

# 1 **Public Private Partnerships (PPP) in the Developing World: Mitigating**

## 2 **Financiers' Risks**

### 3 **Abstract:**

4 A major challenge for foreign lenders in financing PPP infrastructure projects in an emerging  
5 market is the bankability of country-related risks. Despite existing studies on country risks in  
6 international project financing, perspectives of foreign financiers on bankability of country-  
7 specific risks in an emerging market is yet to be explored. Hence, using a mixed methodology  
8 approach to research, three PFI/PPP projects in Sub Saharan Africa (Nigeria) were used to  
9 investigate the bankability requirements for political risk, sponsor, concession and legal risks  
10 in PPP loan applications. Focus group discussions and loan documentations obtained from  
11 foreign project financiers with experience in PPP financing in Nigeria were used as sources  
12 of evidence. Results identified 22 bankability criteria for evaluating country-related risks  
13 (political risk, sponsor, concession and legal risks). These criteria were later put in a  
14 questionnaire survey to local and international project financiers with experiences in PPPs  
15 within Nigerian. Reliability analysis and significance index ranking were carried out. The  
16 significance index ranking helped ascertain the top 7 criteria influencing bankability of  
17 country-specific risks in emerging market PPPs. A conceptual "Risk and Bankability  
18 Framework" was then constructed from the findings and validated with new data from other  
19 PPP financiers in emerging markets. The proposed conceptual framework represents critical  
20 parameters for winning foreign financiers' approval for PPP loan applications from emerging  
21 market.

22

Accepted Manuscript.

Article accepted for publication in the World Journal of Science, Technology and Sustainable Development, 08/07/2019.

- 23 **Keywords:** Public Private Partnerships (PPP); Emerging Markets; Risks; Bankability,  
24 Foreign Financiers.

## 25 **1.0 Introduction**

26 Despite the huge record of project finance investments in emerging markets (EM) so far  
27 (Babatunde and Perera, 2017), financing infrastructures through Public Private Partnerships  
28 (PPP) remains risky for foreign lenders (Ameyaw and Chan, 2015). Studies such as Kayaga  
29 (2008) and Ameyaw and Chan (2015) have once attributed the associated risks to country-  
30 specific factors relating to the macroeconomic conditions of the project host nations.  
31 According to Atmo and Duffield (2014), out of all the current emerging markets (i.e. Brazil,  
32 India, Russia, Indonesia etc.); Sub Saharan Africa has a higher country-related risk  
33 perception. This situation has therefore hindered her capacity to attract sufficient foreign  
34 inflows for prosecuting her PPP infrastructure development ambitions (Briceño-Garmendia *et*  
35 *al.*, 2008). Yet, with an estimated annual investment of \$48billion finance gap required to  
36 meet current infrastructural deficit (Gutman and Chattopadhyay, 2015); PPP remains the only  
37 viable option for Sub Saharan Africa (Salawu and Fadhlín, 2015).

38

39 Several studies have argued that, foreign financiers' interested in African PPPs must pay  
40 attention towards, not only projects' commercial risks but the bankability of country-related  
41 risks (Al Khattab *et al.*, 2007; Busse, M. and Hefeker, 2007; Mills, 2010). According to  
42 Ncube (2010), bankability in PPP project financing is a big concern despite active roles of  
43 multilateral and bilateral agencies in Sub Saharan Africa. In many instances, risks associated  
44 with weak credit capacity to obtain foreign loan by indigenous sponsors usually give rise to  
45 sponsor risk (Mills, 2010). From foreign financiers' perspective, sponsor risk discourages  
46 lenders from financing or compels them to reduce the size of loan to invest in a project'  
47 (Mills, 2010). In addition, scenarios such as civil unrest, currency devaluation, leadership  
48 instability, weak legal framework for PPP etc. generate real threat of political risk in project

49 financing (Bing *et al.*, 2005, Carrieri, *et al.*, 2006; Busse and Hefeker, 2007). According to  
50 Kayaga (2008), expropriation and government repudiation of contracts seriously limited  
51 Africa's PPP growth, with 80% of PPP contracts attracting disputes and cancelled between  
52 1990 and 2004. Such cancellations usually have sustained impact on a nation's PPP initiative  
53 by dampening market confidence in government's commitments (Ncube, 2010).

54

55 One of the fundamental aspect of PPP arrangements is full compliance with project's output  
56 specifications, performance contracts and concession termination clauses (Oyedele, 2013;  
57 Khadaroo, 2014). However, given the relatively weak PPP culture, institutional and  
58 regulatory frameworks in many Sub-Sahara African economies, failures of compliance may  
59 create threats of concession related risks. With huge lender's investments usually at stake in  
60 PPPs, contractual infractions and consequent statutory deductions will jeopardize foreign  
61 financiers' investments on the such projects. Other important risk factors may emerge in form  
62 of legal or regulatory risks. In most cases, such risk arises in situations where construction or  
63 operations of PPPs contravene domestic laws of host nations, or problems relating to  
64 approval and permits of projects (Sachs *et al.*, 2007; Oyedele, 2013).

65

66 The overall consequence of these identified country-specific risk factors on foreign  
67 financiers' investments in sub-Saharan African PPPs can be quite damaging. As such, a  
68 framework for evaluating the bankability of country-related risks in PPPs within an emerging  
69 market context has been canvassed (Olsson, 2002; Atmo and Duffield, 2014; Giannetti and  
70 Ongena, 2012). Albeit, enormous literatures abound on risks in PFI/PPP generally (Bing *et*  
71 *al.*, 2005; Eaton *et al.*, 2006; Hoffman, 2008; Quiggin, 2004; Hardcastle *et al.*, 2005;  
72 Hammami *et al.*, 2006; Khadaroo, 2014). However, much of these studies have focused on  
73 projects in advanced economies like UK, Australia, Canada, US etc. (Demirag *et al.*, 2011;

74 Grimsey and Lewis, 2002; Bing *et al.*, 2005; Khadaroo, 2014). Although, few studies exist on  
75 risks in PPP in some emerging economies i.e. China, Indian, Turkey etc. (; Quiggin, 2004;  
76 Chan *et al.*, 2014; Sachs, 2007; Giannetti and Ongena, 2012), there is currently no research  
77 exploring the bankability of country-related risks in PPP projects in Sub Saharan Africa,  
78 especially from foreign financiers' perspectives. This therefore represents a significant gap in  
79 knowledge on which basis the current study emerged. The overall aim of this study is to  
80 investigate the bankability criteria and associated risk mitigation strategies used by foreign  
81 financiers to evaluate country-specific risks in PPP funding applications within emerging  
82 market context. The following objectives have been identified for the study:

- 83 1. To identify relevant lenders' bankability criteria and existing risk mitigation strategies  
84 for evaluating sponsor risk, political, concession and regulatory risks in PPP loan  
85 applications in an emerging market.
- 86 2. To confirm wider applicability and overall significance of the identified criteria  
87 towards influencing the bankability of country-specific risks in PPP funding  
88 applications.
- 89 3. To propose a "Risk and Bankability" framework model that pairs country-specific  
90 risks with bankability criteria and risk mitigation strategies under a robust platform,  
91 towards aiding foreign lenders' bankability decision.

92 The study adopts a mixed methodology approach to research (qualitative and quantitative). In  
93 other to identify relevant bankability criteria and risk mitigation strategies for evaluating  
94 country-specific risks in PPP loan applications in an emerging market, multiple case studies  
95 were investigated. The case studies comprised PPP projects in Nigeria that were financed  
96 with significant amount of foreign loans. Besides being an emerging market (classified by the

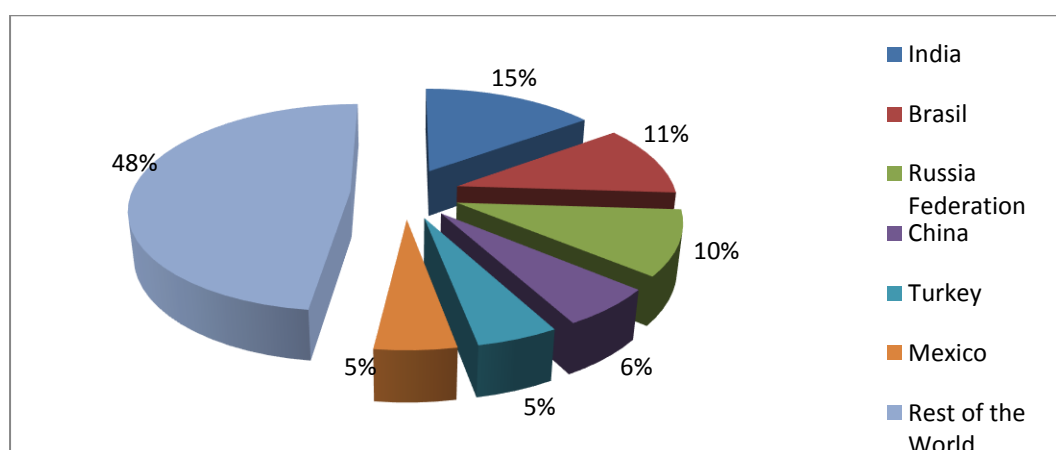
97 World Bank as a MINT nation) and located in sub Saharan Africa, the choice of Nigeria for  
98 PPP case studies was based on her increasing portfolio of PPP projects in the region.  
99 Exploring the subjective views of foreign project financiers was therefore carried out via  
100 focus group discussions and document analysis. Wider applicability of the qualitative  
101 findings was confirmed using questionnaire survey to both local and international project  
102 financiers with involvement in Nigeria's PPP projects. A "Risk and Bankability" framework  
103 was thereafter developed from the overall findings and validated with new data from project  
104 financiers. This model provides a valuable mind-map for foreign financiers and project  
105 sponsors desirous of investing in PPPs in an emerging market. The paper is laid out under  
106 four major sections. Sections 2 and 3 focus on literature review. Section 4 discusses the  
107 research methodology and described the three PPP projects' used as case studies from  
108 Nigeria. Section 5 presents the qualitative and quantitative data analysis (from focus group  
109 discussions and questionnaire survey), while section 6 discusses the general findings from the  
110 study. The last section of the paper concludes the study.

