

# Principal-Agency Relationship in the Road Transport Sector: Implication of Public Private Partnership Project adoption for Uganda National Roads Authority

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## Abstract

*This study was conducted to assess principal-agency relationship in the road transport sector and its implication on adoption of public private partnership (PPP) projects by the Uganda National Roads Authority (UNRA). Globally, PPPs provide avenues for financing projects in the roads sector by the principal and her agents. In 2015, UNRA as an a principal adopted a policy to partner with some private sector players as agents to construct and maintain some national roads by using a PPP project arrangement. Despite the adoption of a policy to use PPP projects in the roads sector in Uganda, there were a number of concerns by the citizens on the use of the contracting out PPP project by UNRA (principal), working with a number of private companies (agents) to manage some construction and maintenance projects in the road sector. This study was guided by the principal-agent theory. The study aimed at establishing whether UNRA has adopted concession PPP projects; adopted leasing PPP projects; and, adopted the management contract PPP projects based on principal-agency relationship. The study adopted quantitative and qualitative approaches and a cross-sectional research design. Data was collected using self-administered questionnaires and document review methods. Quantitative data was analysed using descriptive statistics, while content analysis was conducted to appreciate the qualitative data. The study findings revealed that UNRA is likely to adopt the use of management contract PPP project in the roads sector based on the principal-agent relationship. It was concluded that a healthy relationship between the principal and the agents is required if PPP projects are to be effectively used to deliver high quality services in the roads sector. The study recommended that UNRA as a principal should ensure a healthy working relationship with private partners when planning, financing, implementing and maintaining PPP projects in the roads sector.*

**Keywords:** Principal, Agent, Public Private Partnership, Roads, Transport, Policy, Adopt

## Introduction

The study aimed at conducting an assessment of principal-agency relationship in the road transport sector to ascertain its implication on the adoption of different PPP projects by the Uganda National Roads Authority (UNRA) (UNRA, 2019). Over the past decade, PPP projects have been the issue of conceptual and theoretical debate. Globally, PPPs provide avenues for financing projects in the roads sector by the principal and her agents. Therefore PPP projects have been involved in the construction and management of transportation facilities and utilities worldwide (Yahaya & Ibrahim, 2020). However, particular attention should be paid to the slow development and progress of PPP Projects in developing countries like Uganda (Yury et al., 2020). PPP projects are an arrangement made by the state and private companies to work together to implement certain projects aimed at providing goods and services to the citizens in a more effective, efficient and economic manner (Nuwagaba, 2019).

Typically, a private firm as an agent designs, builds, finances and operates a significant capital asset such as a road, a hospital, a school or a prison, and must ensure these assets are available for providing related services to an acceptable standard (Nuwagaba, 2020). The public partner as a principal, in turn, engages primarily in coordination and enforcement functions to ensure the behaviour of the private firm and the outputs of the PPP project are aligned with public policy objectives (Nuwagaba 2019). PPP project contractual arrangements by both the principal and agent are differentiated, among others, by the extent of private sector risk, the role of the private actors, how the private party (agent) is paid, type of asset (new or old) and the types of PPP projects being proposed in the roads sector by the public partner (principal) (Nuwagaba, 2020). PPP projects have got different public and private sector stakeholders. Public partner as a principal has got stakeholders that are typically composed of national and regional governments, governmental agencies and state owned enterprises, whereas private partner as an agent has got stakeholders that are typically private contractors, investors, sponsors and insurers (Hongyu, 2019). Therefore such various stakeholders for both the principal and agent are brought together by the special purpose vehicle (SPV), which is basically the legal and organizational framework for PPPs (Hongyu, 2019).

Presently, there are a number of debates as to whether the use of PPP projects in infrastructure development especially in the roads sector can be supported globally by all the stakeholders of both the principal and agent than ever before (Leigland, 2018). Although Uganda is currently using contracting out projects to construct and rehabilitate some national roads in different parts of the country such as the oil road in Hoima, it is planning to adopt the use of PPP projects, for example management contract for the construction and maintenance of the Kampala-Entebbe expressway and toll road concessions for the Kampala-Jinja highway (Uganda National Roads Authority, 2019). Within such PPP project arrangements, there are several options that include public guarantees and other potential liabilities.

