Political Risk Factors on Perfomance of Public Private Partnership Renewable Energy Projects: The Case of Geothermal Renewable Enrgy Projects in Kenya

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Abstract To solve the problem of limited fiscal funds and demand for energy, PPP has been touted as an effective approach. However political risks have been blamed for failure to attract private investments in equally measure as their developed partners. This article looked at political risks influencing the performance of PPP renewable energy projects in Kenya. The study adopted a pragmatic paradigm and employed a mixed methods approach, correlational and descriptive survey design. Quantitative data was collected by use of a self-administered questionnaire and an interview guide was used to collect qualitative data. A sample size of 263 respondents was drawn from a target population of 769 using the Yamane formula. For descriptive statistics the study used the mean and standard deviation. For inferential statistics the study used Pearson's Product Moment Correlation (r) and Multiple Regression while the F-tests were used in hypothesis testing. The study established a significant influence of political risks $r = 0.572$, $F (1,205) = 99.771$, $R2 = 0.327$ at $p<.05$ H0 was rejected. The study concluded that there was a significant influence of political risks on the performance of PPP renewable energy projects in Kenya. Based on this finding the study recommends sustainable political stability.

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1. Introduction

On the world stage public private partnerships have presented opportunity not only to increase efficiency but also to minimize the burden for constrained public sector budget [1]. Due to limitations in available funding and the ever increasing need for infrastructure more so in developing countries PPPs are needed more in developing countries and transition economies. Public Private Partnerships would ensure increased economic growth and inflow of private capital into these countries and for the sake of this study the influence of political risks on performance of public private partnerships renewable energy projects. Public Private Partnerships on the other hand if defined by a single contract. The public bears the risks in traditional contract while in public private partnerships risk are shared equitably between the public and the private investor [2]. 'The advantage of public private partnerships is realized in terms of value of the project being undertaken, better planning, access to private finance, flexibility, innovativeness and clear goals [3]. Energy, telecommunications, transport, water and sewerage are among the infrastructure goods and services that can be delivered through public private partnerships. This study was focused on public private partnerships renewable energy projects.

Political risk factors can influence business agreements and even the critical international investment treaties. Political risks are manifested through currency inconvertibility, breach of contract, expropriation, political violence, nongovernmental actions and legal and bureaucratic risks [4]. A study of political risks for investments in public private partnerships in china and other Asian countries that included Indonesia and Vietnam indicated that political risks influences decision and implementation of Public Private Partnership projects by investors [4]. Another research by [5], concluded that globally, developing countries report higher levels of investment risks making studies on risks factors important.

One of the challenges Kenya is facing in pursuit of vision 2030 is significant gaps in financing of infrastructure. For instance the transport sector faces a financing gap of

0.14 billion US dollars. Kenya for instance requires approximately Ksh 236 billion per year to meet her current and future energy need [6]. This necessitated her to look beyond her borders for development agencies as well as foreign investors. Public Private Partnerships have provided an opportunity for countries not only to reduce the burden created by constraint in the public budgets but also to contribute to more development [1]. A study by [7] on factors affecting the performance of public-private-partnerships in infrastructure financing in Kenya: a case of Kenya urban roads authority .However, there was no evidence of studies done on political risk factors influencing the performance of public private partnership renewable energy projects in Kenya. The current study sought to establish how political risks influence performance of public private partnership renewable energy projects in Kenya.

2. Research Objective

The objective of this study was to investigate the influence of political risks on performance of public private partnership renewable energy projects.

2.1. Research Hypothesis

The hypothesis of the study was;

H_0: There is no significant of political risks on performance of PPP renewable energy projects.

3. Literature Review

Political scenario of a country can either promote or discourage Public Private Partnerships, for this reason enabling political environment is considered a critical success factor of Public Private Partnerships [8]. This political climate should include supportive legislative, executive and general public. Lack of political commitment presents a critical risk, more so during the phase of project development. Political risks can occasion withdrawal of project partners if concerns arise that puts to doubt the certainty of investment terms. This risk is normally manifested through outright cancelation of projects by public partner, unresolved disagreement in the partnership involving the structure of the project and failure to provide funds necessary for the project.

