



Public-Private Partnership Regulatory Frameworks and Projects Sustainability in Lagos State, Nigeria

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ABSTRACT

The study assessed Public-Private Partnership (PPP) regulatory frameworks and projects sustainability in Lagos State, Nigeria. The PPP technique such as regulatory frameworks have been part of key issues affecting successful implementation of PPP projects. The study adopted a structured questionnaire to collect relevant data. The total population for the study is Six hundred and Twenty-seven (627) respondents comprising public (State government MDAs), private (concessionary firms) and End-users in the study area. Simple random sampling and purposive sampling techniques were used. The study objectives were assessed with both descriptive (Mean and Standard Deviation) and inferential statistics (PLS-SEM) and Regression Analysis). The result of the structural path analysis of the first objective showed that PPP's regulatory framework is a strong predictor of Project sustainability in the study area as shown by the path coefficient ($\beta = 0.793$; $t = 26.467$; $CI = 0.705, 0.825$; and $p < 0.05$) depicting that regulatory framework has a significant positive effect on PPP project sustainability. The study therefore recommended among others that it should be a policy in our various PPP projects that the sustainability of such projects depends critically on the deployment of suitable regulatory frameworks for safeguarding the integrity and safety of public infrastructure. Also, given the large number of PPP projects that are routinely carried out in the state, PPP project stakeholders and developer should give top priority to delivering projects that will enhance the long-term social, economic, and environmental well-being of end users in Lagos State, Nigeria.

Key words: Sustainability, Public-Private Partnership, Regulatory Frameworks

1. INTRODUCTION

1.1. Background to the Study

An agreement between the public and private sectors that is typically long-term is known as a Public-Private Partnerships (PPPs). According to [1], public-private partnerships are predominantly employed for infrastructure provision, including the construction of public buildings, roads, transportation networks, and sewage systems. In many nations around the world, PPP is becoming more popular as a means of luring private capital to finance infrastructure. PPP projects, however, are more vulnerable to hazards than any other type of contractual arrangement because of the large number of stakeholders involved, each with different interests, as well as the political, social, environmental, economic, and cultural context in which the projects are to be implemented [1]. Also, PPP enables the government and private sectors to profit from their involvement or partnership in managing and financing the expansion of public services by splitting the risks. Furthermore, the government may now concentrate on legislating, planning, and regulating PPP-related operations [2]. Furthermore, according to [3], improving the business environment, having a strong legal and regulatory system, and having a more effective public sector are all necessary for Nigeria to close its infrastructure deficit.

According to [4], a regulatory framework is essential to give PPP projects legitimacy as a form of public investment because developing nations must design the institutional and regulatory frameworks needed to support and structure strong PPP projects that are trustworthy and appealing to a variety of investors. To prevent ambiguities regarding the legal framework, an effective regulatory framework for PPPs is extremely important

and should be coordinated with the government's medium- to long-term investment strategy and financial planning [4].

Governments should take on the leadership challenge of achieving goals of social, economic, and environmentally sustainable development, which is tied to public sector [5]. PPPs should, in the meantime, fulfil requirements and needs to enhance inhabitants' standard of living [6]. Because a key barrier to economic and social development that must be removed if the SDGs are to be accomplished are lack of access to public utilities and public infrastructures [7-8]. Therefore, by utilizing the expertise of private management, the PPPs strategy can be adopted in these public infrastructures to improve operational efficiency, reduce project costs, and boost sustainability [9-10]. The study assessed PPPs regulatory frameworks and projects sustainability in Lagos State Nigeria

1.2. Statement of the Research Problem

Initially, the delivery of public services and provision of infrastructure has been the sole responsibility of the government [11]. Furthermore, because the private sector's willingness to work with the government on infrastructure projects is highly dependent on the legal context in which the projects are implemented, a regulatory framework is one of the main obstacles preventing PPP projects from being completed and maintained [12]. Concerning Lagos state, PPP is faced with various challenges ranging from financial limitations, corruption, and the inability of private companies to access local currency and affordable long-term loans [13]. Also, identified obstacles to effective public-private partnership operations in developing countries are poor regulatory and legal frameworks, inadequate risk management, inadequate judicial processes, rivalry amongst partners, corrupt and fraudulent practices, delays in securing adequate government approvals, poor government commitment is known to have a negative impact on the public-private partnership projects [14].

