

**EVALUATION OF GOVERNMENT PARTICIPATION IN PUBLIC
PRIVATE PARTNERSHIP PROCUREMENT SYSTEM FOR
CONSTRUCTION PROJECT DELIVERY IN NIGERIA**

By

**OJELABI, RAPHEAL ABIODUN
Matriculation Number: 15PCB00964**

JUNE, 2019

**EVALUATION OF GOVERNMENT PARTICIPATION IN PUBLIC
PRIVATE PARTNERSHIP PROCUREMENT SYSTEM FOR
CONSTRUCTION PROJECT DELIVERY IN NIGERIA**

By

OJELABI, RAPHEAL ABIODUN

Matriculation Number: 15PCB00964

B.Sc Building, University of Lagos, Akoka

M.Sc Construction Management, University of Lagos, Akoka

**A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF DOCTOR OF PHILOSOPHY IN BUILDING TECHNOLOGY
(CONSTRUCTION MANAGEMENT) IN THE DEPARTMENT OF BUILDING
TECHNOLOGY COLLEGE OF SCIENCE AND TECHNOLOGY, COVENANT
UNIVERSITY, OTA.**

JUNE, 2019

ACCEPTANCE

This is to attest that this thesis is accepted in partial fulfilment of the requirement for the award of Doctor of Philosophy in Building Technology (Construction Management) in the Department of Building Technology, College of Science and Technology, Covenant University, Ota, Ogun State, Nigeria.

Mr. John A. Phillip
(**Secretary, School of Postgraduate Studies**)

Signature and Date

Prof. Abiodun H. Adebayo
(**Dean, School of Postgraduate Studies**)

Signature and Date

DECLARATION

I, **OJELABI, RAPHEAL ABIODUN (15PCB00964)** declare that this research was carried out by me under the supervision of Prof. Olabosipo I. Fagbenle and Dr. Lekan M. Amusan of the Department of Building Technology, College of Science and Technology, Covenant University, Ota, Nigeria. I attest that this thesis has not been presented either wholly or partially for the award of any degree elsewhere. All sources of data and scholarly information used in this thesis are duly acknowledged.

OJELABI, RAPHEAL ABIODUN

Signature and Date

CERTIFICATION

We certify that this thesis titled "**Evaluation of Government Participation in Public Private Partnership Procurement System for Construction Project Delivery**" is an original research work carried by **OJELABI, RAPHEAL ABIODUN (15PCB00964)** in the Department of Building Technology, College of Science and Technology, Covenant University Ota, Ogun State, Nigeria under the supervision of Prof. Olabosipo I. Fagbenle and Dr. Lekan M. Amusan. We have examined and found the work acceptable as part of the requirement for the award of Doctor of Philosophy (Ph.D) degree in Building Technology (Construction Management).

Prof. Olabosipo I. Fagbenle
(Supervisor)

Signature and Date

Dr. Lekan M. Amusan
(Co-Supervisor)

Signature and Date

Dr. Lekan M. Amusan
(Head of Department)

Signature and Date

Prof. Issac O. Aje
(External Examiner)

Signature and Date

Prof. Abiodun H. Adebayo
(Dean, School of Postgraduate Studies)

Signature and Date

DEDICATION

This thesis is dedicated to the mighty God, the one who loves me

ACKNOWLEDGEMENTS

I am deeply grateful to the most-high God, the Ancient of days, the beginning and the end of all things, without whom I am nothing. He has consistently been my source of strength, all the glory for the successful completion of this research work goes to Him.

To the Chancellor of Covenant University, Dr. David Oyedepo, I appreciate you for the platform you provided through the University.

I equally want to appreciate the Vice-Chancellor, Prof. AAA Atayero, the Deputy Vice-Chancellor Prof Akan Basse and the Registrar Dr. Lanre Amodu for their administrative support to the School of Postgraduate Studies in making my Ph.D. program a reality in Covenant University.

Also, I salute the Dean School of Postgraduate and the Sub-Dean of School of Postgraduate Studies in the persons of Prof. Abiodun Adebayo and Prof. Obinna Nwinyi, and other members of the School for their leadership direction and support towards the completion of my Ph.D. program.