Political risks include civil disturbance, expropriation, breach of contract, corruption and other political scenarios that may impact on public private partnership investment. This risk factor present a major concern for investors more so foreign direct investors and financial institutions. During financing decision making it is relied upon as an early selection filter, which determines whether the proposed project is financially viable or not. When considered in view of broad macro-economic, political or legal concerns then it usually obstructs the implementation of very good projects [9]. A country with high probability of political risks tends to be looked down upon by investors. Political risks destroy the profitability and sustenance of PPP investment, actions like or expropriation of foreign assets or nationalization and breach of contract presents a very big threat to foreign investment. Political risks create uncertainty in the environment of investment which impacts on the profitability of the investment thereby undermining the performance of Public Private Partnership's renewable energy projects. Similarly a country with a high risk of, war and political violence, including terrorist activities, which can easily results into damaging of foreign assets greatly discourages Public Private Partnerships [10,11].

The most extreme case of political risk is normally manifested through expropriation of private or foreign assets. However, nationalization of assets belonging to foreigners is nowadays rare though there is still such possibility [12,13,14]. Instead administrative expropriation has become more rampant. The government hosting the project can infringe on the profit of foreign investment by frustrating investment consequently forcing a renegotiation by foreign investors which result to new terms of investment) [15]. A study by [16] on demographics of expropriation risk concluded that when property rights are secured coupled with higher population growth then international development is fostered. However, the risk of expropriation considerably lowers foreign investment.

Research by [17] on the risk of expropriation and strategic entry decisions in foreign direct investment disputed the popular assumption that all expropriation risk is negative. They distinguish between hard and soft expropriation where the former involves wholesale expropriation of invested physical capital while the latter simply describes policy changes which change the ex-post attractiveness of investment. The researchers tested empirical hypothesis using a data set of firm-level subsidiary creation by Japanese parent firms. They established that there is an influence of expropriation on strategic entry decisions of investment. The current study filled this gap by empirically testing the correlation between the expropriation risk factor and performance of public private partnership projects.

They [18] studied the relationships between political risks and inflows of foreign direct investment established that political stability, law and order, bureaucracy, both internal and external conflict, tribal tensions and democratic level of accountability are statistically significant in determination of foreign direct investment inflows. This is a clear indicator that political risk is very important factor when deciding to invest in projects like renewable energy projects. This study is significant to the current study in the sense that it addresses political risk factor on investment decision. However, the study did not specifically focus on political risks and performance Public Private Partnerships the current study. This study also relied solely on secondary data. This created a gap for the current study as both secondary and primary data were used.

Corruption increases the risk and creates unpredictability of an investment environment; this lowers the prospect of investments, hence affecting the performance of PPP renewable energy projects [19]. Another study by [20] on the impact of corruption on foreign direct investment determined that there is a negative relationship between corruption and foreign direct investment. This study lend credence to the negative relationship between corruption and investment inflows. This affects the performance of public private partnerships renewable energy projects.

Research by [21] on renewable Energy Projects Financing risks in developing countries. This study underscored the need for political stability in promotion of private and foreign investment. He also gave recommendations on the need for strong laws and policies that ensure foreign investment need for establishment of currency hedging mechanisms, opening up of renewable energy markets and the promotion of community involvement. This study was significant to the current study since it addressed political risk which is an independent variable in the current study. However this study was entirely based on secondary information based on literature. This presented a gap for quantitative analysis and testing of hypothesis .The current study will empirically focus on the influence of political risks on the performance of Public Private Partnerships renewable energy projects.

A study by [7] on factors affecting the performance of public private partnership in infrastructure financing. The study focused on 196 members of staff at Kenya Urban Roads Authority as the target population. The researchers used stratified sampling to sample 30% of the target population ending up with a sample size of 59. Primary data was collected by the use of questionnaire which generated both quantitative and qualitative data. Their findings revealed that political risks had a negative influence on the performance of PPPs in infrastructure financing.