## 111 **2.0 PFI/PPP Infrastructure Developments in Emerging Markets**

112 Since its proliferation in November, 1992 in the United Kingdom under the name Private  
113 Finance Initiatives (PFI), the application of PPP have crossed bilateral and multilateral  
114 borders with private sector-led developmental initiatives (Oyedele, 2013, Demirag *et al*;  
115 2011). According to Atmo and Duffield (2014), the last ten years have witnessed a significant  
116 drive towards private participation in the delivery of infrastructures especially in developing  
117 economies. The increasing provision of public utilities through public private partnerships  
118 have made vital infrastructures such as schools, prisons, hospitals, power plants, bridges, toll  
119 roads etc. possible in emerging economies. In a recent study by Hammami *et al.* (2006), the

120 World Bank is reported to have estimated that 20% of global infrastructure investments  
121 amounting to US\$850billion were financed during the 1990s through the PPP strategy in  
122 emerging economies.

123 Additionally, recent findings culled from Thomson Reuters PFI database confirmed that the  
124 volume of non-recourse project finance deals in emerging economies reached an all-time high  
125 in 2010. More than 200 deals were struck, with a total capital outlay of over US\$130bn  
126 across the BRICs (Brazil, Russia, India and China); Europe and the next frontier economies  
127 in Africa, Asia, Middle-East and Latin America. However, despite recent popularity, there  
128 are mixed fortunes for PPP in emerging markets, considering the significant differences in  
129 performances among the EM nations i.e. China, Hong Kong, Taiwan, India, Indonesia,  
130 Malaysia, the Philippines, Brazil, Singapore, Sub Saharan Africa etc. (Cavusgil, 1997;  
131 Ramamurti and Singh, 2009). Currently, Africa's public sectors still retain the lion's share of  
132 infrastructure financing (Briceño-Garmendia *et al.*, 2008). Whereas private-sector led  
133 infrastructure finance in Sub-Saharan Africa is still limited to about 5% -10% growth with an  
134 annual \$48billion financing gap as at 2012 (IFC Report, 2013), the so-called BRIC nations  
135 accounts for 62% of private-sector led infrastructure investments, with 60% growth trend as  
136 at 2008 (Basilio, 2011). See Fig.1 below for distribution of investment in infrastructures  
137 among BRICs and other nations across the globe.



138

139 *Fig.1 Geographical spread of investments in infrastructure projects in BRICs nations as at 2008 Source:*  
140 **Basilio (2008)**

141 From another perspective, PPP infrastructure procurement in Nigeria has gathered  
142 momentum in the last decade, with over 25 infrastructure projects being executed across state  
143 and federal levels (Solomon *et al*, 2015). Since the first wave of PPP projects in Nigeria  
144 which was kick-started with the rebuilding of the Murtala Mohammed Airport (MM2) project  
145 in 2003 (Ibem, 2010), several major infrastructure projects have been procured through PPP  
146 (Mudi *et al*, 2015). As of now, recent statistics show that about N10trillion has been invested  
147 in various PPP projects by different levels of government in the country (Solomon *et al.*,  
148 2015). However, despite the current efforts, Nigeria remains behind many other emerging  
149 market economies in terms of infrastructural deficit (New telegraph, March 21<sup>st</sup>, 2018).  
150 Recent statistics suggest an annual infrastructure investment of between \$12 and \$15billion  
151 for the next six years is needed in order to meet Nigeria's growing infrastructural deficit  
152 (Emmanuel, 2016; New telegraph, March-2018).

153

### 154 **3.0 Risk in PPP Infrastructures in Nigeria**

155 In a study by Royal Society (1983, p.22) cited in Demirag *et al.* (2011), risk is described as  
156 the probability that a specific adverse event will happen at a particular period of time. Risk is  
157 also referred to as the possibility that an event, its resulting impact and dynamic interaction  
158 turns out against anticipated outcome (Bing *et al.*, 2005). Wang *et al.* (2004) classified risks  
159 in PPP projects into internal and external risks. While internal risks are common with every  
160 project such as design risk, construction risk, operation and maintenance risks among others,  
161 external risks are negative uncertainties arising due to project's interaction with the

162 environment. Examples of external risks in PPP projects include regulatory risk, concession  
163 risk, currency or foreign exchange risk, political or social uncertainties, reputational risk  
164 among others (Akintoye *et al.*, 2015; Oyedele, 2013).

165

166 According to Liu *et al.* (2016), although external risks abound in most projects regardless of  
167 where they are being delivered, the severity of external uncertainties is higher in emerging  
168 market PPP projects. For example, a country like Nigeria which is an emerging economy and  
169 currently at the lower-level of PFI/PPP maturity model has been bedevilled by a lot of  
170 country-related risk factors (Osei and Chan, 2015). As argued by Akintoye *et al.* (2015), apart  
171 from challenges of packaging bankable PPP projects, Nigeria is faced with problems like  
172 politicization of concession contracts, non-competitive bidding, and land acquisition  
173 problems. In another related study, Opawole and Jagboro (2016) bemoaned the lack of  
174 demarcation of responsibilities among parties in Nigeria's PPP projects. According to them,  
175 Poor clarity in duties results in government performing the duties of private contractors  
176 which may lead to project failure (Opawole and Jagboro, 2016). While examining barriers to  
177 PPP development in Nigeria, Solomon *et al.*, (2015) also suggested foreign exchange risk,  
178 high country risk perception, weak risk assessment and management as challenges that need  
179 improvement in order to strengthen Nigeria's PPP market. Dominic *et al.* (2015) argued for  
180 better risk allocation that will strengthen service efficiency, including adequate risk transfer  
181 to the private sector party for successful PPP implementation in Nigeria. Similarly, Salawu  
182 and Fadhlin (2015), whilst assessing risk management maturity of Nigerian PPP contractors  
183 condemned the overall risk management maturity level of local contractors. According to the  
184 authors, higher risk assessment maturity level is needed to enable improved project  
185 performance and reduced uncertainties in project outcomes. Kwofie *et al.* (2016) aligned with

186 above perspective by suggesting effective risk assessment and stakeholder analysis as  
187 essential factors for improving the low social acceptability of many Nigerian PPP projects.

188

189 Albeit, Nigeria's Infrastructure Concession Regulatory Commission (ICRC) at the federal  
190 level, including some few states (Lagos, Rivers, Cross-River etc.) have made serious strides  
191 in some aspects of PPP such as project development and preparation, regulation and market  
192 awareness. However, more needs to be done in terms of, not only improving Nigeria's  
193 infrastructure portfolio, but also the investment climate for PPP financing to thrive. As such,  
194 attracting foreign financiers to PPP opportunities in Nigeria will require more effective  
195 approaches in areas of enabling risk awareness, identification, assessment and management.  
196 This will ultimately have huge impact on PPP growth in Nigeria and also ensure that more  
197 bankable projects that can attract both local and foreign investors are packaged.

198

#### 199 **4.0 Methodology**

200 In order to explore the subjective opinions of foreign PPP financiers while also confirming  
201 wider applicability of such views, a 'Mixed Methodology Approach' was employed for the  
202 study. With mixed methodology, the research team collected both qualitative and quantitative  
203 data towards to addressing the research problem (Creswell, 2013). The qualitative phase of  
204 the study commenced with multiple case study exploration of three (3) PPP projects in  
205 Nigeria. The adoption of case study strategy was based on the unique nature of PFI/PPP  
206 projects in which every project is not the same. Additionally, the choice of Nigerian PPP case  
207 studies was hinged on her status as an emerging market with growing portfolio of PPP  
208 projects in Sub Saharan Africa. However, considering the need to capture diverse opinions of  
209 project financiers across various types of PPP projects while also bracketing out

210 presuppositions about the phenomenon (Feagin *et al.*, 1991; Yin, 1994), the study  
211 investigated three different types of PPP projects' case studies. A purposive sampling  
212 strategy was employed, in order to identify suitable case study projects as well as  
213 information-rich participants. Also known as "*Judgement Sampling*" (see, Coviello and  
214 Jones, 2004), purposive sampling strategy involves deliberate search for informants, based on  
215 defined qualities that they possess (Yin, 1994). This sampling approach allowed the research  
216 team to leverage on her network of contacts within Nigeria's PPP industry to identify  
217 participants and access suitable PPP case studies. Studies such as Grimsey and Lewis (2002),  
218 Oyedele (2013); Bing *et al.* (2005) and Eaton (2006) have all adopted similar sampling  
219 method within the realm of PFI/PPP literatures.

220

221 In more specific terms, the study considered the following criteria in selecting appropriate  
222 PPP projects' case studies for the research:

- 223 i. Selection of Nigerian PPP projects wholly or partly financed by international  
224 financiers.
- 225 ii. Availability of evidence-based financing decisions right from funding applications  
226 stage by project sponsors, up till financiers' decision to fund the project;
- 227 iii. willingness of financiers' team to partake in the study; and
- 228 iv. Availability of at least three accessible informants (experienced staff in foreign  
229 lenders' project finance team), who have been centrally involved in reviewing the  
230 PPP funding applications of the selected PPP projects' case studies.
- 231 v. Study to examine any three PPP projects executed in Nigeria between 2003 until  
232 2014.

233

234 Based on the above criteria, the three case studies that fulfilled the requirements were a PPP  
235 Power Project in South West Nigeria, a PPP Seaport Expansion and Maintenance Project in  
236 South West Nigeria and a PPP Hospital Project in South-South of Nigeria. While the PPP  
237 power project is a 10-year concession valued at \$25.5 million, the seaport expansion project  
238 was contracted on 25-year concession with a project value of \$60 million. The hospital  
239 project in South-South Nigeria is a 10-year concession project with a value of \$37 million  
240 (see Table 1 for the nature and attributes of the three PPP case study projects). Going further,  
241 after careful selection of the case studies and research participants, the study conducted three  
242 (3) focus group discussions which were supported with evidences from loan documentations  
243 from project financiers' for qualitative data collection (also see Table 1 for attributes of focus  
244 group discussion participants). This was achieved after reaching a non-disclosure agreement  
245 with the project financiers especially restrictions with respect to revealing vivid information  
246 capable of giving out the financiers identity as well as detailed project description.  
247 Participants in the focus group discussions comprised financial risk managers, senior credit  
248 analysts, heads of structured finance divisions etc. While the focus group discussions  
249 facilitated in-depth understanding of lenders' shared opinions concerning the phenomenon,  
250 less-sensitive loan documentations were used to confirm the claims made by financiers  
251 during the focus group discussions. The focus group discussions lasted an average of 55mins  
252 and were tape recorded, transcribed and later analysed using Nvivo10 Software. Various  
253 codes and nodes were assigned to different emergent themes within the data while carrying  
254 out a thorough thematic analysis. Twenty-two (22) criteria relevant for evaluating the  
255 bankability of sponsor risk, political, legal and concession risks were unravelled. This was in  
256 addition to identifying some risk mitigation strategies used by project sponsors in most loan  
257 applications. Other sub-risk components emerging from the major risk factors during the  
258 process of due diligence appraisal were also uncovered.