The lack of a strong institutional and legal framework supporting public-private partnerships means that, if there are issues with the agreements, private investors are left to shoulder the financial and other burdens [15]. Another significant problem is when the government prematurely terminates a concession right. A prime illustration of this is when Lagos State and the Lekki Concession Company (LCC) had their concession agreement for the Lekki-Epe expressway terminated 2018) [16]. If the public-private partnership is successfully implemented by all parties involved, the advantages considerably outweigh the disadvantages.

1.3. Research Questions

The following research question was addressed in the study

- i. What is the effect of PPP regulatory frameworks on projects sustainability in Lagos State, Nigeria?

1.4. Objective of the Study

The general objective of the study is to assess Public-Private Partnerships regulatory frameworks and projects sustainability in Lagos State, Nigeria with a view to improving the sustainability of PPP projects in Lagos State, Nigeria. While the specific objectives are to:

- i. examine the effect of PPP regulatory frameworks on projects sustainability in the study area.

1.5. Research Hypothesis

The following research hypothesis was formulated and tested:

H₀₁: PPP regulatory frameworks do not have a significant effect on projects sustainability in the study area.

2. LITERATURE REVIEW

2.1. Conceptual Review

This section discusses the concepts involved in public-private partnerships such as the concept of PPPs and concept of projects sustainability.

2.1.1 Concept of Public-Private Partnerships (PPPs)

Each nation implementing the agreements has a particular public-private partnership strategy that is developing [17]. However, it is challenging to come up with a singular definition of the relationship between the public and private sectors. The private sector provides physical assets and infrastructure-based services that were previously provided by the government, according to a more expansive definition of PPP [18]. According to [19], PPPs are partnerships between the public and private sectors that cooperate to achieve common or compatible goals (such as delivering infrastructure services), as well as involving the sharing of risk and responsibility between the public and private sectors.

Around the past three decades, Nigeria's major stakeholders have made a concerted effort to implement the PPP procurement option for businesses and infrastructure projects. For instance, Bus Rapid Transit Scheme (BRT), Diagnostic Centers, Mortuary Services, and Lekki Toll Road Projects are just a few projects that the Lagos State government in Nigeria has carried out utilising the PPP model [20]. Other states in Nigeria, including Cross-River

State, built the Akampa toll road project and the Tinapa Free Trade Zone; Rivers State is building the Greater Port Harcourt housing project; and Benue State built the Teragro Benfruit Plant in a PPP arrangement [21].

2.1.3. Public Private Partnerships and Regulatory Frameworks

Comparative studies are necessary to comprehend the significant national variations in the creation of PPP institutions and policies, as well as the effects of these variations on the adoption of PPPs in other nations. The institutional and political backdrop of these countries is said to have a significant impact on the differences in PPP dissemination and success across countries, producing weak or robust PPP enabling fields [22]. Institutions can be formal or informal frameworks, such as public policies, legal and procedural frameworks, and other formal mechanisms, as well as the widespread acceptance of these processes in society. Institutions can also develop from normative or cognitive frameworks, which refer to standards of conduct and underlying assumptions that unconsciously shape how people behave [23].

Transparent procurement processes, a supportive political climate, and clear rules all contribute to the legitimacy of public-private partnerships, while clear regulations, standards, and the defined roles of public actors promote confidence between public and private actors. Expertise centralization at various levels, specialised units, procedures for learning and information dissemination, and suitable risk and finance mechanisms all promote the effective capacity to manage PPPs [22].

To establish legitimacy for PPPs as a public investment instrument [24], PPP policies and long-term political support are essential (referring to the first dimension of governmental support to PPPs). This will then promote the expansion and development of a pipeline of projects. According to PPP literature, political support and a long-term legal and regulatory framework are essential elements to guiding successful PPP projects [25]. PPP policies also define PPP in relation to alternative choices for procuring infrastructure services and outline the objectives and justifications for implementing the schemes.

The second aspect of government support for PPP is represented by its legal and regulatory framework. PPPs are subject to both "hard" and "soft" restrictions, which can either enable or prevent their adoption in different national contexts, according to research [26]. The literature also reveals a high degree of diversity in national approaches to the regulation of PPPs, with some nations having established specialised PPP laws and formal processes for project financing and approval while others have adopted a less formalised and essentially more decentralised approach [27].

The third area in which governments may engage in PPPs is through PPP-supporting agreements, one of which is the presence of a specific PPP unit. Recent research has focused heavily on the function and role of PPP-supporting arrangements, which are seen as key players in establishing the national and local institutional frameworks for PPP development [25-28]. Thus, the presence or absence of these institutions and how they function in terms of their respective roles and functions, organisational structure, formal authority, working procedures, and institutional logic are likely to have an impact on the development of projects and the implementation of PPP policies [29]. Additionally, the legal and regulatory structure for PPPs that might direct the private sector's amount of engagement with the government has not been as straightforward due to concern over government succession over time [30].