Since PPP projects involve various stakeholders for both the principal and agent, they must always be devised and managed realistically and carefully (Martin, Mark & Siddharth, 2018). The key stakeholders of UNRA as the principal involved in the use of PPP projects in the roads sector include board of governors, senior managers, contracts committee, procurement and disposal unit, user departments, district officers and private firms as agents that they partner with to implement PPP projects (Dentons, 2014). According to Solomon et al. (2014), there are various Concession, Leasing and Management contract PPP projects (Matti, 2013). The Ugandan Government views the use of such PPP projects as an important tool in its plan to bridge the infrastructure financing gap in the next five years. For effective adoption of such PPP projects in the roads sector in Uganda, there is need to understand the nature of the relationship that exists between UNRA as the principal and private organizations as agents to work together to deliver services to the citizens through the use of principal-agency theory (Holland, 1984). This theory is based on the fact that the success of such PPP projects in the roads sector in Uganda depends on the nature of the relationship between public partners as principals and private partners as agents (McQuaid, 2000). From these contextual assumptions of PPP projects and how they can be influenced by the relationships between partners, it is possible to understand how the principal-agency theory applies to this study on the adoption of PPP projects in the road sector in Uganda (McQuaid, 2000).

## Problem Statement

UNRA, as statutory body responsible for constructing and maintaining all national roads in Uganda, has adopted the use of PPP projects in the road transport sector, as an option for meeting the funding gap through the use of private sector capital (Dentons, 2014). Before embarking on the plan to use PPP projects in the roads sector, Uganda has been financing the road sector projects through the traditional public procurement process using the Uganda Road Fund (URF) (Nite, 2013). After the passing of the PPP policy in 2015, UNRA as a principal is currently planning to work with a number of private firms as agents to implement a number of construction and maintenance projects in Uganda using PPP projects such as management contract for Kampala-Entebbe express highway and road toll concession PPP project for Kampala-Jinja highway (Dentons, 2014). Despite the intention to use such PPP projects, the plan is not being fully supported by a number of key stakeholders of both UNRA as a principal and private partners as agents (*Daily Monitor*, 2019). Some do not support the plan to adopt such PPP projects in the roads sector because they believe that since the use of such PPP Projects is a new experience in Uganda, UNRA as a principal is likely to fail to use the best suitable PPP projects in the roads sector (Uganda National Roads Authority, 2019). This reveals some information gaps in the adoption of PPP projects in the roads sector, and it also indicates that the use of such PPP projects is not sufficiently known in Uganda.

## Purpose of the Study

The main purpose of the study was to assess the adoption of concession, leasing and management contract PPP projects in the roads sector in Uganda based on principal-agency relationship.

## Study Objectives

- a) To establish whether UNRA has adopted concession PPP projects based on the principal-agency relationship;
- b) To examine whether UNRA has adopted leasing PPP projects based on the principal-agency relationship;
- c) To analyse whether UNRA has adopted the management contract PPP projects based on principal-agency relationship.

## Study Questions

- a) What concession PPP projects has UNRA adopted based on the principal-agency relationship?
- b) What leasing PPP projects has UNRA adopted based on the principal-agency relationship?
- c) What management contract PPP projects has UNRA adopted based on the principal-agency relationship?

## Literature Review

The Principal-Agent Theory emerged in the early 1970s from the integrated aspects of economics and institutional theory. The principal-agent theory tries to describe the relationship between two parties, where one is a principal in charge of a certain business and the other is an agent who represents the principal in transactions with a third party (Barry, 2006). Agency relationships exist when the principal employs the agent to do some tasks on his behalf (Jensen & Meckling, 1976). Ross is believed to be the one that initially explained the dilemma of the principal-agent theory in terms of someone choosing a flavour of ice cream for another person whose tastes he does not understand (Barry, 2006). The main quoted reference to the principal-agent theory, however, comes from experts such as William Meckling and Michael Jensen (Barry, 2006). Agency theory contends that an organization is made up of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are given the responsibility of using such resources to execute certain tasks in order to achieve the intended objectives (Jensen & Meckling, 1976).

The theory is based on the premise that agents are more informed than principals and that such information disequilibrium results in certain unethical practices which negatively impact the principals' capacity to effectively monitor and evaluate whether their interests are being well catered for by the agents (Adams, 1994). Since agents make such decisions with third parties that eventually affect the principal, agency problems are bound to occur (Jensen & Meckling, 1976). The theory is concerned with the contradicting purposes between the principal and agent in realising each of their specific objectives and is hinged on strategies aimed at getting facts about their potential customers, acquisition of goods, service and works or getting the right contractor (Farquharson & Yescombe, 2011).