To my supervisor Prof. O.I. Fagbenle, I cherish your excellent supervision and I deeply appreciate you for your support beyond your academic obligations to me. The fatherly role you played in my life, I will never take it for granted. I am grateful to Dr. L.M. Amusan, my co-supervisor and Head of Department for your contribution in my research endeavour.

I also appreciate the contributions of the entire staff of Building Technology Department, Covenant University in the persons of Prof. T.O Mosaku, Dr. A.O. Ogunde, Dr. J.D. Owolabi, Dr. I.O. Omuh, Dr. P.F. Tunji-Olayeni, Dr. O. Joshua and Dr. A.O. Afolabi and my colleagues Mr. D. Nnduka, Mrs. B. Akinbile, Miss F. Akinbo and all the Technologists in the Department. I really appreciate you all.

To my parents, Mr. and Mrs. Ojelabi, I appreciate you for your love; your sacrifice for my academic pursuit is priceless. Thank you so much.

To my siblings, especially, my big brother Mr. Emmanuel Ojelabi, words cannot express my gratitude to you for your invaluable support to my education. I appreciate you.

To my jewel of inestimable value, my beautiful wife Mrs. Christiana Ojelabi I am saying thank you for your love, support and encouragement at all time. I love you.

TABLE OF CONTENTS

CONTENT	PAGES
COVER PAGE.....	i
TITLE PAGE.....	ii
ACCEPTANCE.....	iii
DECLARATION.....	iv
CERTIFICATION.....	v
DEDICATION.....	vi
ACKNOWLEDGMENTS.....	vii
TABLE OF CONTENTS.....	ix
LIST OF TABLES.....	xiv
LIST OF FIGURES.....	xvi
LIST OF ABBREVIATIONS.....	xvii
ABSTRACT.....	xviii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background to the Study.....	1
1.2 Statement of the Research Problem	4
1.3 Research Questions	7
1.4 Aim and Objectives of the Study	8
1.5 Research Hypotheses	9
1.6 Significance of the Study.....	10
1.7 Scope and Delimitation of the Study.....	13
1.8 Definition of Key Terms	14
1.8.1 Construction.....	14
1.8.2 Procurement.....	14
1.8.3 Social and Economic Infrastructure Projects.....	15
1.8.4 Public-Private Partnership (PPP).....	15
1.8.5 PPP Procurement System.....	15
1.8.6 PPP Process.....	15
1.9 Chapter Summary	16
CHAPTER TWO: LITERATURE REVIEW.....	17
2.1 Public Infrastructure Procurement Routes in Nigeria’s Built Environment.	17

2.1.1 Direct Labour Procurement Route	17
2.1.2 Traditional Procurement Route	19
2.1.2.1 Lump Sum Contract.....	21
2.1.2.2 Measurement Contract.....	21
2.1.2.3 Cost Reimbursement Contract.....	22
2.1.3 Design and Build procurement Route	23
2.1.3.1 Classification of Design and Build Procurement Method	24
2.1.4 Public-Private Partnership (PPP) Procurement Route	26
2.1.4.1 Types of Public-Private Partnership	29
2.1.5 PPP Process	35
2.2 Forms of Social and Economic Infrastructure Delivered through PPP Procurement Option and Reasons for its Application:	39
2.2.1 Forms of Social and Economic Infrastructure Delivered through Public-Private Partnership.....	40
2.2.2 Reasons for the Application of Public-Private Partnership Procurement Option for Public Construction Projects Delivery	41
2.2.2.1 Reasons for PPP Adoption in some Countries	45
2.3 Examination of the Existing PPP frameworks for Infrastructure Delivery.....	47
2.3.1 Infrastructure Concession Regulatory Commission (ICRC) Acts	50
2.3.2 Public Procurement Act of 2007	51
2.3.3 Bureau of Public Enterprises Act 1999	53
2.3.4 National Policy on Public Private Partnership Procurement in Nigeria	54
2.3.4.1 Objectives of National Policy on Public Private Partnership	54
2.3.4.2 Institutional Framework	56
2.3.4.3 Processes for Managing Public Private Partnership	59
2.4 Barriers to the Implementation of PPP in the Procurement of Public Infrastructure Projects	61
2.4.1 Global Challenges in the Implementation of PPP Procurement Option	62
2.5 Government’s Roles in PPP Construction Project	68
2.5.1 Legal and Regulatory Provisions.....	69
2.5.2 Policy Framework	72
2.5.3 Public Sector Capacity	73
2.5.4 Projects Preparation and Planning.....	74