2.2. Theoretical Review

The study reviewed the following relevant theory:

2.2.1. Stakeholder Theory

Stanford Research Institute (SRI), founded in the 1960s, is where the term "stakeholder" first appeared [31-32]. Stakeholders were referred to as "those groups without whose support the organisation would cease to exist" in their definition. The only group to which management must be responsive is the stakeholders, according to [31]. Stakeholders, according to [32], are "any group or person who can affect or is affected by the achievement of the organization's objectives."

According to [33], stakeholders are "those who have the power to change the project's process and end results, whose living environment is positively or negatively impacted by the project, and who get associated direct and indirect advantages and/or losses." According to [34], the fundamental tenet of the stakeholder theory is that organisations are dedicated to meeting a specific set of stakeholder expectations. In order for PPP projects to be successful, it is essential to take into account groups or individuals outside of the government and private sector as stakeholders who need to be informed and involved in consultation at the very beginning of the PPP project process, particularly the communities/residents or users, media, labour unions/special interest groups, among others. Stakeholders have a critical and significant role in the success of a project.

The theory adopted for this study is "Stakeholder Theory" is primarily concerned with institutional change, and involves groups or individuals outside of the public or private sector who needs to be informed and involved in the consultations at the beginning of PPP project process. Therefore, governance increased the involvement of the private sector and other voluntary organisations in service delivery and strategic decision-making. Thus, the concept of stakeholder theory is required in PPPs practice to guaranty long-term project success.

2.3. Empirical Review

The following empirical findings were reviewed in the study

2.3.1. Public-Private Partnership and Regulatory Framework

According to [35] in “effect of regulatory framework on the performance of public-private partnership in road projects in Kenya”. The study examines the effect of regulatory frameworks on the performance of public-private partnership road projects in Kenya. The study’s population was one hundred and eleven (111) organizations involved in road sector PPP either as regulators, project implementers, financiers, or interest groups involved in the PPP project process. The study’s respondents are 215 from 111 organizations. The study data was collected through a well-structured questionnaire and was measured on a scale of 1 – 5, where 5 = to a very great extent and 1 = to a very low extent. The data collected were analysed using descriptive statistics of mean, mode, and frequency, and inferential statistics using regression analysis. The study revealed that regulatory framework has a significant and positive effect on the performance of PPP in Kenya’s road projects. The study also revealed that government policy has a moderating influence on the relationship between regulatory framework and the performance of PPP in road projects in Kenya. The study recommends that there should be an amendment to the regulatory framework, PPP Act (2013) to give contracting authorities more flexible PPP procurement frameworks that ensures innovation and less overly prescriptive regulations.

In [36] researched “Legal frameworks for Public-Private partnerships: South Africa and Nigeria in focus”. The study was conducted based on empirical reviews of literature, policies, and enabling laws in South Africa and Nigeria to draw out lessons from both countries. The study revealed that South Africa has a better experience in PPP practice and administration than Nigeria, which Nigeria and other developing economies can learn from. The study concludes that for PPPs to be successfully arranged and executed, the public sector represented by ministries, departments, or agencies (MDAs), and the private sector should understand themselves. The study recommends that the Nigeria infrastructure concession regulatory commission (ICRC) Act 2005 should be amended to allow for the PFI type of PPP arrangements so that government can utilize PPP in environments where the market is not viable enough for private investment.

In [37] “Policy support, legal and regulatory framework, and institutional support for PPP in international comparison: Indexing countries readiness for taking up PPP” developed an index of the governmental support for PPP called “PPP Governmental support index”. The aim of developing the index is to measure the extent to which the national government provides an institutional framework that is either conducive or preventive for the introduction and diffusion of PPPs within the infrastructure. The study research design was both qualitative and quantitative by reviewing empirical literature from 15 European countries. Their research revealed the element of the PPP governmental support index, which includes; policy and political support regarding PPPs, the legal and regulatory framework regarding PPPs, as well as the presence/ absence of PPP – supporting structures and instruments (PPP – units, procedures for projects appraisals and green lighting, and standardization of instruments and contracts. The study also revealed that the United Kingdom and the Netherlands score highest in the overall PPP governmental support index while the Czech Republic, Estonia, Slovenia, and Sweden have the lowest PPP governmental support index. The study also revealed that the higher the PPP governmental support index, the higher the number of PPP projects in the country. The study concludes that the index mainly gives a static picture and is less detailed when it comes to explanations and exploration of developments and trends over time.