A study on barriers to investment in the South African renewable energy sector by [22]. This study involved companies that had part of their finance portfolio dealing in renewable energy projects; they used both qualitative and quantitative approaches. Using a sample of 16 companies covering all segment of the investment community

representative of the general population. This study adopted a convenient sampling since the respondents available were limited. Using structured interview the study sought to establish why investors were reluctant to invest in renewable energy projects. The study established that one of the reasons investors were reluctant to invest was political. In essence they established that politics influenced financing of renewable energy projects, this corroborated a study by [23] who has a similar conclusion.

Conflicts within a country poses risks which undermines performance of Public Private Partnership renewable energy projects [24]. Nations like Uganda, Ivory Coast, Nigeria, Egypt and Mali among others are examples of countries that have experienced political instability. In Kenya democratic transition is characterized by serious ethnic division which many at times has flared up into violence, a case in point is 07/08 political violence that quickly degenerated into ethnic violence [25]. This serves as a great hindrance to potential private and foreign investment into the renewable energy sector hence impacting on financing of renewable energy projects.

Political conflicts contribute not only to discouragement of potential investors but also to the destruction of existing renewable energy infrastructure which is a great draw back to the financing efforts. Countries such as Mali, Ivory Coast, Somalia and Egypt among other African countries have experienced destruction of already financed renewable energy infrastructure [26,27]. Link between political instability risk and the level of investments by foreign investors in the energy sector is corroborated by several) [25,28]. According to the [29] political instability poses the biggest threat to investments in developing countries more so in Africa.
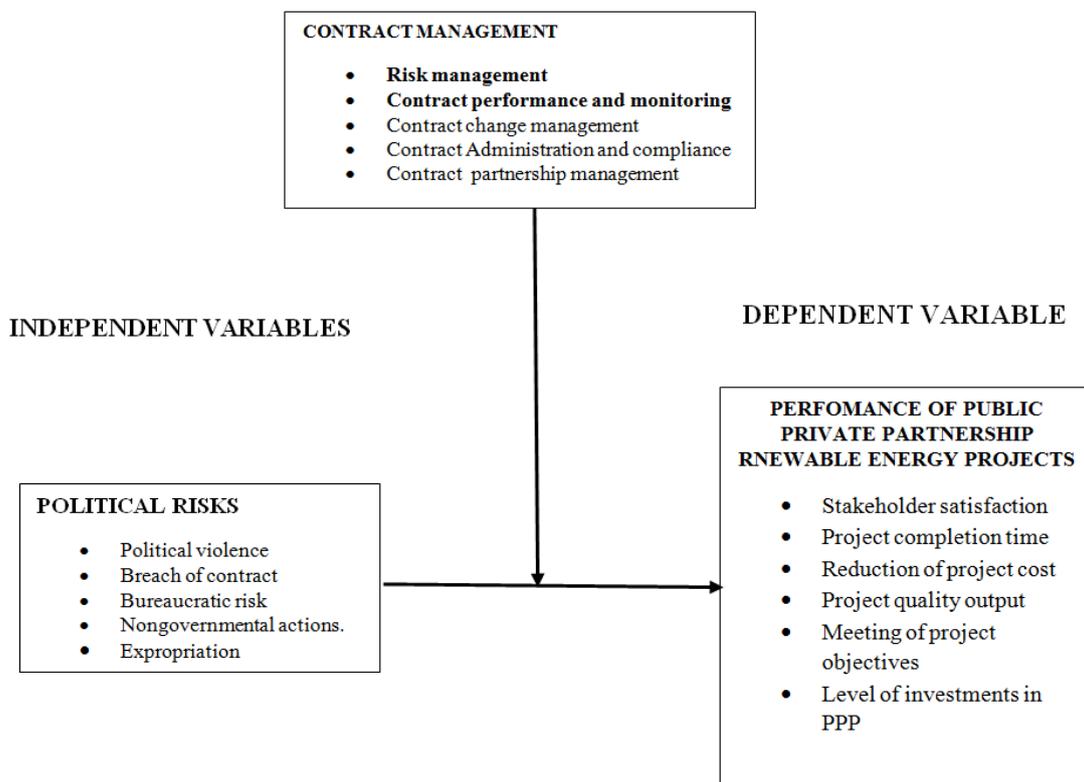
MODERATING VARIABLE