2.5.5 Project Procurement and Contractual Arrangement.....	75
2.6 The Impact of Governments Role in PPP on the Private Party in the Delivery of Public Construction Project.....	76
2.7 Tabulated Summary of Empirical Studies	78
2.8 Theoretical and Conceptual Framework	89
2.8.1 Theoretical Framework	90
2.8.1.1 Social Partnership Theory	90
2.8.1.2 New Public Management Theory	93
2.8.1.3 Actor-Network Theory	95
2.8.1.4 Governance Theory	97
2.8.2 Conceptual Framework of the Study.....	99
2.9 Chapter Summary	101
CHAPTER THREE: METHODOLOGY.....	103
3.1 Research Design.....	103
3.1.1 Research Philosophy	104
3.1.2 Research Approach.....	107
3.1.3 Research Strategy.....	108
3.1.4 Methodological Choices and Time Horizons.....	108
3.1.5 Techniques and Procedures	109
3.2 Characteristics of the Population of Study.....	110
3.3 Study Area	110
3.3.1 Lagos.....	111
3.3.2 Abuja	112
3.4 Population and Sampling technique.....	113
3.5 Sample Size.....	116
3.6 Data Collection Instrument	117
3.7 Pilot Study.....	117
3.8 Validity	118
3.9 Reliability Test.....	119
3.10 Design of Data Collection Instruments.....	120
3.10.1 Section A- Background Information	121
3.10.2 Section B- Brief Description of Research Objectives	121

3.10.2.1	Forms of Social and Economic Infrastructure Delivered through PPP.....	121
3.10.2.2	Reasons for PPP Application.....	122
3.10.2.3	Barriers at Different Stage of PPP Process.....	122
3.10.2.4	Government Roles in the Adoption of PPP	122
3.10.2.5	Impact of Government Roles in PPP on Private Investors	122
3.11	Statistical Tools for Data Analysis	123
3.12	Justification of Research Objectives and Hypotheses	126
3.12.1	Objective One.....	126
3.12.1.1:	Investigate the Forms of Social and Economic Infrastructure through PPP Procurement Option.....	127
3.12.1.2:	Reasons for the Application of PPP in the Procurement of Social and Economic Infrastructure.....	128
3.12.2	Objective Two: Identifying the barriers at Different Stages of the PPP Procurement Implementation in the Delivery of Social and Economic Infrastructure.....	129
3.12.3	Objective Four: Ascertain the Importance of Government Roles and Assess its Performance in the Delivery of PPP Construction Projects.	132
3.12.4	Objective Five: Evaluating the Impact of Government Roles on Private Stakeholders in the Delivery of PPP Construction Projects in Nigeria.	135
3.12.5	Significant difference between the Private and Public Stakeholders on the Reasons for PPP Implementation for Construction Projects Procurement in Nigeria.	136
3.12.6	Significant PPP Barriers Influencing the Public and Private Stakeholders Collaboration in Social and Economic Infrastructure Delivery across the Procurement Lifecycle.....	137
3.12.7	Relationship between Importance and Performance of Government Roles Critical to PPP Implementation in Construction Projects Delivery.	137
3.13	Qualitative Data Operationalisation.....	138
3.14	Ethical Consideration of the Research.....	138
3.15	Chapter Summary.....	139
CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS.....		140
4.1	Survey Details	140
4.2	Background Information of Participants of Survey.....	140
4.3	The Forms of Social and Economic Infrastructures Procured through PPP	145
4.4	Reasons for PPP Application in the Procurement of Social and Economic Infrastructure.....	147