The entire PPP framework in Nigeria hinges on the principles of achieving better value and affordable services. As expressed in the National Policy Document, there are economic, social, and environmental objectives for the adoption of the PPP model as a strategy for infrastructure development. The government believes that a private-sector-led drive for infrastructure development through PPPs will open up the infrastructure and service delivery landscape in Nigeria to efficiency, inclusive access, and overall improvement of the quality of public service delivery in a sustainable way (Zucon & Collaboration, 2009) [38].

[39] studied “Public-private partnership and infrastructural development in Nigeria: A study of greater Onisha water scheme in Anambra” investigates the factors militating against the implementation of PPP projects in Anambra. The study employed a descriptive survey design, hence using questionnaires as a means of collecting data. The research population comprises a staff of Chinese railway Construction Corporation represented by Africa Lekki Investment Company, which is 33 personnel and due to the small population, it was used as a sample size. The research reveals that a weak regulatory framework is a major factor militating against the implementation of the PPP projects in Anambra state. The study concluded and recommends that a legal and regulatory framework should be established to facilitate willingness to implement the PPP contract; showcase transparency and accountability, and fight against any vices that will impede the implementation of the PPP project in Anambra state.

3. METHODOLOGY

This section describes the method employed in conducting the study. It provides details regarding research design, study area, population of the study, sample size, sampling techniques, method of data collection and methods of data analysis.

3.1. Study Area

The study area for the study is Lagos State, Nigeria. Twenty Local Governments Areas and 37 Local Council Development Areas make up Lagos State, which is home to an estimated 24 million people. Lagos has a significant number of construction activities and a huge concentration of contracting and consulting organisations, which also contain a collection of practitioners and specialists from the construction industry. Lagos serves as the economic and commercial hub of the nation. The Lagos State Public-Private Partnership Office provided data on PPP infrastructures. Information received includes the project's type, parties involved, and its progress.

The Lagos metropolitan in South-West Nigeria was chosen as the focus of the study due to its accessibility for conducting the survey to gather the necessary data, the availability of qualified PPP specialists, and the suitability of the PPP infrastructure project for the analysis. The state was also selected because there are numerous PPP infrastructure projects that have already been completed and in operations. It is one of the few states in Nigeria that has successfully applied PPP techniques to a variety of infrastructure projects.

3.2. Population of the Study

The population of this study was restricted to PPP projects undertaken by the Lagos State government with private investors. The respondents were selected from State Government Ministries, Departments, and Agencies (MDAs) which include: the Office of Public-Private Partnerships (OPPP), Lagos State Ministry of Housing (LSMH), Lagos State Development and Property Corporation (LSDPC), Lagos State Ministry of Works and Infrastructure (LSMWI), and Concessionary firms involved in PPP projects in Lagos State over the years.

Table -3.1 Total Number of Sample Size

Respondents Base		Sample Size
i.	Public Sector (Government MDAs)	207
ii.	Private Sector	36
End-users of the Projects		384
Total		627

Source: Field Survey 2021

3.3. Method of Data Analysis

The data collected was well analysed based on the research questions and hypotheses formulated for the study. Both descriptive and inferential statistics were used to analyse the data collected with the aid of Smart-PLS 3 and SPSS statistical tools. The descriptive statistic used were frequency Tables, per centages, mean and standard deviations. Multivariate Regression Analysis, Analysis of Variance (ANOVA) and PLS-SEM were employed to show the significance level and level of relationship among variable constructs.

4. RESULTS AND DISCUSSION

The results of the data analysis are presented in this chapter. The methodology and procedures utilised to carry out the study are described in the preceding chapter. The survey response rate, a descriptive analysis of the respondents, and the constructs are all covered in this chapter. The results of the statistical analysis used to assess the proposed hypothesis are displayed below.

4.1. Response Rate

Table 4.1 shows the response rate of the questionnaire distributed and retrieved. According to Table 4.1, 243 copies of the questionnaire were distributed to various Government MDAs and Private firms while 147 copies were retrieved making 60.1%. Also, 384 copies of the questionnaire were distributed to various End-users of the projects within the State while 277 copies were retrieved making 72.1%. For the analysis, it has been determined that a total response rate of 67.6%, which was based on the degree of homogeneity among the copies of the questionnaire that were returned, is sufficient. This conclusion was drawn as a result of the fact that the copies of the questionnaire that were returned were remarkably consistent.