Figure 1. Conceptual Framework

This study was guided by the following conceptual framework.

Conceptual Frame work for political risk factors, contract management and performance public private partnership renewable energy project

3.1. Theoretical Framework

The study was influenced by the stakeholder theory.

3.1.1. Stakeholder Theory

This theory is associated with [30] now considered a classic definition of stakeholders, it is considered the most cited in literature owing to its popularity. The study was informed by [30] stakeholder theory and is conceptualized within the pragmatic paradigm case study approaches. Stakeholders are described as individuals, groups or organizations that influence of be influenced by completion or performance of a project [31]. They include funding bodies, project managers, clients, designers, contractors, subcontractors, suppliers and the community [32]. The stakeholder situation in PPP structure for large complex projects is more sensitive than in typical projects. The stakeholder theory suggests that an organization is understood as an interplay of different stakeholders. It is perceived as a central network of various stakeholders, a complex system where services are exchanged and there is influence of information and resources at play [30]. The government as the principal employs the best agent (a private partners) contractually then creates measures to monitor the behavior of the contractor to ensure they comply with contractual terms and conditions. This theory considers information asymmetry as contributing to the situation of adverse selection and moral hazard. The agent is considered to be more knowledgeable on the provision of the intended services than the government or the public authority. This theory provides a conceptual frame work to examine issues in PPPs governance framework in managing interactions of parties with diverse capabilities and interests. Due to long term nature of PPPs, fundamental challenges created by dynamic stakeholders over the life cycle of project at different phases. Stakeholders most likely have different interests and conflicting concerns [33]. If these concerns and interests are not managed properly they can impact on the performance of PPPs .Stakeholder theory in this context holds that the performance of project depends on the stakeholders and this in turn has influence on their interests which in turn impacts on the project outcomes [33]. Informed by the stakeholder theory, the extent to which PPP project performance is dependent on the project stakeholders. The study therefore conceptualized that Performance of Public Private partnership renewable energy projects id dependent on stakeholders.

4. Methodology

The study employed pragmatism research paradigm which informed the use of descriptive survey research design and correlational research design. Both quantitative and qualitative data was collected by use of a self-administered questionnaire and an interview guide after piloting and

reliability established. The study employed descriptive survey and correlational research design which enabled testing of the hypothesis. The target population was derived from employees of Ken Gen which has a population of 2407.However, the study focused on project employees under business development and geothermal development, the target population was therefore considered under this category who were 769 employees. The sample size was eventually drawn from the 769 employees under business development and geothermal which was relevant to the study. The target population, the company is having 98 senior managers, 259 middle level managers and 412 lower level manager under the Business Development and Geothermal Development. They entailed the target population from which the sampling was done. A sample size of 263 respondents was drawn from a target population of 769 using the formula.

4.1. Sampling Procedure

The study population constituted of senior managers, middle level managers and lower level managers. Stratified random sampling was consequently applied.