Accepted Manuscript.

Article accepted for publication in the World Journal of Science, Technology and Sustainable Development, 08/07/2019.

259

260

**Table 1: Attributes of PPP Case Study Projects and Focus Group Discussion Participants**

| Characteristic of Focus Group Discussion Participants      | Case Study A   | Case Study B   | Case Study C   |
|--|--|--|--|
| <i>No. of Participants</i>                                 | 3  | 2  | 4  |
| <i>Average Experience in Emerging Market PPP financing</i> | 7  | 5  | 8  |
| <i>Average PFI/PPP Experience in Nigeria</i>               | 3  | 3  | 6  |
| <b>Project Types involved in by lenders:</b>               |  |  |  |
| ▪ <i>Power Project</i>                                     | 1  | 1  | 2  |
| ▪ <i>Road Project</i>                                      | 2  | 2  | 3  |
| ▪ <i>Port Project</i>                                      | 1  | 1  | 1  |
| ▪ <i>Hospital Project</i>                                  | 2  | 1  | 2  |
| <b>Project Nature and Description</b>                      | <p><b><u>Power Project</u></b></p> <p>This project is a 10-year concession contract for the development and maintenance of an independent power plant in Nigeria under a Build Operate and Transfer (BOT) arrangement. The power project, which cost about \$25.5million, was constructed to generate 12.15megawatts of electricity. This was aimed at providing uninterrupted electric power for two water plants both with combined installed capacity of 115million gallons of potable water per day. The project also included the construction of a 13km gas grid connected to the power plant and designed to expand water supply capacity to 85%, as against the initial 40% capacity of the project. The project facility also included a 10year Power Purchase Agreement (Offtake contract) with the government. With the Power Purchase Agreement, the project secured a long-term regular purchase of generated electricity with the water department arm of the public sector client. The project was said to have boosted revenue generation and reduced carbon emissions in the region by 30%.</p> | <p><b><u>Sea Port Expansion Project</u></b></p> <p>This project is a seaport PPP concession contracted under a Build Own Operate Transfer (BOOT) model. The two phased development project involved the construction of a new 220mt harbour, flooring of 220, 000sqmeter area and the provision of other physical as well as IT infrastructures to the terminal. The project which was estimated at \$60million (N9.6billion) was to run under a 25year concession agreement by the private sector, with a regular royalty arrangement with the public sector client. The second phase of the project also included the construction of a 200mt harbour and the reclamation of another 40,000sqm of the terminal area. The project was also targeted to produce about 300 direct jobs while contributing additional 1000 indirect job to the national workforce.</p> | <p><b><u>Hospital Project</u></b></p> <p>This project is a Hospital project delivered under the Design, Build, Finance and Operate (DBFO) model. The facility was designed to accommodate about 105-hospital beds and serves as referral hospital. Estimated at a value of about \$37million, this facility was procured on a Turnkey basis with 24hours operation and maintenance being undertaken by a group of health consortium. The project is run under a 10-year concession agreement and will ensure the provision of quality and affordable access to regional level clinical services. The facility is also expected to provide advanced secondary clinical and diagnostic services to the populace within its geographical location. An estimated 60,000 patients per annum is expected to patronise the hospital facility.</p> |

Accepted Manuscript.

Article accepted for publication in the World Journal of Science, Technology and Sustainable Development, 08/07/2019.

262

263 The second phase of the study involved questionnaire survey developed from findings from  
264 the focus group discussions and loan documentations. This ensured validity and wider  
265 applicability of results from the qualitative findings (Oyedele, 2013). The survey targeted  
266 wider audiences of local and international project financiers who have been involved in  
267 structuring financial packages for PPP projects in Nigeria. Questionnaires were distributed  
268 using a snowball sampling approach. As such, the research team built on referrals from their  
269 existing contacts among local and international project financiers as well as other subject  
270 matter experts involved in PPP financing in Nigeria. The survey respondents comprised  
271 senior lenders, financial consultants and infrastructure finance and investment firms. A pilot  
272 study involving three separate financiers and two academics with an average of 7years prior  
273 experience in PFI/PPP project finance was conducted. The study implemented their  
274 feedbacks, which included shortening of sentences and rewording of questions to develop the  
275 final questionnaire. In the final questionnaire, respondents were asked to rank the perceived  
276 importance of each identified criterion on the bankability of the country-specific risks in PPP  
277 funding applications from an emerging market. This was done with the aid of a five-point  
278 Likert Scale in which; 5 represented “Most Important” while 1 represented “Not Important”.

279

280 The questionnaire survey was distributed to respondents via email and was accompanied by a  
281 letter of introduction detailing the objective of the study. Two hundred and fifty (250)  
282 questionnaires were distributed in all, out of which 173 were returned after several reminder  
283 emails from June 2013 to March 2015. The rate of response represents 69.2% of total  
284 distributed questionnaires. The return rate was considered suitable for analysis owing to the  
285 claim by Oyedele (2013) that survey results lower than 30 to 40% could be considered of  
286 little significance and biased. Out of the returned questionnaires, twenty-seven (27) were  
287 incomplete and so rejected, leaving us with 146 (58%) usable questionnaires from senior

288 lenders, infrastructure finance experts and financial advisory consultants. Among the  
289 questionnaire respondents, 71 were senior lenders, 49 of them were infrastructure finance  
290 experts while the remaining 26 were financial advisory consultants (see Table 2 for  
291 demographics of survey respondents). On average, all the respondents have 11.7years of  
292 experience in project financing in emerging economies. With the aid of Statistical Package  
293 for Social Sciences (SPSS), the result of the survey was analysed. Reliability analysis to  
294 determine whether the variables were true measures of the construct was carried out. This  
295 was then followed by correlation analysis and significance index ranking to ascertain the  
296 subjective importance (based on lenders' perception) of each bankability criterion identified  
297 in the study. Results from the study were later used to develop a "Risk and Bankability  
298 Framework". However, in order to ensure reliability and validity of the proposed framework  
299 model, the study validated it with three new PPP Projects in Nigeria. The three projects  
300 comprised a \$25 million Waste to Energy PPP project in south west of Nigeria, a \$703  
301 million BOT Bridge project in South East/South-South of Nigeria as well as a \$150 million  
302 PPP port project in South West Nigeria. Using snowball sampling, the research team built on  
303 referrals from their exiting contacts to access new international project finance experts  
304 involved in these projects. The study obtained less-sensitive loan documentations from the  
305 financiers to validate the model.

306

307

**Table 2: Demographics of Respondents in the Survey.**

308

| Variables  | Sample Size |
|--|-------------|
| <b><i>Total Number of Respondents</i></b>                | 146         |
| <b><i>Type of Organisation</i></b>                       |             |
| ▪ Senior lenders (Staff Members of banks)                | 71          |
| ▪ Infrastructure Financiers                              | 49          |
| ▪ Financial Advisory                                     | 26          |
| <b><i>Years of Experience in PPP Project Finance</i></b> |             |
| ▪ <1   | 3           |
| ▪ 1-5  | 35          |
| ▪ 6-10   | 47          |
| ▪ 11-15  | 33          |
| ▪ 16-20  | 21          |
| ▪ >20  | 7           |

309

## 310 **5.0 Data Analysis and Findings**

311

312 This section presents analysis of qualitative and quantitative findings from the study. It  
 313 commences with the qualitative analysis of loan documentations and focus group discussions  
 314 conducted with foreign lenders involved in financing PPP projects in Nigeria. Immediately  
 315 following the qualitative analysis is the quantitative analysis of questionnaire survey  
 316 distributed to wider audiences of local and international project financiers as well as other  
 317 subject matter experts involved Nigeria's PPPs and other emerging economies.

### 318 **5.1 Qualitative Data Analysis**

319 The data analysis commenced with the qualitative aspect of the study. The focus group  
 320 discussions transcripts were analysed using Nvivo 10 software. The author set out to  
 321 investigate suitable criteria influencing the bankability of four major risks (sponsor risk,  
 322 political, concession and regulatory risks) common with emerging market PPPs. Thematic  
 323 analysis of data transcripts was carried out using various coding and nodes. After exhaustive

324 analysis, 22 relevant criteria influencing bankability of political risk, sponsors, concession  
325 and regulatory risks were unravelled (see, Table 3 for bankability criteria and some  
326 mitigations strategies for evaluating country-related risks in PPPs). These bankability criteria,  
327 as argued by most focus group discussants, are crucial towards influencing bankability of the  
328 identified risks and foreign lenders' loan approval for PPPs in an emerging market.

329

330 In addition, the qualitative analysis also produced a couple of existing risk mitigation  
331 strategies often put forward by project sponsors in PPP loan applications in emerging  
332 economies, coupled with various sub-risk components resulting from the four major risk  
333 factors (Sponsors risk, political, concession and regulatory risk). According to many of the  
334 participants, where PPP loan applicants had offered risk mitigations that are not considered  
335 critical to bankability by the lenders, such mitigation strategy only give "more advantage" to  
336 the lenders. However, the important bankability criteria to lenders are clearly and explicitly  
337 requested from project sponsors (See Table 3).

