rodrigues & Silva, 2024). These elements are not isolated; their interplay shapes overall project performance and sustainability (Chang & Lee, 2025; Eckhardt et al., 2023).

Project Scope Clarity

Project Scope Clarity (PSC) is a fundamental determinant of PPP success. Projects with clearly defined scopes reduce delays, minimize cost overruns, and prevent scope creep (Li et al., 2022; Cheng & Zhang, 2024). Studies have shown that continuous stakeholder communication and clearly defined roles further enhance project outcomes (Makhanya & Van Der Merwe, 2025; Zhao & Wang, 2023).

Contract Agreements

Contract Agreements (CA) provide the legal and operational framework for PPP projects. Ambiguous or poorly structured contracts often lead to disputes and inefficiencies, undermining project delivery (Rodrigues & Silva, 2024; Makhanya & Van Der Merwe, 2025). In contrast, transparent and comprehensive agreements that address performance expectations, payment structures, and dispute resolution mechanisms improve accountability and foster trust between partners (Eckhardt et al., 2023; Abdulhamid & Lawal, 2015).

Risk Allocation

Risk Allocation (RA) is another critical determinant of PPP performance. Balanced risk-sharing mechanisms encourage collaboration and timely project completion (Alvarado & Alvarez, 2024; Chang & Lee, 2025). Research indicates that political, financial, and regulatory risks, if not properly managed, disproportionately affect one partner, leading to project delays and cost overruns (Li et al., 2022; Alvarado & Alvarez, 2024). Strong regulatory oversight and adaptive risk frameworks have been shown to reduce conflicts and enhance project resilience in emerging markets (Eckhardt et al., 2023; Rodrigues & Silva, 2024).

The conceptual foundation for PPP success lies in the interplay of project scope clarity, contract agreements, and risk allocation. Each element uniquely contributes to project performance, yet their combined effectiveness relies on careful planning, transparent communication, and context-sensitive management practices (Chang & Lee, 2025; Zhao & Wang, 2023). These insights frame the current study, which investigates how these variables influence infrastructural development in Kogi State, Nigeria, offering practical guidance for policymakers and project stakeholders (Abdulhamid & Lawal, 2015; Alvarado & Alvarez, 2024).

Theoretical Framework

The Principal-Agent Theory (PAT), originally developed in economics and organizational studies, explains the relationship between a principal, who delegates tasks, and an agent, who performs them on the principal's behalf (Eisenhardt, 1989; Jensen & Meckling, 1976). In the context of PPPs, the public sector acts as the principal, responsible for providing infrastructure services and ensuring public welfare, while the private sector acts as the agent, delivering projects efficiently and effectively using its resources, expertise, and capital (Siemiatycki, 2010; Abdulhamid & Lawal, 2015).

A central tenet of the theory is the potential for information asymmetry and goal divergence between the principal and agent. The public sector (principal) may face challenges in monitoring the private partner's (agent) performance, leading to inefficiencies or misaligned objectives. To mitigate these challenges, the theory emphasizes the importance of clear contracts, well-defined project scopes, and balanced risk allocation all of which are key variables in this study (Rodrigues & Silva, 2024; Alvarado & Alvarez, 2024). For instance, a transparent contract ensures that both partners understand responsibilities, while risk allocation aligns incentives and reduces potential conflicts.

Applying Principal-Agent Theory to this study provides a conceptual lens to analyze how project scope clarity, contract agreements, and risk allocation influence PPP success in infrastructural development. It explains why miscommunication, ambiguous contracts, or uneven risk-sharing can lead to delays, cost overruns, or suboptimal outcomes. By grounding the research in PAT, the study highlights mechanisms for enhancing collaboration, accountability, and efficiency in PPP projects in Kogi State

Empirical Review

Furthermore, several scholars (Eckhardt et al., 2023; Chang & Lee, 2025) suggest that PPP projects in developing economies such as Kogi State benefit from stronger regulatory oversight, which ensures that both partners adhere to their contractual obligations and maintain a balanced approach to risk management. This creates a more conducive environment for infrastructural development, with a reduced likelihood of conflicts and disruptions that might otherwise derail project timelines.