Table -4.1 Response Rate of the Questionnaire

Questionnaire	MDAs & Private Firms	End-users	Total
Number Distributed	243	384	627
Number Retrieved	147	277	424
TOTAL	60.1%	72.1%	67.6%

Source: Field Survey, (2021)

4.2. Structural Equation Modeling of the Effect of PPP Regulatory Frameworks on Projects Sustainability

The models are tested using Partial Least Squares (PLS), a Structural Equation Modelling (SEM) approach, which has become increasingly popular in PPP projects research [40]. The PLS approach of SEM is a well-accepted statistical analysis technique for modelling complex, multivariable, and causal relationships among dependent and independent variables [41]. This section presents a comprehensive overview of the models' validation assessment in PLS-SEM.

4.2.1. Formative Measurement Model Assessment of PPP Regulatory Frameworks on Projects Sustainability

Measurement model assessment is an attempt to determine whether the measurement models as well as the structural model fulfill the quality criteria for empirical work. The formative measurement models reverse the direction of causality as far as the indicators form or compose the latent variable. The validation of formative measurement models requires different procedures and techniques than the ones applied for reflective measurement models [42]. Traditional validity assessments used in reflective measurement models do not apply to formative measurement models.

This study assesses the formative measurement models on the level of the indicators in order to determine whether each indicator indeed delivers a contribution to the formative index by testing for collinearity. A significance level of at least 0.050 suggests that an indicator is relevant for the construction of the formative index and, thus, demonstrates a sufficient level of validity [42]. It is also recommended that the path coefficients between formative indicators and their perspective LV should be greater than 0.100.

4.2.2. Second Order Construct (Projects Sustainability Assessment)

This section discusses the validation assessment conducted on the second-order formative project sustainability constructs. Following the approach of linear composites from the indicators used to measure each of the dimensions in the first order (i.e. Economic, Social, Environmental) were created and used as formative indicators for the project sustainability construct. Assessment of the degree of multicollinearity entails the calculation of the Variance Inflation Factor (VIF) or the tolerance values. Several Ordinary Least Squares (OLS) regressions were performed, with each dimension (i.e. Economic, Social, Environmental) as the dependent variable and the multivariate mean of the first-order formative indicators as independent variables to obtain VIF. Table 4.2 shows the results. The results show that all the VIF values are below the critical level of 5 as suggested by [43].