4.5 Barriers in the Lifecycle of Public Private Partnership Social and Economic Infrastructure Projects	158
4.6 Importance and Performance of Government Roles in PPP Procurement Implementation.....	168
4.7 Impact of Government Roles on Private Stakeholders in the Implementation of PPP Social and Economic Infrastructure Projects.....	178
4.8 Testing of Research Hypotheses	180
4.8.1 Hypothesis One	181
4.8.2 Hypothesis Two.....	183
4.8.3 Hypothesis Three.....	187
4.9 Validation of Conceptual Framework of the Study	192
4.10 Chapter Summary.....	196
CHAPTER FIVE: DISCUSSION.....	196
5.1 Discussion of Findings.....	198
5.2 Chapter Summary.....	210
CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS.....	211
6.1 Summary of Findings	211
6.2 Implication of Findings and Recommendations	213
6.3 Contributions to Knowledge	214
6.4 Areas of Further Research	215
6.5 Concluding Remark	215
REFERENCES	217
APPENDIX.....	237

LIST OF TABLES		PAGES
Table 2.1	PPP Models Adopted in Different Countries in Different Sectors.....	34
Table 2.2	Summary of Reasons for PPP Adoption.....	47
Table 2.3	Institutional Frameworks for PPP Projects in Nigeria.....	56
Table 2.4	Barriers to PPP Adoption	66
Table 2.5	Tabulated Summary of Empirical Studies	79
Table 3.1	List of PPP Projects and Partners.....	114
Table 3.2:	PPP Stakeholders Sample Size.....	117
Table 3.3	Reliability Coefficient using SPSS.....	120
Table 3.4	Operationalization of Objective One (i)	127
Table 3.5	Operationalization of Objective One (ii).....	128
Table 3.6	Operationalization of Objective Two.....	130
Table 3.7	Operationalization of Objective Four.....	133
Table 3.8	Operationalization of Objective Five	135
Table 3.9	Operationalization of Hypothesis One.....	136
Table 3.10	Operationalization of Hypothesis Two	137
Table 3.11	Operationalization of Hypothesis Three	138
Table 3.12	Operationalization of Qualitative Data.....	138
Table 4.1	Survey Response Rate.....	140
Table 4.2	Respondents Characteristics.....	141
Table 4.3	Interviewee Characteristics.....	143
Table 4.4	Forms of Social Infrastructure Delivered through PPP.....	145
Table 4.5	Reasons for PPP Application.....	147
Table 4.6	KMO and Bartlett’s Test of Reasons for PPP Adoption.....	150
Table 4.7	Component Transformation Matrix of Reasons for PPP Adoption.....	151
Table 4.8	Factor Loading of Reasons for PPP Adoption.....	153
Table 4.9	Summary of Public and Private Sector PPP Stakeholder’s response On Reasons for PPP Application.....	156
Table 4.10	Barriers at Initiation and Preparation in PPP Implementation.....	159
Table 4.11	Barriers at Approval and Bidding Phase in PPP Implementation.....	161

Table 4.12	Barriers at Implementation and Delivery Phase of PPP Procurement.....	162
Table 4.13	Barriers at Operational Phase in PPP Procurement Implementation.....	163
Table 4.14	Summary of Public and Private Sector PPP Stakeholder’s Response on PPP Lifecycle Barriers.....	165
Table 4.15	Assessment of Importance of Government Roles and Performance in PPP Adoption.....	169
Table 4.16	Impacts of Government Roles in PPP on Private Partners.....	179
Table 4.17	Mann-Whitney U Test on the Difference between the Public and Private PPP Stakeholder’s Reasons for PPP Adoption.....	181
Table 4.18	Model Summary on Impact of Barriers at Different Stages of PPP.....	184
Table 4.19	ANOVA Difference on Impact of Barriers at Different Stages of PPP.....	184
Table 4.20	Impact of Barriers at Different Stages of PPP.....	185
Table 4.21	Spearman Correlation of Relationship between Importance and Performance of Government Roles.....	191