Table 1. Distribution of the sample size

Population	Number of employees in strata	Number of people in a sample	Sample size	Proportion
Senior management	98	98*263/769	33	13.4
Middle level management	259	259*263/769	88	33
Lower level management	412	412*263/769	141	53.6
Total	**769**		**263**	**100%**

Quantitative and qualitative data was collected using questionnaire and an interview schedule, which were structured as per the study objective. On pilot testing of the research instruments, the proposed study had identified the Kenya Electricity Generating Company Limited (KENGEN), Western hydro. The study finds KENGEN appropriate because it presents similar characteristic to the main area of study. Just like KENGEN Olkaria has incorporated Public Private Partnership as an approach of financing its hydro-power development projects. Therefore, a random sampling of 27 employees of KENGEN; Western Hydro were selected and used for the pilot study. The Cronbach Alpha Reliability Coefficient for all the ten items used to measure political risks was 0.799**.**This reliability coefficient was an indicator that there was internal consistency with the items that were used. A tool is considered reliable when r is equal or greater than 0.7(Burns and Grove, 2008), the researcher was therefore convinced the instrument was ready to solicit the required data. Descriptive statistics was done using summary of distribution of scores, variability, relationship and association in frequencies. Both linear and multiple regressions were used to establish the relationship between variables. For multiple regression the equation; $y=\beta0+\beta X_1+\beta X_2+\beta X_3+\beta X_4+\beta X_5+\varepsilon i$, Y=Performance of PPP renewable energy projects, β_0= constant, β=Beta coefficients, $X_{1...}X_5$= Political violence, Breach of contract, Bureaucratic risk, Nongovernmental actions and Expropriation and εi = error term. For linear regression the equation; $y=\beta_0+\beta_1X_1+\varepsilon i$,

where Y=Performance of PPP renewable energy projects, β_0= constant, $_1$= Beta coefficient, X_1=Political risks and εi = error term.

5. Results and Discussion

Of the 263 questionnaires that were distributed to the respondents, 207 were collected and analyzed. This resulted to a return rate of 78.7% which is considered acceptable for social sciences (Saunders, 2003).Of the 207, 21 (10.1%) were senior managers. 76(36.7%) were middle level managers while 110(53.1%) were lower level managers. The study consequently concluded the respondents were well equipped to respond to research questions. This is presented in Table 2.

Table 2. Questionnaires Return Rate

Category	Targeted Respondents(N)	Responsive Respondents(n)	Response Percentage
Senior management	33	21	10.1
Middle level management	88	76	36.7
Lower level management	141	110	53.1
Total	**263**	**207**	**100.0**

5.1. Political Risk Factors and Performance of PPP Renewable Energy Projects

The dependent variable was performance of public private partnership renewable energy projects. The independent variable was political risk factors. The independent variable was measured using a five point scale where the anchors were ranging from Not at all to very large extent with the others representing small extent, moderate extent and large extent. The assumption of equidistance was fulfilled by adopting a decision rule such that Not at all 1.0 <NA<1.8; to a small extent 1.8<S<2.6;

moderate extent 2.6<M<3.4; to a large extent 3.4<L<4.2; and to a very large extent 4.2<VLE<5.0, this gave an equidistance of 0.8.

The first item sought to establish if cases of political violence had made it difficult to meet objectives of public private partnership renewable energy projects. From the results on Table 2, show 11 respondents (5.3%) indicated not all implying political violence had not made it difficult to meet PPP renewable energy objectives. 114 respondents (55.1%) agreed to a small extent, 15 respondents (7.2%) agreed to a moderate extent, 63 respondents (30.5%) indicate they agreed to a large extent while 4(1.9%) agreed to a very large extent. This item had a mean score of 2.6860 with a standard deviation of 1.0253 implying most of the respondents agreed to a moderate extent. This means score fell below the composite mean score of the ten item questionnaire which was 2.9720 with a standard deviation of 0.6095. This was an indicator that political violence negatively contribute to the performance of public private partnership renewable energy projects, there is need therefore to address political concerns.

Secondly the study sought to assess the extent to which the respondents agreed that political instability had impacted on cost and quality of public private partnership renewable energy projects. Out of the 207 respondents 7 respondents (3.4%) indicated not at all implying they did not agree with the statement, 93 respondents (44.9%) indicated they were in agreement to a small extent, 48 respondents (23.2%) indicated they had were moderately in agreement, 39 respondents (18.8%) indicated they were largely in agreement while agreed to a very large extent 20 respondents (9.7%). This item mean was 2.8647, with 1.0708 as the corresponding standard deviation. This indicated majority of responses were moderately in agreement. Comparatively the mean score for this item was lower that the composite mean score of 2.9720 with a composite deviation of 0.6095, this implies that political stability had influence on the quality and cost performance of public private partnership renewable energy projects.