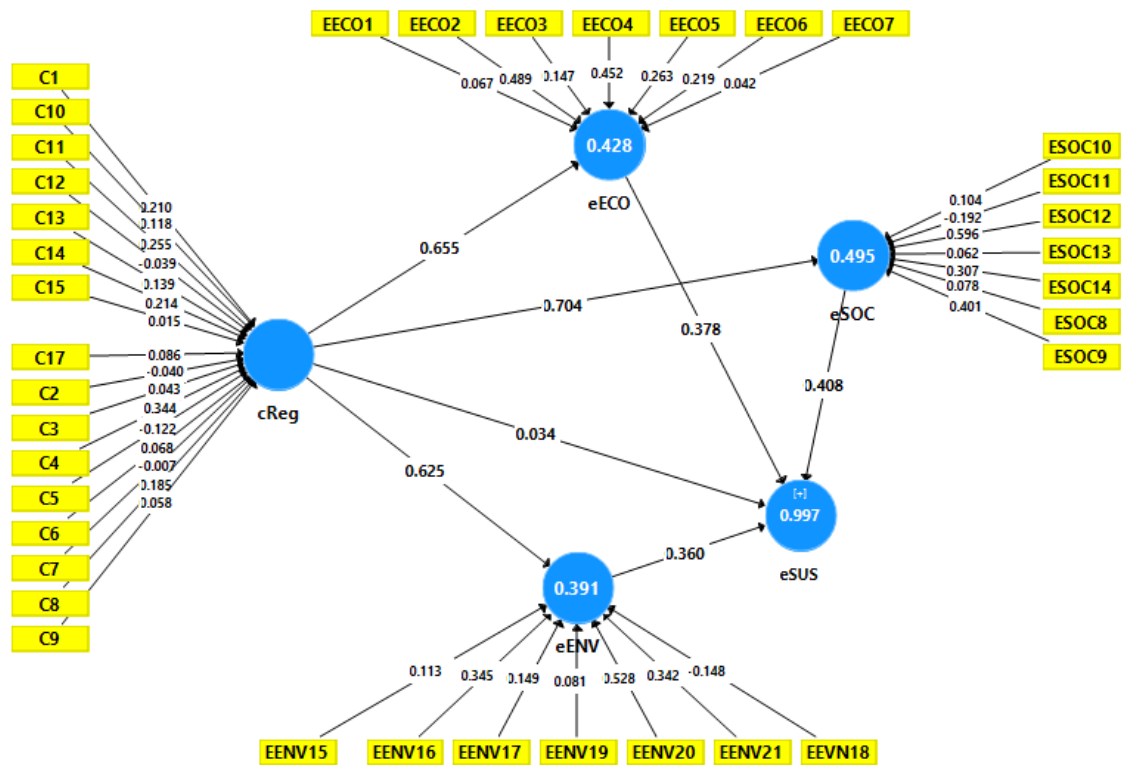


Fig. 4.1 Measurement model for PPP regulatory framework and projects sustainability

Table -4.2 Inner VIF for Second order Construct (Projects Sustainability Assessment)

VIF	Esus
cReg	2.570
eECO	1.952
eENV	1.846
Esoc	2.459

Source: Field Survey, 2021

Table -4.3 Testing significance of weights of the second-order measurement model

Path Weight	Sample Mean (M)	Std. Dev.	T Stat	P Values	Bias	2.5%	97.5%	
eECO -> eSUS	0.378	0.362	0.022	17.362	0.000	-0.015	0.350	0.426
eENV -> eSUS	0.360	0.352	0.025	14.249	0.000	-0.008	0.319	0.421
eSOC -> eSUS	0.408	0.387	0.023	17.488	0.000	-0.021	0.382	0.456

Source: Field Survey, 2021

4.2.3: Structural Model Assessment of PPP Regulatory Framework on Projects Sustainability

After the successful assessment of the reliability and validity of the measurement (outer) models, we can now evaluate the structural (inner) model. This section reports on the assessment of the structural model. The validity assessments of the inner model were conducted. The validity assessments include multicollinearity, coefficient of determination (R^2) value of the endogenous constructs, path coefficients, and effect size (F2). In examining the collinearity issue, a VIF analysis was conducted as shown in Table 4.4. The VIF result shows that there are no collinearity issues, and the VIF value is below the threshold value of 5. This implies that the constructs were appropriately constructed and that collinearity is not a critical issue.

4.2.4. Structural Path Analysis for PPP Regulatory frameworks and Projects Sustainability

Table 4.5 presents the path analysis for the regulatory framework and PPPs project sustainability. The coefficient of determination (R^2) measures the overall effect and variance explained in the endogenous construct (dependent variable) for the structural model by the exogenous construct which is the independent variable [44]. As shown in Table 4.5, the R square value of 0.629 (coefficient of determination) indicates that the independent constructs moderately explain 62.9% of the variance in the dependent variable. This implies that 62.9% of the change witnessed in projects sustainability was due to the regulatory frameworks governing PPP projects in the study area. [44] classify R^2 values of 0.75, 0.50, and 0.25 as substantial, moderate, and weak respectively.

According to [44] effect size (F2) defines as the degree of impact of each exogenous latent construct on the endogenous construct. [31] classify the effect size values of 0.02, 0.15, and 0.35 as weak, moderate, and strong effects respectively. In addition, an F2 value less than 0.02 is regarded to have no effect [45]. Table 4.5 shows the F2 value of the PPP regulatory framework to be 1.696, and considered very strong. This implies that PPP regulatory frameworks has a very strong effect on projects sustainability in the study area. The path coefficient, which signifies the expected variation in the dependent construct for a unit variation in the independent construct is shown in Figure 4.1. In assessing the significance level of the path coefficient, a bootstrapping procedure was conducted for this study and the results are presented in Table 4.8 and Figures 4.2 and 4.3.

The results shown in Table 4.5 depicted that regulatory framework ($\beta = 0.793$; $t = 26.467$; F2 value = 1.696; $P = 0.000$, and $p < 0.05$) has a significant positive effect on projects sustainability. This implies that the regulatory frameworks established to govern PPP projects in the study area will enhance the sustainability of the projects, economically, socially, and environmentally. This implies that for every unit increase in the level of the PPP regulatory frameworks, projects sustainability will increase by 0.793. Hence, the null hypothesis (H_{01}) which states that PPP regulatory frameworks does not have a significant effect on projects sustainability in Lagos, Nigeria is hereby rejected.

It is important to note that the path of C4 (Regulatory framework provides appropriate remedies for protecting the integrity and the safety of public infrastructure) affect PPP projects sustainability mostly in the study area. This implies that it should be a policy in our various PPP projects that the sustainability of such projects depends critically on the deployment of suitable remedies for safeguarding the integrity and safety of public infrastructure.