338 *Table 3: Analysis of Lenders' Bankability Criteria Adopted for Evaluating for Case Studies*

339

340

341

**Table 3: Analysis of Lenders' Bankability Criteria Adopted for Evaluating for Case Studies**

| Risk Factors (RF)                  | Risk Mitigation Strategies Proffered by Project Sponsors   | Lenders Bankability Criteria for Project Appraisal   | Case Study A | Case Study B | Case Study C |
|------------------------------------|--|--|--------------|--------------|--------------|
|                                    |  |  | Focus Group  | Focus Group  | Focus        |
|                                    |  |  | (1)          | (1)          | (1)          |
| <b>Sponsor Risk</b>                | Sponsor presents full financial guarantee.   | More Advantage   | ✓            | ✓            |              |
|                                    | Sponsor's background check, credit history and experience in project finance contracts                     | Sponsors with track record of successful project finance contracts delivered on schedule and within budget | ✓            | ✓            | ✓            |
|                                    | 3rd party debt guarantee in form of corporate/Bank guarantee   | Bank-financed guarantee facility or Pre-completion Guarantee.  |              | ✓            | ✓            |
|                                    | Not Provided/Negotiated  | Mix of management skills and experience demonstrated by or available to the sponsors                       | ✓            | ✓            | ✓            |
|                                    | Not Provided/Negotiated  | Sponsor with well-established relationship with a lender   | ✓            |              | ✓            |
|                                    | Front-ended equity contribution  | Satisfactory Equity contribution by the sponsor  | ✓            | ✓            | ✓            |
|                                    | Not Provided/Negotiated  | Equity contributions must be available either in cash or in a blocked account.                             |              | ✓            |              |
| <b>Country/<br/>Political Risk</b> | Supervision of emerging market risk exposure by Lenders' home country's Central Bank.                      | More Advantage   |              | ✓            | ✓            |
|                                    | Bank's Internal Country Risk committee to periodically determine appropriate levels of country risk limits | Transfer of Political Risk to Export Credit Agency (ECA)   | ✓            | ✓            |              |
|                                    | Country/Political risk insurance from private sector insurers  | Country Capacity/Political Risk Insurance from private sector insurance                                    | ✓            |              |              |
|                                    | Not Provided/Negotiated  | Raising a part of the project loan from banks in the host country may reduce currency risk.                | ✓            |              | ✓            |
|                                    | World Bank Backed Project  | Multilateral-Backed loan facility  | ✓            | ✓            |              |
|                                    | Not Provided/Negotiated  | "Preferred Creditor status" to the MLA   |              | ✓            | ✓            |

| Risk Factors (RF)      | Risk Mitigation Strategies Proffered by Project Sponsors                                | Lenders Bankability Criteria for Project Appraisal  | Case Study A | Case Study B | Case Study C |
|------------------------|---|---|--------------|--------------|--------------|
|                        |   |   | Focus Group  | Focus Group  | Focus        |
|                        |   |   | (1)          | (1)          | (1)          |
|                        | Sponsor to be responsible for obtaining necessary permit and approval                   | Existence of operational permit and approval from the public sector                       | ✓            | ✓            | ✓            |
| <b>Legal Risk</b>      | Pre-construction environmental impact assessment  | Social and Environmental Due diligence  | ✓            | ✓            | ✓            |
|                        | Compliance with Equator Principles  | Compliance with Equator Principles  | ✓            | ✓            | ✓            |
|                        | Sponsors to bear legal risk   | Legal Risk to be borne by sponsor   | ✓            | ✓            | ✓            |
|                        | Not provided  | Annual Reporting of EP's application  |              | ✓            |              |
| <b>Concession Risk</b> | Concession risk to be borne by project sponsors   | Concession risk to be transferred to the SPV  | ✓            | ✓            |              |
|                        | Risks arising from performance failure deductions will be transferred to O&M contractor | O&M contractor to bear performance failure risks  | ✓            | ✓            | ✓            |
|                        | Project Grantor identified and has capacity for approvals                               | Identity of Grantor and its approval capacity must be known                               | ✓            | ✓            | ✓            |
|                        | Not Provided/Negotiated   | Direct Agreement with project grantor and other project contractors and sub-contractors   |              | ✓            |              |
|                        | Not Provided/Negotiated   | Debt repayments to terminate one or two years before the expiry of concession contract    | ✓            | ✓            |              |
|                        | Not Provided/Negotiated   | Security rights over SPV's insurance policies, Cash flows and other corresponding assets. | ✓            | ✓            | ✓            |
|                        | Not Provided/Negotiated   | Right of lenders to replace O&M Contractor  | ✓            | ✓            | ✓            |

342 Based on evidences from the study, "**More Advantage**" indicates that the corresponding risk mitigation strategy proposed by the sponsors were not essential but offer more advantage to lenders.  
343 "**Not Provided/Negotiated**" indicates that project sponsors did not provide the required bankability criteria from lenders, but rather negotiated such criteria with by offering other mitigations.  
344

## 345 **5.2 Quantitative Data Analysis**

### 346 *Reliability Analysis*

347 Since one of the major objectives of this study is to confirm the wider applicability of the  
348 various bankability criteria unravelled through the qualitative study, statistical analysis of the  
349 questionnaire survey to financiers was carried out. As argued by many social scientists  
350 (Spector, 1992; Field, 2005; Santos, 1999), when using Likert Scale questionnaire, a  
351 Cronbach's alpha coefficient of reliability must be calculated. Reliability analysis facilitates  
352 validity and wider applicability of the bankability criteria, while ensuring the criteria  
353 represents true measures of the construct (bankability of the four major risks in PPP loan  
354 application from an emerging market). Cronbach's Alpha is mathematically written as:

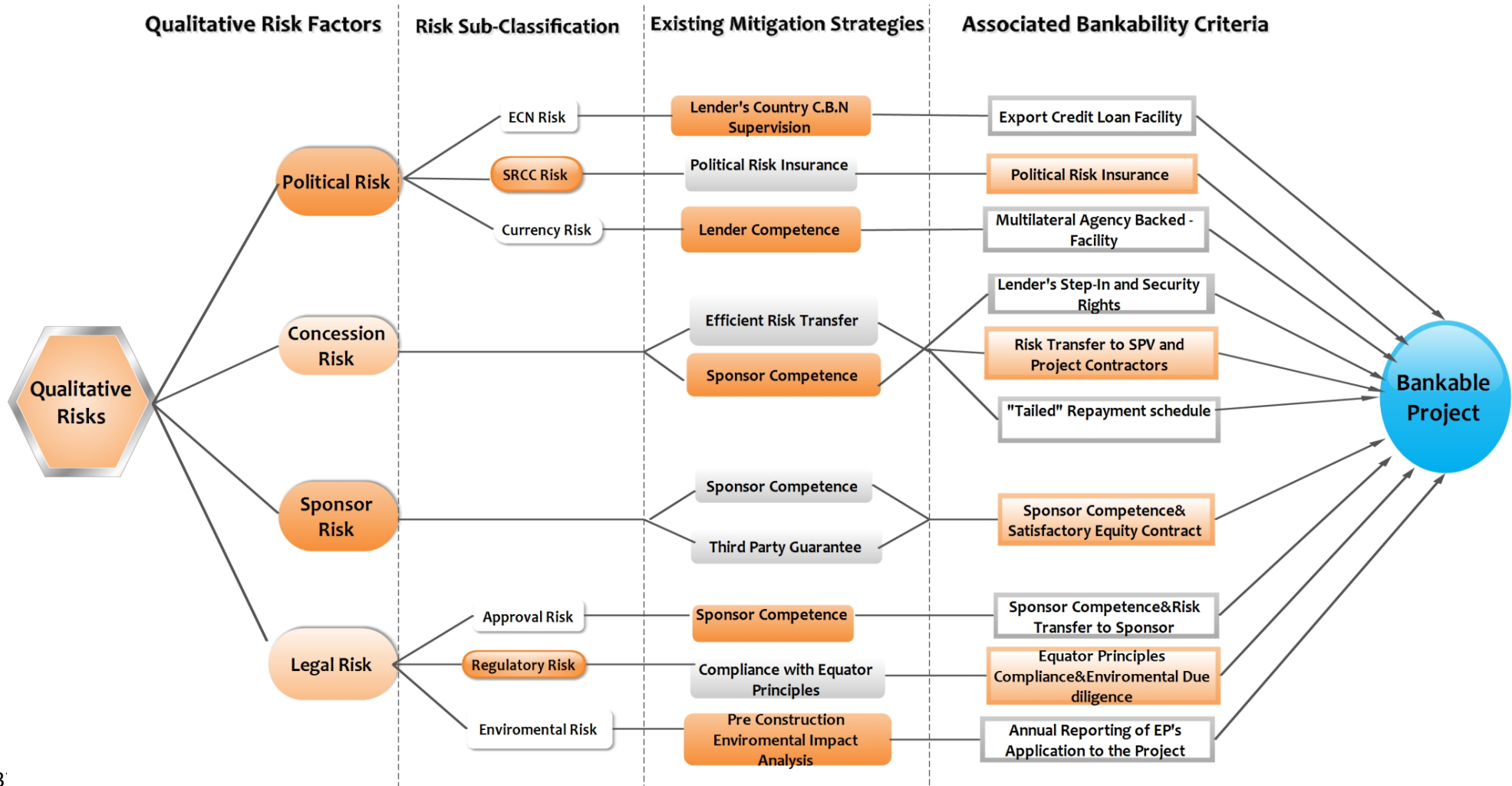
$$355 \alpha = \frac{N^2 \overline{COV}}{\sum_{factor} S^2 + \sum COV_{factor}}$$

356 Where N = the total number of criteria; COV = average covariance between criteria;  $S_{factor}$  =  
357 variance of each criterion; and COV factor = covariance within a criterion. Since the rule of  
358 thumb in Cronbach's alpha coefficient is usually between 0 and 1; a value of 0.7 was  
359 considered acceptable (George and Mallery, 2003), while a value of 0.8 suggests strong  
360 internal consistency. Using the Statistical Package for Social Sciences (SPSS) software tool,  
361 the Cronbach's alpha coefficient for this study was 0.745 (see Table 4 for Reliability Analysis  
362 results). This demonstrated good internal consistency and reliability of most of the  
363 bankability criteria. Additionally, in order to ascertain whether all the bankability criteria are  
364 truly contributing to internal consistency of the construct, the fifth column of Table 4 labelled  
365 "Cronbach's alpha if item deleted" was examined. According to George and Mallery (2003),  
366 any criterion that is not contributing to the overall reliability of the data, will have its  
367 Cronbach's alpha coefficient higher than the overall coefficient (0.745).