Table 3. Political Risks and Performance of Public Private Partnerships Renewable Energy Projects

Statements	n	1	2	3	4	5	Mean	Std.Dev
1. Cases of political violence has made it difficult to meet PPP objectives	207	11 (5.3%)	114 (55.1%)	15 (7.2%)	63 (30.5%)	4 (1.9%)	2.6860	1.0253
2.Political instability has impacted on the cost and quality of public private partnership projects	207	7 (3.4%)	93 (44.9%)	48 (23.2%)	39 (18.8%)	20 (9.7%)	2.8647	1.0708
3. Contractual disputes have impacted on cost and time performance of public private partnerships.	207	10 (4.8%)	108 (52.2%)	38 (18.4%)	46 (22.2%)	5 (2.4%)	2.6522	0.9577
4.Failure to honor contractual obligations has discouraged private investors from PPPs	207	22 (10.6%)	71 (34.3%)	68 (32.9%)	29 (14.0%)	17 (8.2%)	2.7488	1.0860
5.Corruption in procurement of PPPs impacted on the quality of projects delivered,	207	56 (27.1%)	58 (28.0%)	30 (14.5%)	55 (26.5%)	8 (3.9%)	2.5217	1.2496
6. Bureaucracy has contributed to unsatisfactory outcomes of public private partnership projects.	207	10 (4.8)	119 (57.5%)	30 (14.5%)	36 (17.4%)	12 (5.8%)	2.6184	1.0165
7.Agitation by NGOs has contributed to delays and cost overruns of PPP projects	207	9 (4.4%)	108 (52.2%)	33 (15.9%)	23 (11.1%)	34 (16.4%)	2.8309	1.2009
8. Satisfactory performance Of PPPs projects can be attributed to collaboration with Non-governmental action groups.	207	2 (1.0%)	27 (13.0%)	57 (27.5%)	43 (20.8%)	78 (37.7%)	3.8116	1.1097
9. Possibility of illegal takeover of private partner's assets has influenced the performance of PPPs.	207	7 (3.4%)	44 (21.2%)	62 (30.0%)	25 (12.1%)	69 (33.3%)	3.5072	1.2459
10. Cases of political expropriation of investment assets in the region have influenced the performance of PPPs in Kenya	207	2 (1%)	22 (10.6%)	104 (50.3%)	33 (15.9)	46 (22.2%)	3.4783	0.9845
Alpha Coefficient= 0.799, Composite Mean, Standard Deviation							**2.9720**	**0.6095**

The study also sought to establish if contractual disputes had impacted on the cost and time performance of PPP renewable energy projects. Out of the 207 respondents, 10 respondents (4.8%) indicated not all, meaning that contractual disputes did not impact on cost and time of the projects. 108 respondents (52.2%) agreed to a small extent, implying somehow contractual disputes impacted on the performance of Public Private Partnership renewable energy projects while 38 respondents (18.4%) indicated they agreed to a moderate extent, 46 respondents (22.2%) indicated they were largely in agreement that contractual disputes had impacted on the performance cost and time and 5 respondents (2.4%) to a very large extent were in agreement. The mean is 2.6522 with 0.9577 as the corresponding standard deviation, compared to the mean of means at 2.9720 and 0.6095 as the corresponding standard deviation, the item mean was lower. This showed that contractual disputes had an inverse effect on the PPP renewable energy project performance. The issue of contractual dispute therefore need to be given attention by the PPP contractual partners.