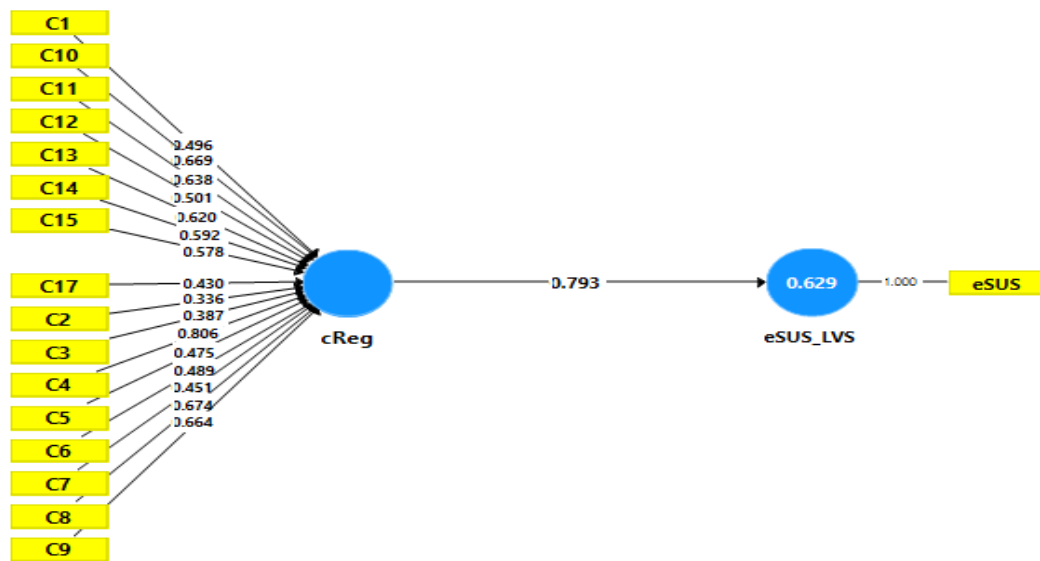


Fig. 4.2 Loadings of cReg: Algorithm of Regulatory and sustainability (SM)

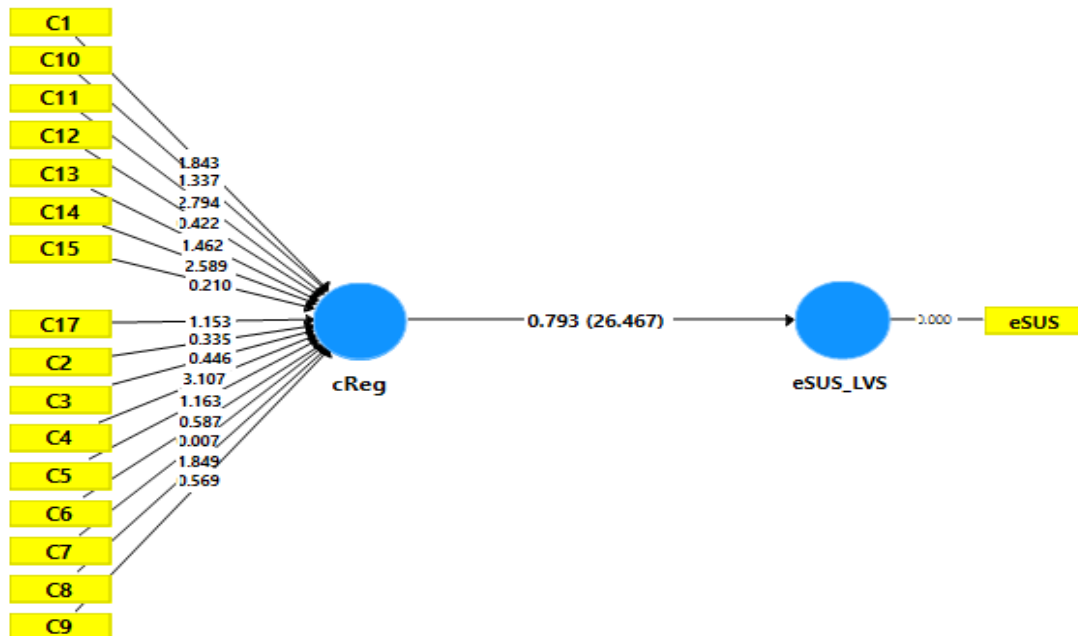


Fig. 4.3 Bootstrapping of Regulatory Framework and Projects Sustainability (Structural Model)

“This finding infers that the sustainability of PPP projects in the study area is largely dependent on the workability, enabling, and adequacy of regulatory frameworks involved in the PPP projects”. For sustainable PPP projects, this study established that it was essential to have an enabling regulatory framework. However, the application of such regulations requires sustained political support from host governments [46].