**Table 4: Reliability Analysis and Significance Ranking of Bankability Criteria**

| Risk Factors (RF) |      | Lenders Bankability Criteria for Evaluating PFI/PPP Loan Application in an Emerging Market Project  | Corrected Items: total correlation | Cronbach's $\alpha$ if items deleted | Significance Index (%) | Ranking within Group | Overall Ranking |
|-------------------|------|---|------------------------------------|--------------------------------------|------------------------|----------------------|-----------------|
| Sponsor Risk      | BC1  | <b>Sponsors with track record of successful project financing, strong credit quality and financial capacity</b>                                   | 0.608                              | 0.721                                | 85.10                  | 1                    | 4               |
|                   | BC2  | <b>Bank-financed guarantee facility or Pre-completion guarantee</b>   | 0.308                              | 0.736                                | 84.11                  | 2                    | 10              |
|                   | BC3  | Mix of management skills and experience demonstrated by or available to sponsors  | 0.544                              | 0.719                                | 69.10                  | 5                    | 18              |
|                   | BC4  | Sponsor with well-established relationship with a lender  | 0.512                              | 0.718                                | 70.23                  | 4                    | 17              |
|                   | BC5  | <b>Satisfactory equity contribution by the sponsors</b>   | 0.450                              | 0.730                                | 84.03                  | 3                    | 11              |
|                   | BC6  | Equity contribution must be available either in cash or in a blocked account  | 0.568                              | 0.727                                | 55.65                  | 6                    | 20              |
| Political Risk    | BC7  | <b>Full Transfer of political risk to export credit agency (ECA)</b>  | 0.333                              | 0.736                                | 85.32                  | 1                    | 1               |
|                   | BC8  | <b>Country capacity/political risk insurance from private sector insurer</b>  | 0.310                              | 0.737                                | 76.41                  | 4                    | 14              |
|                   | BC9  | Raising part of the project loan from indigenous banks in project host nation to reduce currency risk   | 0.510                              | 0.738                                | 59.01                  | 5                    | 19              |
|                   | BC10 | <b>Multilateral Agency-Backed Loan facility</b>   | 0.377                              | 0.720                                | 85.21                  | 2                    | 2               |
|                   | BC11 | <b>“Preferred Creditor Status” granted by the MLA to participating banks</b>  | 0.359                              | 0.738                                | 81.15                  | 3                    | 12              |
| Legal Risk        | BC12 | <b>Existence of Operational permit and approval from the project grantor</b>  | 0.314                              | 0.733                                | 85.01                  | 1                    | 5               |
|                   | BC13 | <b>Social and environmental due diligence</b>   | 0.378                              | 0.740                                | 84.43                  | 2                    | 8               |
|                   | BC14 | <b>Compliance with Equator Principles</b>   | 0.388                              | 0.746                                | 84.15                  | 3                    | 9               |
|                   | BC15 | Annual reporting of Equator Principles implementation on the project  | <b>0.114*</b>                      | <b>0.820*</b>                        | 51.24                  | 4                    | 22              |
| Concession Risk   | BC16 | <b>Concession risk to be transferred to the project company</b>   | 0.484                              | 0.725                                | 72.15                  | 5                    | 15              |
|                   | BC17 | <b>Direct contractual relationship between lenders and project grantor, as well as other project contractors and sub-contractors respectively</b> | 0.529                              | 0.721                                | 84.70                  | 2                    | 6               |
|                   | BC18 | <b>Security rights over project company's insurance policies, cash flows and other income generating contracts as well as assets</b>              | 0.540                              | 0.723                                | 84.49                  | 3                    | 7               |
|                   | BC19 | Identity of project grantor and her approval capacity must be ascertained   | 0.507                              | 0.726                                | 85.12                  | 1                    | 3               |
|                   | BC20 | Debt repayments to terminate one or two years before the expiration of concession   | <b>0.217*</b>                      | <b>0.771*</b>                        | 54.11                  | 7                    | 21              |
|                   | BC21 | Right of lenders to replace operations and maintenance contractor   | 0.554                              | 0.745                                | 71.04                  | 6                    | 16              |
|                   | BC22 | Operations and Maintenance contractor to bear performance failure risks   | 0.388                              | 0.718                                | 79.17                  | 4                    | 13              |

371 Cronbach's alpha ( $\alpha$ ) coefficient for overall reliability of the data is 0.745; Bankability Criteria coefficient marked (\*) represent items deleted; BC means Bankability Criteria  
 372



*Fig.2: Framework for Risks, Mitigation Strategies and Associated Bankability Criteria*

375

376 This suggests that such higher value for a criterion, if deleted, would improve the overall reliability  
377 of the entire data set (Field, 2005). Based on this rule, only two criteria (BC15 and BC20) were  
378 revealed to have values of 0.820 and 0.771 respectively as reflected in the fifth column of Table 8.  
379 This indicates that the criteria – “Annual reporting of Equator principles in project host nation” and  
380 “Debt repayments to terminate one or two years before the expiry of concession contract “ are  
381 considered unreliable and do not represent a good measure of evaluating bankability of legal and  
382 concession risks. This also corresponds with the low correlation coefficient of these two criteria, as  
383 shown in the fourth column of Table 8. **The Correlated item:** total correlation column represents the  
384 correlation between each criterion and Cronbach’s alpha ( $\alpha$ ) of the entire data. In reliable data, all  
385 criteria are expected to correlate with the overall reliability. As such, any correlation coefficient that  
386 is less than 0.3 should be dropped (Santos, 1999). In view of this, the two bankability criteria BC15  
387 and BC20 show correlation coefficient of 0.237 and 0.117 respectively. As such, these two criteria  
388 were later dropped from the list, leaving us with only 20 reliable bankability criteria.

### 389 ***Significance Index Ranking***

390 After conducting reliability and correlation analysis, this study proceeded to identify the significance  
391 index ranking of each criterion based on lenders’ perception. Significance indexing is a quantitative  
392 technique, which ranks all criteria from the survey based on their relative significance value. Similar  
393 to the approached used by Spillane *et al.* (2012) and Tam *et al.* (2000), the significance index ratings  
394 for the 22 criteria were arrived at using a simple mathematical equation expressed below:

$$395 \quad \text{Significance Index (SI)} = \left( \frac{\sum(s)}{NS} \right) \times 100\%$$

396 Where s represents the significance rating on a Likert scale of 1 to 5, S is the highest significance  
397 rating (that is 5) and N is the total number of responses for that particular criteria. The significance

398 index and ranking are shown in column six, seven and eight of Table 8 respectively. With  
399 significance index calculation, the linear five-point Likert scale used in the questionnaire is  
400 converted into a percentage scale. As such, 0% represents the lowest, while 100% represents the  
401 highest significance value achievable. This indicated that the Likert scale values of 1, 2, 3, 4, and 5  
402 have significance indexes of 0, 25, 50, 75, and 100, respectively. Based on the survey analysis,  
403 significance index (SI) values were produced for the 22 bankability criteria ranging from 85.32 to  
404 51.24 (see Table 8 for bankability criteria's significance index ranking). The top seven most  
405 significant bankability criteria with an overall index ranking of moderately significant or SI value of  
406  $\geq 75.00$  across the four country-specific risks are:

- 407 ❖ BC7= Full Transfer of Political Risk to Export Credit Agency (ECA).
- 408 ❖ BC10= Multilateral Agency-Backed Loan Facility
- 409 ❖ BC19= Identity of project grantor and her approval capacity must be known.
- 410 ❖ BC1= Sponsors with track record of successful project financing, strong credit quality and  
411 financial capacity.
- 412 ❖ BC12= Existence of operational permit and approval from the project grantor.
- 413 ❖ BC17= Direct contractual agreement between lenders and project grantor, as well as other  
414 project contractors and sub-contractors respectively.
- 415 ❖ BC18= Security rights over SPV's insurance policies, Cash flows and other corresponding  
416 assets.

417

## 418 **6.0 Discussion of Findings**

419 This section discusses findings from focus group discussions and questionnaire survey to foreign  
420 project financiers and experts concerning bankability of country-specific risks (Sponsor, political,  
421 Legal and concession risks) in PPP loan applications in an emerging market. Twenty (20) important

422 bankability criteria for evaluating the four risks were explored from foreign financiers' perspectives.  
423 The significance ranking of each criterion towards determining the bankability of country-specific  
424 risks in PPP loan applications was calculated. Evidences from the questionnaire survey, as shown in  
425 Table 4 above, were corroborated with findings from the focus group discussions with financiers  
426 (See Table 3 and 4). Results from the study were used to construct a "Risk and Bankability  
427 Framework" and validated with new data set from project financiers (see Fig.2. for Risk and  
428 Bankability Framework).

### 429 **6.1. Sponsor Risk and Associated Bankability Criteria**

430 Evidences from the study, as reflected in Table 3, revealed sponsor risk is inherent in the three PPP  
431 case studies investigated. Focus Group Discussion (FGD) participants referred to sponsor risk  
432 analysis as a "smell test" that must be conducted by lenders before loans are granted. In evaluating  
433 sponsor risk in PPP loan applications within emerging market context, lenders consider the  
434 "**competence of the project sponsors**" to be crucial to bankability. This is based on results from the  
435 questionnaire survey, which shows a high significance index ranking of 85.10, in terms of its  
436 influence on bankability of sponsor risk (see Table 4). The result confirms findings from the FGD  
437 captured in the views of one of the participants who argued that:

438 *"Foreign lenders will consider factors like sponsor's identity, sponsors' credit background,*  
439 *the sponsor's financial strength, the sponsor's history of corporate dealings, probability of*  
440 *default etc."*

441 The above assertions highlights Atmo and Duffield (2014) as well as Hoffman (2008) who argue that  
442 the fact that project finance loans are granted to a newly formed Special Purpose Vehicle (SPV) does  
443 not suggest lenders are not interested in the identity and credit history of project sponsors. Rather, the  
444 profile of the project sponsors or any prior banking relationship with the lender will play a crucial

445 role in addressing possible information asymmetry. Another important bankability criterion for  
446 evaluating sponsor risk, based on results from the survey, is the “**existence of Pre-completion**  
447 **guarantee or full-financial guarantee presented by project sponsors**”. Evidences in Table 4 show  
448 a significance index ranking of 84.11, indicating high lenders’ perception of the criterion towards  
449 influencing lenders bankability decision. The result buttresses suggestions from some of the FGD  
450 participants who argued that, where lenders are not satisfied with the credit risk profile of a project  
451 sponsor:

452 *“In such cases a foreign bank will demand credit risk enhancements such as Pre-completion*  
453 *Guarantee, full-financial Guarantee, third party guarantee or even a bank-financed*  
454 *guarantee, for better considerations.”*

455 This is in line with Hoffman (2008) and Mills (2010) who opined that, to foreign lenders, credit  
456 guarantee serves as collateral against project incompleteness. Hence, the presence of such facilities in a  
457 PPP loan application will improve the bankability of such funding applications from foreign  
458 financiers’ perspectives (Grimsey and Lewis, 2002). According to Yescombe (2007) and Mills  
459 (2010), credit risk enhancement may become crucial to lenders where the sponsors have weak credit  
460 quality or have no prior experience in project financing arrangements. In addition, going by findings  
461 revealed in Table 3, another crucial bankability criterion used for evaluating sponsor risk in PPP loan  
462 applications from an emerging market is the “**sponsors’ equity case**”. Relying on survey findings  
463 which show a significance ranking of 84.03 for this criterion (see Table 4), the share of equity  
464 contribution of projects sponsors must be satisfactory to lenders. As confirmed by FGD findings,  
465 participants’ argue that:

466 *“It is also important to consider the debt equity ratio on offer. This is because; the amount*  
467 *of equity to be injected into the project by the sponsor team and the timing of such injection*  
468 *will also influence foreign funding decision”.*

469 Studies such as Demirag *et al.* (2011), Al-Khattab *et al.* (2007) and Mills (2010) have confirmed the  
470 above claim and argued that the amount of equity contribution of sponsors will determine the extent  
471 of the lenders' funding, her recourse as well as the loan price during due diligence appraisal.  
472 According to Hoffman (2008), lenders believe that, the more the sponsor's equity at stake in PPP  
473 projects, the higher the commitment and the lesser the possibility of walking away in case the project  
474 encounters challenges.

## 475 **6.2 Country/Political Risk and Associated Bankability Criteria**

476 Going by evidences from the study, political risk was considered very important in the three PPP  
477 projects' case studies investigated. As shown in the results from the questionnaire survey (see Table  
478 3 and 4), an important bankability criterion for evaluating political risk in PPP loan applications is  
479 the **“transfer of political risk to Export credit agencies”**. The high significance ranking of the  
480 criterion (85.32) confirms lenders' strong perception of its influence on the bankability of political  
481 risk in PPPs, especially from an emerging market context (see Table 4). This perspective was also  
482 highlighted by discussants in some of the focus group discussions.

483 *“Definitely, Export Credit Agency (ECA) assisted facility has got high bankability potentials.*

484 *Foreign Banks can be sure their political risk exposure is covered to a significant level”.*

485 In buttressing the above perspective, Matsukawa and Habeck (2007) argued that, ECAs are  
486 providing a new source of long-term finance for infrastructures especially in the emerging BRICs  
487 nations. This helps reduce cost of lending to critical infrastructures, while international lenders are  
488 able to transfer political risks in projects to the public financial agencies. However, according to  
489 Giannetti and Ongena (2012), in practice, ECAs do not provide “Full Risk Transfer” to lenders  
490 because certain percentage of the project loan (5%-10%) is usually uncovered under the ECAs'  
491 political risk guarantee. In addition, going by findings from the survey as well as the focus group

492 discussions, the involvement of “**Multilateral Agencies (MLA)**” such as the World Bank usually  
493 enhances the potentials of indigenous investors’ loan applications. Evidences from the survey  
494 revealed high lenders perception with a significance index of 85.21, concerning the important role of  
495 MLAs in providing political risk cover for PPPs in emerging markets. This buttressed the  
496 perspectives of many FGD participants, who opined that:

497 *“Many PPP projects in these (developing) economies are often World Bank and IFC (International*  
498 *Finance Corporation) assisted....especially Africa .... And that’s good for us as an international*  
499 *lender since it provides much guarantee against the common political risk situations in many of*  
500 *these (emerging) places.*

501 This view has been confirmed by Hoffman (2008) and Ramamurti (2009) who suggested that MLAs  
502 provide some form of political risk guarantees for participating banks in order to encourage  
503 financing. This is evidenced by the “Preferred Creditor’s Status” usually granted banks collaborating  
504 with MLAs in financing a project. Such involvement of international development financier boosts  
505 the bankability consideration of a prospective PPP project (Delmon, 2011). Further findings from  
506 FGD participants as reflected in Fig. 4 above, identified three sub-risk components, which often  
507 spinout from political risk and are thus inter-dependent:

508 *“We could classify political risk into (i) Expropriation, Confiscation and Nationalisation*  
509 *(ECN) risk, (ii) Strike, Riot, and Civil commotion (SRCC) (iii) and currency risk. And you*  
510 *will agree with me that, all the risks present various threats to lenders investments in such*  
511 *projects”*

512 According to Khoury and Zhou (1998), where a project host nation has high political risk index, any  
513 of the above components may be responsible. In tackling these likely threats to lenders financial  
514 stakes in projects, an important bankability criterion for lenders to consider is the “**Existence of**  
515 **Private-Sector Political Risk Insurance Cover**”. This was confirmed by results from the survey,

516 showing a significance index rating of 76.41, indicating high lenders' perception. In what seemed  
517 largely a unanimous opinion, most FGD participants emphasized the importance of private-sector  
518 political risk insurance in financing PPPs in emerging market. As captured in the view of one of the  
519 participants:

520 *“If foreign Banks were to finance such projects, depending on the country capacity of the project*  
521 *host nation, we would definitely request a Private-Sector Political Risk Insurance Cover from would-*  
522 *be project sponsors. This is one of the most common global best practices in international lending to*  
523 *projects. It does not have to be a PPP project before banks consider political risk insurance cover”.*

524 Studies such as Hoffman (2008), Yescombe (2007), Atmo, and Duffield (2014) have confirmed these  
525 assertions. According to Yescombe (2007) and Hoffman (2008), private-sector political risk  
526 insurance cover may be in form of general insurance cover for a PPP project; or may be tailored to  
527 the foreign lenders' key concerns (Delmon, 2011). In situations where the insurance policy is  
528 targeted at lenders' specific concerns in the concession, any risk arising from events not mentioned  
529 in the insurance policy will not be reimbursed (Mills, 2010).

### 530 **6.3 Legal Risk and Associated Bankability Criteria**

531 Going by evidences from the study, legal risk was important and was given high consideration by  
532 financiers in the three case studies examined. As represented in the qualitative framework in Figure 2  
533 above, the study identified three sub-risk factors that often emerge from legal risk: permit and  
534 approval risk, regulatory risk and environmental risk. Based on evidences from the survey, the  
535 bankability criterion **“existence of operational permit and approval from public sector”** is  
536 considered most important in legal risk analysis. This is based on lenders' perception with a  
537 significance index rating of 85.01. Focus group discussants also highlighted the importance of

538 permit and approval to successful implementation of PPPs, as encapsulated in the views of one of the  
539 discussants who argued that:

540 *“One needs to determine whether such proposed project has got necessary permits and*  
541 *approval from relevant government departments or agencies. Foreign banks will expect*  
542 *sponsors of projects to obtain legal and regulatory approvals for the construction and*  
543 *operations of a project. Of course failure to obtain such results in delay in project start-up*  
544 *which will definitely distort financing plans”.*

545 This view was buttressed by Wang *et al.* (2004) who argued that project grantor’s approval is  
546 essential to funding decision because most financiers will not fund any unapproved concession. As  
547 such, sponsors are usually expected to present lenders with operational permits and approvals of  
548 project, as a condition for funding approval. Additionally, in evaluating potential legal risks in a PPP  
549 loan application from an emerging market context, results from questionnaire survey show that,  
550 foreign lenders consider the **“environmental impact assessment of potential projects”** on host  
551 communities, as very crucial to loan approval. This confirms the high significance index of the  
552 criterion at 84.43, based on lenders perception. In supporting the above perspective, many  
553 discussants in the focus groups opined that:

554 *“International lenders will request project sponsors to present evidence of Environmental Impact*  
555 *Assessment (EIA) report of the project. The EIA report details the potential impact of the project on*  
556 *the host community. It’s important for banks to avoid litigation arising from environmental damage*  
557 *to a project host community as this portends great danger to lenders funds”.*

558 The above perspective is buttressed by Hoffman (2008), who suggested that, lenders are increasingly  
559 becoming more environmentally aware of impacts of projects on host communities. As such, most  
560 banks will seek to avoid a reputational risk that may arise due to negative publicity from

561 environmental pressure groups (Mills, 2010). This is more essential, especially where the project  
562 host nations are outside the OECD nations and external risks to projects is often high (Yescombe,  
563 2007). Further results from the survey also show a high significance index rating of 84.15 for  
564 **“Compliance with Equator Principles”**. The significance index of the criterion confirms evidences  
565 from focus group discussions, as captured in the views of one of the discussants who argued that:

566 *“We would have to also consider the project’s Compliance with Equator Principles (EPs). These*  
567 *equator principles are World Bank’s global environmental best practices, and most international*  
568 *lenders in OECD nations will request this as part of due diligence appraisal for funding approval.”.*

569 Existing literatures such as Amalric (2005), Gupta *et al.* (2002), Yescombe (2007), share this  
570 perspectives and argued that, a common practice for most compliant banks in OECD nations is, to  
571 insist on environmental impact assessment of proposed PPP projects. This is in line with global  
572 environmental KPIs’ as prescribed by the Equator Principles (Gupta *et al.*, 2002). Equator Principles  
573 (EPs) was introduced in 2003 in Washington DC after a consultation among select international  
574 lenders and the International Finance Corporation (IFC) (Hardenbrook, 2007). With the EPs, key  
575 Performance standards in terms of socio-environmental sustainability of project’s geographical  
576 location were introduced in line with the World Bank health and Safety general guidelines (Giannetti  
577 and Ongena, 2012).