As to whether investors were discouraged by failure to honor contractual obligations. Of the 207 respondents 22 respondents (10.6%) indicated not at all meaning they did not agree with the statement, 71 respondents (34.3%) were in agreement to a small extent, 68 respondents (32.9%) indicated to a moderate extent, 29 respondents (14.0%) indicated they agreed to a large extent while 17 respondents (8.2%) were to a very large extent. The mean is 2.7488 with 1.0860 as the standard deviation, showing that most respondents agreed to a moderate extent with the statement. This was lower than the composite mean of means 2.9720 with 0.6095 as the corresponding standard deviation, hence the item mean had a negative contribution. This implied that contractual obligation is an issue influencing performance of public private partnership negatively and should be given attention by the contracting parties.

To establish if corruption during the procurement of public private partnership impacted on the quality of projects delivered. Of the 207 respondents 56 respondents (27.1%) did not agree at all with the statement, 58 respondents (28.0%) they were in agreement to a small extent, 30 respondents (14.5%) indicated they agreed to a moderate extent, 55 respondents (26.6%) were largely in agreement while 8 respondents (3.9%) indicated they to a very large extent in agreement. This item realized a mean score of 2.5217 with1.2496 as the corresponding standard deviation, this meant that most of the respondents were moderately in agreement. Compared to the mean of means at 2.9720 with 0.6095 standard deviation the item mean was lower. Corruption had a negative impact on the public private partnership performance.

To determine if bureaucracy had contributed to unsatisfactory outcomes of PPP renewable energy projects. From the results 10 respondents (4.8%) did not agree at all with the statement,119 respondents (57.5%) to a small extent were in agreement, 30 respondents (14.5%) indicated they were moderately in agreement,36 respondents (17.4%) were largely in agreement while 12 respondents (5.8%) indicated they were to a very large extent in agreement. A mean score of 2.6184 with a standard deviation of 1.1065 was realized on this item implying most participants were

moderately in agreement that bureaucracy impacted on the performance of PPPs. Comparatively the composite of 2.9720 with standard deviation of 0.6095 this item mean was below, bureaucracy has a negative contribution to the performance of public private partnership renewable energy projects. Concerns of bureaucracy should therefore addressed to enhance performance of renewable energy the projects procured through PPPs.

To find out if agitation by nongovernmental organizations (NGOs) had contributed to delays and cost overruns of the Public Private Partnership renewable energy projects. Out of the 207 respondents who participated 9 (respondents 4.4%) of the respondents indicated not at all, 108 respondents (52.2%) were in agreement to a small extent, 33 respondents (15.9%) were moderately in agreement 23 respondents (11.1%) were largely in agreement 34 respondents (16.4%) were in agreement to a very large extent. This item mean score is 2.8309 with a standard deviation of 1.2009, this implied most respondents were moderately in agreement. Comparing this mean score with the mean of means 2.9720 with 0.6095 as the corresponding standard deviation, the item mean was lower, this implied that agitation by NGOs had contributed to delays and cost overruns. Effort should be made address stakeholder concerns during project initiation and execution.

As to whether collaboration with NGOs attributed to satisfactory performance. Out of the 207 respondents 2 respondents (1.0%) did not agree entirely with the statement, implying satisfactory performance public private partnership renewable energy projects could not attributed to collaboration with NGOs. 27 respondents (13.0%) indicated they agreed to a small extent, 57 respondents (27.5%) were moderately in agreement while 43 respondents (20.8%) were largely in agreement while 78 respondents (37.7%) indicated they were to very large extent in agreement. Analysis of the responses on this item resulted to a mean score of 3.8116 with a standard deviation of 1.1097 this implies that majority of the respondents were in agreement to large extent. When compared to the composite mean score of 2.97290 with a composite deviation of 0.6095 this mean that collaboration with NGOs contributed to PPP renewable energy project performance.