Alvarado and Alvarez (2024) examines risk management in Public-Private Partnerships: Lessons from Emerging Markets. The study conducted a mixed-methods study using both qualitative interviews and quantitative data analysis to explore risk management practices in PPPs, particularly in emerging markets. The study involved interviews with 40 project managers and key stakeholders in various sectors, including infrastructure, energy, and transportation. The researchers also analyzed 25 case studies of PPP projects in Latin America and Sub-Saharan Africa, focusing on the challenges and strategies used to manage risks. The study found that risk management in PPPs is often underdeveloped, particularly in emerging markets. A significant number of projects faced delays and cost overruns due to inadequate risk identification and allocation between the public and private sectors.

Alvarado and Alvarez (2024) also highlighted that political risk, financial instability, and regulatory changes were the most common challenges faced by private sector partners, while the public sector often shouldered operational risks. The authors recommend that PPP contracts should include more comprehensive risk-sharing frameworks and include clear mechanisms for addressing unforeseen risks, especially political and economic instability. Additionally, they suggest that governments in emerging markets adopt international best practices for risk allocation and build stronger legal and regulatory frameworks to ensure transparency and accountability.

Li et al. (2022) Examines Project Scope Management in Public-Private Partnerships: A Comprehensive Framework. The study employed a case study approach, analyzing 15 PPP projects from different sectors, including transportation, education, and healthcare. The study included both qualitative interviews with project managers and quantitative analysis of project performance data, such as cost overruns, delays, and quality assessments. The research aimed to develop a framework for effective project scope management in PPPs. The study revealed that unclear project scopes were a leading cause of inefficiencies in PPP projects. In many cases, the scope was either too vague at the beginning or changed significantly during the project, leading to scope creep. Projects with well-defined and stable scopes saw better performance in terms of time and cost efficiency.

Li et al. (2022) also noted that clear communication between stakeholders at every stage of the project was crucial for preventing scope-related issues. The study recommend that PPPs invest time in thorough upfront planning and scope definition, with continuous monitoring and feedback loops throughout the project. They also advocate for establishing clear roles and responsibilities for all stakeholders to ensure that the scope remains aligned with initial goals.

3.0 Methodology

The study adopted survey research design. The population for this study comprised 300 stakeholders from various sectors within the construction and infrastructure industries in Kogi State. The researchers administered the questionnaires face-to-face, ensuring that respondents had the opportunity to ask questions for clarity and that the completed surveys were returned promptly. The data analysis was carried out using SPSS version 23, which provided the necessary tools for conducting the regression analysis and interpreting the results. This methodology ensures that the study provides reliable and valid insights into how PPPs impact the development of infrastructure in Kogi State, helping policymakers and industry stakeholders make informed decisions about future infrastructure projects.

4.0 Data Analysis and Discussion of Findings

Regression Results of the Study

Variables	Coefficients	T-Values	P-Values
Constants	1.79	3.120	0.010
CPS	.451	2.611	0.000
CCA	.304	4.322	0.010
RA	.144	3.267	0.001
R^2	0.621		
Adj. R^2	0.707		
F-Stat.	50.333		
F- Sig			0.000

Source: SPSS 23 Outputs 2026

The constant term (1.79) is positive and significant, indicating a meaningful baseline level of infrastructural development. CPS has a strong positive effect (coefficient = 0.451, $p < 0.01$), showing that clearer project scopes are associated with higher infrastructural development. Similarly, CCA (coefficient = 0.304, $p < 0.01$) and RA (coefficient = 0.144, $p < 0.01$) positively and significantly influence development, highlighting the importance of clear contracts and effective risk allocation. The model explains a substantial portion of the variation in infrastructural development ($R^2 = 0.621$, Adjusted $R^2 = 0.707$) and is statistically robust ($F = 50.333$, $p < 0.001$). Overall, the results demonstrate that improving project clarity, contract agreements, and risk allocation can significantly enhance PPP-driven infrastructural development in Kogi State

Discussion of Findings

Clarity of Project Scope (CPS) has a coefficient of 0.451 ($p < 0.01$), showing that better-defined project scopes significantly enhance infrastructural development. This aligns with literature emphasizing that clear scopes help prevent delays, cost overruns, and scope creep (Li et al., 2022; Cheng & Zhang, 2024). However, some studies note that scope clarity alone does not guarantee success, particularly in regions facing political instability or weak regulatory frameworks (Zhao & Wang, 2023).