LIST OF FIGURES	PAGES
Figure 2.1 Nigeria’s PPP Institutional Framework.....	58
Figure 2.2 Social Partnership Model	92
Figure 2.3 New Public Management Model	94
Figure 2.4 Actor Network Theory Model	96
Figure 2.5 Governance Model	99
Figure 2.6 Conceptual Framework	101
Figure 3.1 Research Onion Model.....	104
Figure 3.2 Sequential Exploratory Design Model.....	108
Figure 4.1 Scree Plot of Reasons for PPP Implementation.....	152
Figure 4.2 Framework for PPP Successful Implementation.....	193

LISTS OF ABBREVIATIONS

PPP- Public Private Partnership

ICRC- Infrastructure Concession Regulatory Commission

DB- Design and Build

BOO- Build-Own-Operate

BOT- Build-Operate- Transfer

BOOT- Build-Own-Operate-Transfer

DBOM- Design-Build-Operate-Maintain

MDAs- Ministries, Departments and Agencies

FEC- Federal Executive Council

UNECE- United Nations Economic Commission for Europe

WEF- World Economic Forum

PPIAF- Public Private Infrastructure Advisory Facility

NIAF- Nigeria Infrastructure Advisory Facility

FMOF- Federal Ministry of Finance

BPP- Bureau of Public Procurement

NPM- New Public Management

FHA- Federal Housing Authority

ABSTRACT

Public-Private Partnership procurement option has been identified by researchers as one of the procurement routes through which infrastructural provision has been enhanced in the different countries worldwide. However, the implementation of the procurement route in Nigeria is subject to questioning due to the persistent gap in infrastructural provision. Hence, to boost the PPP procurement system, the study investigated the delivery rate of the different forms of infrastructure through the PPP procurement route and reasons for the procurement application in infrastructural provision. It examined the barriers associated with the lifecycle of the PPP procurement option implementation in the delivery of social and economic infrastructure. It assessed the performance of the government on the important roles under her jurisdiction critical to the successful implementation of PPP procurement option. It evaluated the impact of the government roles in PPP on private stakeholders in the delivery of PPP public construction projects. A mixed methods research approach (quantitative and qualitative) was adopted in achieving the objectives. A well-structured questionnaire and interview guide which addressed the study objectives were used to gather the data from the targeted respondents. In a bid to identify the targeted PPP stakeholders, a purposive sampling technique was used to elicit sixty-two (62) public and private firms with PPP construction project engagement records in Lagos and Abuja. Hence, three- hundred and eighty-four (384) stakeholders were further selected through random sampling technique from the firms. Two-hundred and seventy-four (274) PPP stakeholders which represented 71% of the respondents responded to the survey. The quantitative data generated were analysed using the statistical tools which include mean, categorical regression, Mann-Whitney U, Factor analysis, severity index and Spearman rho correlation respectively. Also, the qualitative data collected was analysed with content analysis. The findings revealed that the rate of delivery of the different forms of socio-economic infrastructure which includes housing and roads is poor and the significant reasons for the implementation of the procurement option in infrastructural provisions are linked to constraint in the government infrastructural development budget and its benefits to local economic development among others. The findings also revealed the procurement system implementation. These barriers were associated with the procurement system lifecycle which include poor enabling policies at the initiation and preparation phase, non-competitive bidding at the approval and bidding phase, financial partner's lack of commitment at the implementation and delivery phase and lack of transparency and accountability at the operational phase among others. These barriers are due to the poor performance of the government in legal and regulatory provisions, project preparation and planning, policy framework, management capacity, contract arrangement and project procurement critical to PPP successful implementation. The study further revealed the impacts of the government roles in PPP on the private stakeholders as improved private stakeholder's consortium on PPPs, and increasing in private stakeholders investments among others. In conclusion, the study acclaims that the government needs to address the barriers associated with the PPP lifecycle and enhance its efficiency in the roles critical to the successful implementation of PPP in infrastructural delivery in Nigeria.

Keywords: Government, Public-Private Partnership, PPP Lifecycle, PPP Stakeholders, Procurement System, Socio-economic Infrastructure.