#### 578 **6.4. Concession Risk and Associated Bankability Criteria**

579 As represented in Table 3 above, evidences from the study indicate that, the lenders examined  
580 concession risk when evaluating the three case studies under investigation. Based on results from  
581 survey responses with respect to determining the bankability of concession risk in PPP loan  
582 application within emerging market context (see Table 4), top on lenders’ criteria is unravelling the  
583 **“identity and powers of the project grantor”**. This is evidenced by the significance index rating of

584 85.12 from survey analysis. FGD participants also share these perspectives, and this was captured in  
585 the view of a discussant who argued that:

586 *“The identity of the Awarding Authority (project grantor) coupled with her capacity to*  
587 *grant concession approvals will be critically assessed before foreign banks commit funds to*  
588 *such PPP project”.*

589 This perspective is in line with Mills (2010) and Delmon (2011) who argued that a project grantor  
590 must have the legal powers to contract a project on concession basis. The lack of such powers  
591 therefore, automatically invalidates the actions of the awarding authority and poses threats to the  
592 realization of the project. Giannetti and Ongena (2012) suggested that foreign lenders want to  
593 ascertain whether a project grantor enjoys implicit cooperation and supports of higher authorities in  
594 the project’s host nation for her contractual activities. This enables lenders to envisage any potential  
595 clash of interests between the provisions of the concession and existing government laws in host  
596 nations (Sachs *et al.*, 2007). Additionally, further evidences from the survey as shown in Table 4  
597 revealed that, besides unravelling the identity and powers of the project grantor, foreign lenders  
598 considering emerging market PPP loan applications will also require **“direct legal contracts with**  
599 **the project grantor and other parties to the project”**. Based on significance index rating of 84.70,  
600 survey respondents consider this criterion important in evaluating concession related risks in an  
601 emerging market. This further attest to evidences from the qualitative study in which some focus  
602 group participants opined that:

603 *“Usually you find banks having direct contractual agreement with awarding authorities and*  
604 *project sub-contractors in an emerging market PPP project. Obviously such agreements is*  
605 *to enable lenders protect her Secured Creditor’s Rights with the authority, in case the*  
606 *concession is terminated”.*

607 The above assertion is in line with Busse and Hefeker (2007) and Chan *et al.* (2014), who both  
608 argued that lender's direct agreements ensures that the contractual relationship between the SPV and  
609 other sub-contractors are in tandem with clauses and service level specifications stipulated in the  
610 concession contract. Such direct contract therefore puts lenders in the supervisory role, especially  
611 considering the high-leverage nature of PPPs and relative systemic instability in many of these  
612 regions.

613 Further findings from the study also indicate that, as part of measures to ensure proper due diligence  
614 is taken on funding applications for PPPs in an emerging market; "**lenders will impose some**  
615 **security rights on the project SPV**". Based on survey responses, the significance index rating of  
616 this criterion is 84.49. This suggest high lenders' perception with respect to its influence on  
617 bankability of concession risk. The above evidence further confirms perspectives highlighted during  
618 some of the FGDs. As encapsulated in the argument of one of the discussants:

619 *"You have to demand contractual security rights on PPP project assets, cash flows and*  
620 *other income generating contracts of the SPV. These are very important issues in bankability*  
621 *for most lenders to PPPs".*

622 Boeing and Kalidindi (2009) highlighted the above perspective and suggested that, in most instances  
623 lenders exercise security rights over assets and cash flows of PPPs in order to consolidate their  
624 positions in a project. This becomes more important in the event of project failure or concession  
625 termination by the awarding authority. Hence, such security rights help foreign lenders to mitigate  
626 the severity of any exposure at project default (Hoffman, 2008).

## 627 **7.0 Conclusion**

628 Project finance stakeholders consider the bankability of country-related risks as essential for funding  
629 PPP projects in emerging markets. Bankability of project risk is even more crucial within Sub  
630 Saharan African context given the high country-risk perception which has hindered adequate foreign  
631 financing. This study embraced a mixed methodology approach to investigate four country-related  
632 risks prevalent in many emerging markets by using Nigerian PPP environment as context. The  
633 investigated risks included sponsor risk, political, legal and concession risks. Multiple case studies of  
634 three PPP projects in Nigeria were used to identify important bankability criteria for evaluating  
635 project loan applications within emerging market context. The qualitative strategy comprise focus  
636 group discussions (FGD) with foreign financiers in Nigeria's existing PPPs, and loan document  
637 analysis which helped reveal 22 relevant bankability criteria. Going further the wider acceptability of  
638 the 22 bankability criteria were later confirmed using a questionnaire survey to wider audiences  
639 among foreign and local financiers in Nigeria's PPP market. Statistical results of the survey revealed  
640 top seven (7) bankability criteria considered "very important" for winning foreign financiers' loan  
641 approval for PPPs in emerging market. These include: BC7= Full Transfer of Political Risk to Export  
642 Credit Agency (ECA), BC10= Multilateral Agency-Backed Loan Facility, BC19= Identity of project  
643 grantor and her approval capacity must be known., BC1= Sponsors with track record of successful  
644 project financing, strong credit quality and financial capacity, BC12= Existence of operational permit  
645 and approval from the project grantor, BC17= Direct contractual agreement between lenders and  
646 project grantor, as well as other project contractors and sub-contractors respectively, and BC18=  
647 Security rights over SPV's insurance policies, cash flows and other corresponding assets. Further  
648 findings from the study also revealed the complexity and true structure of certain risks in emerging  
649 markets PPPs, with the existence of sub-risk components (i.e. ECN, SRCC Currency, approval,  
650 environmental risk, approval risk, etc.). It is relevant to note that, most sub-risk components PPP

651 evaluation often come as offshoots of many major risk factors during analysis. Hence, the occurrence  
652 of the major risks will automatically throw up other emerging risk components which require equal  
653 and careful bankability evaluation. Results from this study confirm a number of existing studies by  
654 arguing that, unless risks are matched with their bankability criteria and practical mitigation, the  
655 much needed clarity will be lacking especially in market where PPP growth is still nascent. Based on  
656 findings from the study a “**Risk and bankability framework model**” for assessing the four country-  
657 specific risks in PPP loan applications within an emerging market context was developed. The  
658 framework model pairs risk factors with various mitigation strategies as well as associated  
659 bankability criteria under a single platform. The study validated the model with another set of data  
660 from foreign project financiers and other subject matter experts with emerging market project  
661 financing experiences. As such, the framework model proposed in the study presents a valuable  
662 mind-map tool and checklist for foreign financiers including private investors interested in emerging  
663 market PPP projects. This result mirrors the perspective of Kayaga (2008), who suggested that the  
664 relative slow pace of PPP growth in Sub Saharan Africa can be attributed to huge hindrance posed by  
665 country-related risks to the bankability of indigenous PPP projects. Thus, results from the study  
666 represent critical parameters for winning foreign loan approval for PPP infrastructure projects within  
667 an emerging market context.

668

669 Future studies should endeavour to widen the scope of this study. These include using more contexts  
670 to confirm the applicability of findings from the current study with respect to other emerging  
671 economies. It may also be very essential to explore the impact of public sector guarantee on the  
672 bankability of PPPs within emerging market context. Further empirical studies are also needed on  
673 how to avoid lenders’ “call for event of default” in PPP projects, determinants of sponsors’ equity

- 674 contribution in typical project finance arrangements, and lenders' perspective to securitization in PPP  
675 projects among other things.

## 676 **8.0 References**

677

- 678 Akintoye, A., Beck, M., & Kumaraswamy, M. (Eds.). (2015). Public private partnerships: A global  
679 review. Routledge.
- 680 Al Khattab, A., Anchor, J., & Davies, E. (2007). Managerial Perceptions of Political Risk in  
681 International Projects. *International Journal of Project Management*, 25(7), 734-743.
- 682 Amalric, F. (2005). The Equator Principles: A Step towards Sustainability. [Online]. *Center for*  
683 *Corporate Responsibility and Sustainability*. [Accessed 3<sup>rd</sup> Feb, 2015].
- 684 Ameyaw, E. E., & Chan, A. P. (2015). Evaluation and ranking of risk factors in public-private  
685 partnership water supply projects in developing countries using fuzzy synthetic evaluation  
686 approach. *Expert Systems with Applications*, 42(12), 5102-5116.
- 687 Atmo, G. U., and Duffield, C. (2014). Improving Investment Sustainability for PPP Power Projects  
688 in Emerging Economies: Value for Money Framework. *Built Environment Project and Asset*  
689 *Management*, 4(4).
- 690 Babatunde, S. O., & Perera, S. (2017). Barriers to bond financing for public-private partnership  
691 infrastructure projects in emerging markets: A case of Nigeria. *Journal of Financial*  
692 *Management of Property and Construction*, 22(1), 2-19.
- 693 Babatunde, S. O., Opawole, A., and Akinsiku, O. E. (2012). Critical Success Factors in Public-  
694 Private Partnership (PPP) on Infrastructure Delivery in Nigeria. *Journal of Facilities*  
695 *Management*, 10(3), 212-225.
- 696 Basilio, M. (2011). Infrastructure PPP investments in Emerging Markets. [Online]. Available at  
697 [[http://www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2011-](http://www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2011-Braga/papers/0337_update.pdf)  
698 [Braga/papers/0337\\_update.pdf](http://www.efmaefm.org/0EFMAMEETINGS/EFMA%20ANNUAL%20MEETINGS/2011-Braga/papers/0337_update.pdf)]. [Accessed on 12<sup>th</sup> Feb, 2015].
- 699 Bekaert, G. and Harvey, C. R. (2002). Research in Emerging Markets Finance: Looking to the  
700 Future. *Emerging Markets Review*, 3(4), 429-448.
- 701 Bing, L., Akintoye, A., Edwards, P. J. and Hardcastle, C. (2005). The Allocation of Risk in PPP/PFI  
702 Construction Projects in the UK. *International Journal of project management*, 23(1), 25-35.
- 703 Briceño-Garmendia, C., Smits, K., and Foster, V. (2008). Financing Public Infrastructure in Sub-  
704 Saharan Africa: Patterns and Emerging issues. *AICD Background Paper*, 15(1).
- 705 Boeing Singh, L. and Kalidindi, S. N. (2009). Criteria Influencing Debt Financing of Indian PPP  
706 road projects: A Case Study. *Journal of Financial Management of Property and Construction*,  
707 14(1), 34-60
- 708 Busse, M. and Hefeker, C. (2007). Political Risk, Institutions and Foreign Direct Investment.  
709 *European journal of political economy*, 23(2), 397-415.
- 710 Cavusgil, S. T. (1997). Measuring the Potential of Emerging Markets: An Indexing Approach.  
711 *Business Horizons*, 40(1), 87-91.