As to whether illegal takeover of private partners' assets had influenced performance of public private partnership renewable energy projects. Of the 207 participants who responded to this item, 7 respondents (3.4%)did agree at all, 44 respondents (21.2%) were in agreement to a small extent, 62 respondents (30.0%) indicated them moderately in agreement, 25 respondents (12.1%) indicated they were largely in agreement, while 69 respondents (33.3%) indicated they were in agreement to a very large extent. This item mean is 3.5072 with 1.2459 as the corresponding standard deviation, this was construed that most respondents to a large extent were in agreement. Comparatively this mean score is above the composite mean score mean score of 2.9729 with a composite deviation of 0.6095. This shows that illegal takeover of private partners' asset influenced how PPP renewable energy projects performed. Majority of the respondents opined that possibility of illegal take over private investors asset influence the PPPs.

Responses on cases of influence of political expropriation of investment assets in the on PPP renewable energy

projects performance. Of the respondents who participated in the study, 2 respondents (1.0%) indicated not at all, 22 respondents (10.6%) indicated to be in agreement to a small extent, 104 respondents (50.3%) indicated they moderately in agreement, 33 respondents (15.9%) indicated to a large extent while 46respondents (22.2%) indicated to they were to a large extent in agreement. This item had 3.4783 as the mean with 0.9845, as the corresponding standard deviation meaning majority of the respondents agreed to a large extent that political expropriation impacted on PPPs. Compared to the mean of means of 2.9720 with 0.6095 as the standard deviation, this item had a higher means score implying expropriation is a factor that influences the performance of PPP renewable energy projects. Security of private investment assets is paramount in the performance of PPPs

5.2. Test of Research Hypothesis Political Risk and Performance of Public Private Partnerships Renewable Energy Projects

A linear regression analysis was conducted with political risks as the predictor variable and performance of PPP renewable energy project as the outcome variable. As revealed on Table 4, the regression of political risks on performance of public private partnerships was $F_{(1,205)} = 99.771$, p<.05. The significant F-ratio implies that political risks has strong influence on how public private partnership perform. This provided enough grounds for the adoption of the alternate hypothesis by the study. The study therefore held that political risk significantly influences the performance of PPP renewable energy

projects. The model obtained R^2 =.327, showing that approximately 33% of the variance in performance of public private partnerships can be accounted for by political risks.

Since it was established that political risks explained 32.7% (R^2 = 0.327, $F_{(1,205)}$ = 99.771, p<.05 of the variance in performance of Public Private Partnership renewable energy projects. Null hypothesis was rejected.an examination of the coefficients, the constant term (B=.789,p<.001), while political risks (B=-.560;p<.001) was found to be statistically significant in predicting performance of PPP renewable energy projects. The study concluded that there is significant influence of political risks on the performance of PPP renewable energy projects.

6. Conclusions

The purpose of this study was to establish how political risks influence theperformance of public private partnerships renewable energy projects. The study reveals that political risk factors examined strongly predicted the performance of public private partnerships renewable energy projects. Political violence, bureaucratic risks, breach of contract and risk of expropriation had a significant inverse influence on the performance of public private partnerships renewable energy projects. In this regard the study recommends policy measures that would ensure PPPs are protected against political risks. Identification and mitigation of political risks to ensure performance of PPP renewable energy projects.

Table 4. Political risk and Performance of Public Private Partnerships renewable energy projects

Model summary				
Model	R	R square	Adjusted R square	Std.Error of the Estimate
1	0.572[a]	0.327	0.324	0.23154
Predictors: (Constant), political risks				

ANOVA						
model		Sum of Squares	df	Mean square	F	Sig
1	Regression	5.349	1	5.349	99.771	0.000[b]
	Residual	10.991	205	0.054		
	Total	16.340	206			
a. Dependent Variable: Performance of public private partnerships						
b. Predictor: political risks						

Coefficients								
Model		Unstandardized coefficients		standardized coefficients	t	Sig	Collinearity Statistics	
		B	Std.Error	Beta			Tolerance	VIF
1	(Constant)	0.789	0.033		24.147	0.000		
	Political risks	-0.560	0.056	-0.572	-9.989	0.000	1.000	1.000
a. Dependent Variable: Performance								

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