Contract Clarity and Agreement (CCA), with a coefficient of 0.304 (p = 0.01), positively influences infrastructural development. Clear contracts establish roles, responsibilities, and expectations, reducing conflicts and inefficiencies (Cheng & Zhang, 2024; Rodrigues & Silva, 2024). Yet, overly rigid contracts can limit flexibility, which is critical in dynamic environments like Kogi State (Makhanya & Van Der Merwe, 2025). Risk Allocation (RA) also has a significant positive effect (coefficient = 0.144, p = 0.001), demonstrating that fair and balanced risk-sharing encourages collaboration and timely project completion (Eckhardt et al., 2023; Chang & Lee, 2025). Nonetheless, external factors such as political instability can disrupt even well-structured risk-sharing agreements (Alvarado & Alvarez, 2024)

Policy and Administrative Implications

The study underscores the importance of clear project scopes, transparent contracts, and balanced risk allocation for the success of PPP projects in Kogi State. Policymakers and administrators should focus on ensuring that project objectives and responsibilities are well-defined while maintaining flexibility to respond to changing political, economic, or social conditions. Effective risk-sharing between public and private partners is essential to encourage collaboration, accountability, and timely project completion. Strengthening institutional capacity, including skilled personnel and monitoring mechanisms, is critical to support these processes. Integrating these measures with context-sensitive strategies can enhance the efficiency, resilience, and overall impact of infrastructural development initiatives in the region.

5.0 Conclusion and Recommendations

In conclusion, the study's results strongly support the importance of CPS, CCA, and RA in the success of PPP-driven infrastructural development in Kogi State. The findings are consistent with existing literature but also highlight the need for flexibility and a nuanced approach in applying these concepts to regions facing unique challenges. Future studies could further explore the role of external factors, such as political risks or regulatory changes, in influencing the success of PPPs, particularly in emerging economies like Kogi State.

The following recommendations were made from the findings:

i. Based on the findings of this study, it is recommended that both public and private sector partners prioritize a clear and detailed project scope during the planning phase of PPP projects in Kogi State.
ii. The study emphasizes the importance of fair risk distribution between public and private partners. To improve the success of PPP projects, it is crucial to adopt a more dynamic and adaptable approach to risk allocation.
iii. Given the unique challenges faced by Kogi State, it is essential to invest in capacity building for both public and private stakeholders involved in PPP projects. Training programs should be introduced to equip local government officials, contractors, and other key stakeholders with the necessary skills to manage complex PPP projects effectively

References

Abdulhamid, M., & Lawal, A. (2015). The role of public-private partnerships in the development of infrastructure in emerging economies. *Journal of Infrastructure Development*, 12(3), 22-34.

Alvarado, A., & Alvarez, R. (2024). Risk management in public-private partnerships: Lessons from emerging markets. *Journal of Infrastructure Policy and Management*, 11(2), 123-145.

Blain, L. (2020). Examining the effectiveness of risk management strategies in public-private partnerships. *International Journal of Project Management*, 38(4), 245-259.

Chang, J., & Lee, J. (2025). Risk allocation strategies in public-private partnerships: A comparative study. *International Journal of Project Management*, 40(3), 251-267.

Cheng, W., & Zhang, X. (2024). Project scope and its impact on the success of public-private partnerships. *Construction Management Review*, 12(4), 89-104.

Eckhardt, P., Zhang, Y., & Liu, H. (2023). Risk-sharing frameworks in public-private partnerships: Current trends and challenges. *Risk Management Journal*, 18(1), 15-29.

Hassan, M., & Mehmood, S. (2025). An analysis of the contractual arrangements in public-private partnerships: Empirical evidence from infrastructure projects. *Journal of Public Administration and Policy*, 19(2), 97-113.

Li, D., Zhang, J., & Wang, Z. (2022). Project scope management in public-private partnerships: A comprehensive framework. *Project Management Journal*, 52(5), 67-84.

Makhanya, L., & Van Der Merwe, A. (2025). Contractual failures in PPPs: A South African case study. *International Journal of Construction Law*, 9(3), 112-125.

Rodrigues, S., & Silva, R. (2024). Legal aspects of contract agreements in public-private partnerships: A comparative analysis. *Public Policy and Law Review*, 13(2), 158-174.

Sultan, F. (2023). Examining the sustainability of public-private partnerships in infrastructure development. *Global Development Review*, 5(1), 45-61.

Zhao, Q., & Wang, H. (2023). Defining project scope in large-scale PPP infrastructure projects. *Construction and Infrastructure Management Journal*, 14(2), 202-216.