- 712 Chan, A. P., Lam, P. T., Wen, Y., Ameyaw, E. E., Wang, S. and Ke, Y. (2014). Cross-Sectional  
713 Analysis of Critical Risk Factors for PPP Water Projects in China. *Journal of Infrastructure*  
714 *Systems*.
- 715 Creswell, J. W. (2013). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*.  
716 Sage Publications.
- 717 Coviello, N. E., and Jones, M. V. (2004). Methodological Issues in International Entrepreneurship  
718 Research. *Journal of Business Venturing*, 19(4), 485-508.
- 719 Delmon, J., (2011). *Public–Private Partnership Projects in Infrastructure: An Essential Guide for*  
720 *Policy Makers*. New York: Cambridge university press.
- 721 Demirag, I., Khadaroo, I., Stapleton, P., and Stevenson, C., (2011). Risks and the Financing of PPP:  
722 Perspectives from the Financiers. *The British Accounting Review*, 43 (2011) 294–310.
- 723 Dominic, M. U., Ezeabasili, A. C. C., Okoro, B. U., Dim, N. U., & Chikezie, G. C. (2015). A review  
724 of Public Private Partnership on some development projects in Nigeria. *International Journal of*  
725 *Application Innovation in Engineering & Management*, 4(3).
- 726 Eaton, D., Akbiyikli, R. and Dickinson, M. (2006). An Evaluation of the Stimulants and  
727 Impediments to Innovation within PFI/PPP projects. *Construction Innovation: Information,*  
728 *Process, Management*, 6(2), 63-67.
- 729 Feagin, J. R., Orum, A. M., and Sjoberg, G. (Eds.). (1991). *A case for the case study*. UNC Press  
730 Books.
- 731 Field, A. (2005). *Discovering Statistics using SPSS*. 2nd Ed., Sage Publications, London.
- 732 George, D. and Mallery, M., (2003). *Using SPSS for Windows Step-by-Step: A Simple Guide and*  
733 *Reference*. Boston, MA: Allyn y Bacon.
- 734 Giannetti, M. and Ongena, S. (2012). “Lending by Example”: Direct and Indirect Effects of Foreign  
735 Banks in Emerging Markets. *Journal of International Economics*, 86(1), 167-180.
- 736 Grimsey, D., and Lewis, M., (2002). “Evaluating the Risks on Public Private Partnerships for  
737 Infrastructure Projects”. *International Journal of Project Management*, Vol. 20, pp 107-118.
- 738 Gupta, P., Lamech, R., Mazhar, F. and Wright, J. (2002). Mitigating Regulatory Risk for Distribution  
739 Privatization: The World Bank Partial Risk Guarantee. *Energy & Mining Sector Board*  
740 *Discussion Paper*. Series, (5).
- 741 Gutman, J., Sy, A., & Chattopadhyay, S. (2015). Financing African infrastructure: Can the world  
742 deliver?.
- 743 Hammami, M., Ruhashyankiko, J. F. and Yehoue, E. B. (2006). Determinants of public-private  
744 partnerships in infrastructure. [Online]. *International Monetary Fund*. Available at  
745 [<https://www.imf.org/external/pubs/ft/wp/2006/wp0699.pdf>]. [Accessed on 16<sup>th</sup> Feb, 2015].

- 746 Hardcastle, C., Edwards, P. J., Akintoye, A. and Li, B. (2005). Critical Success Factors for PPP/PFI  
747 Projects in the UK Construction Industry: A Factor Analysis Approach. *Construction*  
748 *Management and Economics*, 23(5), 459-471.
- 749 Hoffman, S.L., (2008). *The Law and Business of International Project Finance*, 3rd edition. New  
750 York: Cambridge University press.
- 751 Ibem, E. O. (2010). An Assessment of the Role of Government Agencies in Public-Private  
752 Partnerships in Housing Delivery in Nigeria. *Journal of Construction in Developing Countries*,  
753 15(2), 23-48.
- 754 International Finance Corporation Report (2013). *Advisory Services in Public Private Partnerships in*  
755 *Sub Saharan Africa*. Available online  
756 [[www.ifc.org/wps/wcm/connect/.../RegionalFactsheet\\_Africa.pdf?MOD..](http://www.ifc.org/wps/wcm/connect/.../RegionalFactsheet_Africa.pdf?MOD..)]. [Accessed on 3<sup>rd</sup>  
757 Jan, 2015].
- 758 Kayaga, S., (2008). Public-Private Delivery of Urban Water Services in Africa.
- 759 Kennedy, M. M. (1979). Generalizing from Single Case studies. *Evaluation Review*, 3(4), 661-678.
- 760 Khadaroo, I. (2014) The Valuation of Risk Transfer in UK School Public Private Partnership  
761 Contracts. *The British Accounting Review*, 46(2), 154-165.
- 762 Khoury, S. J. and Zhou, C. (1998). Country Risk: Existing Models and New Horizons. *Handbook of*  
763 *International Banking*, 13. 327.
- 764 Kwofie, T. E., Afram, S., & Botchway, E. (2016). A critical success model for PPP public housing  
765 delivery in Ghana. *Built Environment Project and Asset Management*, 6(1), 58-73.
- 766 Liu, T., Wang, Y., & Wilkinson, S. (2016). Identifying critical factors affecting the effectiveness and  
767 efficiency of tendering processes in Public-Private Partnerships (PPPs): A comparative  
768 analysis of Australia and China. *International Journal of Project Management*, 34(4), 701-716.
- 769 Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. Revised and  
770 Expanded from "Case Study Research in Education.". Jossey-Bass Publishers, 350 Sansome St,  
771 San Francisco, CA 94104.
- 772 Mills, S., (2010). "The Mechanics of Project Finance". *Institute for International Research (IIR)*,  
773 Limited, U.K.
- 774 Mudi, A., Lowe, J., & Manase, D. (2015). Conceptual Framework for Public-Private Financed Road  
775 Infrastructure Development in Nigeria. *International Journal of Engineering Research &*  
776 *Technology*, 4(8), 586-590.
- 777 Ncube, M., (2010). Financing and Managing Infrastructure in Africa. *Journal of African Economies*,  
778 19(suppl 1), pp.i114-i164.
- 779 Noor, K. B. (2008). Case study: A Strategic Research Methodology. *American Journal of Applied*  
780 *Sciences*, 5(11), 1602.
- 781 Nunnally, J. (1978) *Psychometric Theory*. New York: McGraw-Hill.

- 782 Olsson, C. (2002). Risk Management in Emerging Markets. *Financial Times and Prentice Hall*,  
783 London.
- 784 Oyedele, L., (2013). "Avoiding Performance Failure Payment Deductions in PFI/PPP Projects:  
785 Model of Critical Success Factors". *Journal of Performance of Constructed Facilities*, Volume  
786 27, Issue 3 (June 2013), pp. 283–294.
- 787 Osei-Kyei, R., & Chan, A. P. (2015). Review of studies on the Critical Success Factors for Public–  
788 Private Partnership (PPP) projects from 1990 to 2013. *International Journal of Project*  
789 *Management*, 33(6), 1335-1346.
- 790 Quiggin, J. (2004). Risk, PPPs and the Public Sector Comparator. *Australian Accounting Review*,  
791 14(33), 51-61.
- 792 Ramamurti, R. and Singh, J. V. (Eds.) (2009). *Emerging Multinationals in Emerging Markets*.  
793 Cambridge University Press.
- 794 Royal Society. (1983). *Risk Assessment: Report of a Royal Society study group*. London: Royal  
795 Society.
- 796 Sachs, T., Tiong, R. and Wang, S. Q. (2007). Analysis of Political Risks and Opportunities in Public  
797 Private Partnerships (PPP) in China and Selected Asian Countries: Survey Results. *Chinese*  
798 *Management Studies*, 1(2), 126-148.
- 799 Spector, P.E., 1992. *Summated Rating Scale Construction: An introduction* (No. 82). Sage.
- 800 Spillane, J.P., Oyedele, L.O., and von Meding, J. (2012) Confined Site Construction. *Journal of*  
801 *Engineering, Design and Technology*. 10(3), pp. 397–420. doi:10.1108/17260531211274747.
- 802 Tam, C.M., Deng, Z.M., Zeng, S.X., and Ho, C.S. (2000) Quest for Continuous Quality  
803 Improvement for Public Housing Construction in Hong Kong, *Construction Management and*  
804 *Economics*, 18(4), pp. 437–446. doi:10.1080/01446190050024851.
- 805 Santos, J.R.A., (1999). Cronbach's Alpha: A Tool for Assessing the Reliability of Scales. *Journal of*  
806 *Extension*, 37(2), pp.1-5.
- 807 Stake, R. E. (2013). *Multiple Case Study Analysis*. Guilford Press.
- 808 Vetiva, (2011). *Construction Industry Report: A Haven of Opportunities*. [Online] A publication of  
809 VETIVA Capital Management Limited. Accessed [18 February, 2015].
- 810 Wang, S. Q., Dulaimi, M. F., and Aguria, M. Y. (2004). Risk Management Framework for  
811 Construction Projects in Developing Countries. *Construction Management and Economics*,  
812 22(3), 237-252.
- 813 World Bank Report (2013). *Public Private Partnership Programme in Nigeria*. Available from:  
814 [[http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/AFR/2013/12/27/090224b0821823a7/1\\_0/Rendered/PDF/Nigeria000Nige0Report000Sequence005.pdf](http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/AFR/2013/12/27/090224b0821823a7/1_0/Rendered/PDF/Nigeria000Nige0Report000Sequence005.pdf)].  
815 [Accessed on 19th December, 2014].  
816  
817

- 818 Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd ed.). Thousand Oaks, CA: Sage  
819 Publication.
- 820 Yescombe, E. R. (2007). *Public Private Partnership: Principles of Policy and Finance*, 1st Edition.  
821 Oxford: Elsevier Limited.