Also, a stable political environment, which promotes commitment from the host government is an essential bedrock for an effective regulatory framework. Lagos State, Nigeria is being governed by the same political party since 1999 till date. This promoted political stability in the state and continued governance. PPP projects such as the HubCo (Pakistan) and Paiton-I (Indonesia) shows that the private sector suffered from contract reneges when the government leadership changed [47]. Also, the Phu-My 2.2 project (Vietnam) experienced prolonged financing delay as the winning project consortium needed to negotiate with multiple levels of Vietnamese government organisations due to changes in political structure. While the Laibin-B project was strongly supported by the Central Government of China underwriting the contractual commitment of the Guangxi provincial government in the project [48].

All these examples show that successful PPP projects depend on long-term commitments from host governments at the central and local levels. These are required to implement PPP regulatory frameworks consistently across different levels of governmental organisations. Until such a level of PPP maturity is demonstrated, the private sector will likely continue seeking guarantees from host governments and international organisations before they commit to investments in PPP projects. This finding aligned with [49], which identified government commitment (a bedrock for an enabling regulatory framework) as important for the success of PPP projects.

This study specifically highlights the importance of a sustained long-term government commitment to implement PPP regulatory frameworks consistently across various levels of governmental organisations. Hence, PPP project stakeholders should create an appropriate regulatory framework that facilitates private investment in infrastructures such as foreign ownership flexibility and favourable tax incentives. The regulatory framework should be consistent with international standards as supported by [46].

It is well known that PPP projects are mostly infrastructure projects or public-related projects, involving a vast amount of investment and secure funding arrangements for their success. Most PPP projects became unsustainable due to the unavailability of funds during the project development phase. As an efficient procurement method for public infrastructure projects or services, the public-private partnership (PPP) approach has been widely adopted in many countries [50]. Therefore, raising sufficient funds via the debt channel is a key task for PPP sponsors and project companies amid difficult market access, leading to banks becoming the main source of funds for PPP projects [50].

[51] state that regulatory framework is among the top ten criteria that affect the bankability and success of PPP of projects. Other factors were the political environment, economic environment, and shareholders' credibility. A PPP project is considered bankable if lenders are willing to finance it [52]. Hence, the regulatory frameworks do not only influence the sustainability of a PPP projects, but it also affects its bankability.

Table -4.5 Structural Path Analysis for PPP Regulatory Frameworks and Projects Sustainability

	Original Sample (O)	Sample Mean (M)	STDEV	T Statistics	P Values	Bias	2.5%	97.5%	F2	Hypothesis	Decision
cReg -> eSUS_LVS	0.793	0.821	0.030	26.467	0.000	0.027	0.705	0.825	1.696	H0	Rejected
R Square = 0.629											
R Square Adjusted = 0.627											

Source: Field Survey, 2021

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

The study has established empirically the relationship between Public-Private Partnerships (PPPs) and projects sustainability in Lagos State, Nigeria. This research has raised awareness of the variables which are likely to determine PPP projects sustainability in an unnatural environment, with the support of Stakeholders Theory. The study also examined the effect of PPP regulatory frameworks on projects sustainability in the study area. The indicators cumulatively, showed that the respondents agreed that regulatory frameworks involved in PPP projects in the study area had significant impact on the projects, and hence its inclusion should be emphasized during PPP projects contracts formulation. The results of the regression analysis showed that PPP regulatory framework has a significant positive effect on projects sustainability in the study area.

5.2. Recommendations

Based on the findings of the research, the following recommendations are hereby proposed:

- i. Given the large number of PPP projects that are routinely carried out in the state, PPP projects stakeholders should give top priority to delivering projects that will enhance the long-term social, economic, and environmental well-being of end users in Lagos State, Nigeria.
- ii. Since the sustainability of PPP projects in the study area is largely dependent on the workability, enabling, and adequacy of regulatory framework involved in the PPP projects, PPP projects stakeholders should emphasize this factor during projects contracts formulation as it ultimately improves PPP projects implementation, management, and delivery.
- iii. The application of the enabling regulatory framework necessitates constant political backing from the government, which should be adequately provided.

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