The agency theory provides realities, which are relevant to this study on PPP project contracts, and the management structures that are essential for influencing agents to do certain things that are in line with the expectation and specifications of the principal (Babayán & Kadlečiková, 2016). To manage the risk of loss of confidence that stems from a loose ownership control structure in the public management process, government may be more inclined to employ internal monitoring mechanisms to ensure effective implementation of PPP projects in the roads sector (Mouraviev et al., 2016). The agency theory also encourages regulations and guidelines to ensure that business managers (agents) behave in line with what business owners (principals) expect (Poulton & Macartney, 2012). Barry (2006) suggests that implementation of PPP projects in the roads sector is a bonding cost borne by agents to satisfy the principals' demands for accountability. Therefore, adoption and implementation of PPP projects in the roads sector such as management contract for Kampala-Entebbe express highway and toll road concession for Kampala-Jinja highway (Dentons, 2014), requires the principals to always monitor how such PPP projects are being managed by the private sector agencies. This is because private officials who are agents may not look out for the specific interests of the citizens (Iossa & Martimort, 2015). In addition, the public sector as a principal should always make recommendations on improvement of the risk management, control and governance systems pertaining to PPP projects being implemented in the roads sector by the private sector agents (Javed et al., 2013).

Agency theory, therefore, guides the principal to check whether the agent is effectively implementing the road sector PPP projects in line with agreed terms, conditions, parameters, specifications and standards (Van Den Hurk & Verhoest, 2016). In addition, the principal agency theory suggests a variety of reasons why traditionally procured public infrastructure projects exhibit higher costs of construction in the roads sector compared to PPP projects (APMG, 2017). This is because in most cases the bundling of construction and operation contracts in a PPP project gives the private partner greater incentives to make investments in the construction phase to lower subsequent operation and maintenance costs but unfortunately due to poor relations that exist between the principal and the agent that arise sometimes as a result of self-vested interests, may lead to high operational costs when executing such PPP projects (Blanc, Hugh & Timo, 2006).

Scholars like Shankman (1999) suggest inclusion of other key stakeholders in a principal-agent relationship since they also play an important role in shaping the work of the agent to ensure that the principal's objectives are achieved in an efficient manner (Iossa & Martimort, 2015). Such engagement of the agents in PPP projects is part of a mechanism for improving productivity and driving effectiveness, efficiency and economy in the roads sectors by the principals worldwide (Farquharson & Yescombe, 2011). According to Solomon et al. (2014), there are various PPP projects used in the roads sector which include: concession, leasing and management contract PPP projects (Matti, 2013). Concession is where a public entity gives the private entity the right to construct for an agreed period of time, which may range 20 to 30 years (Mouraviev et al., 2016). Lease is where the private sector is responsible for the service in its entirety and undertakes obligations relating to quality and service standards (Delmon, 2011). A management contract is usually where a private agency carries out maintenance of a facility on behalf of the public entity for a fee (Kwak et al., 2009). The Ugandan government views the use of such PPP projects as an important tool in its plan to bridge the infrastructure financing gap in the next five years.

Thus, in the context of UNRA, the principal-agency theory argues that to be effective in the adoption and implementation of such different PPP projects in the roads sector, UNRA as the principal needs to work well with private partners who are her agents (Poulton & Macartney, 2012). The theory, therefore, can be used by UNRA as a principal to explore the challenges of agency problems in contract arrangements it has with few private entities as agents in the implementation of some PPP projects that some scholars refer to as a principal striking a bargain with an agent. This culminates into an agency relationship where an agent acts for or as a representative of the principal (Babayan & Kadlečíková, 2016)

## **Methodology**

The researcher used the mixed methods approach under the cross-sectional survey design, case study design and exploratory design (Creswell, 2013). A combination of the quantitative and qualitative approaches within the same study was taken as complementary since the aim of the study was to assess the adoption of PPP projects by UNRA in the roads sector (Creswell, 2003). The study population consisted of 120 key stakeholders of UNRA (Shari, 2012). A sample size of 91 respondents was used (Krejcie & Morgan, 1970). These UNRA stakeholders were purposively selected because they are the ones that were involved in the adoption of PPP projects and they had the right knowledge and skills pertaining to the use of PPP projects and so they were the most suitable respondents that could provide the necessary information

required by the researcher (Creswell, 2014). Simple random sampling technique and purposive sampling technique were used. Data was collected using self-administered questionnaires, documents review checklist and review of literature (Joubish et al., 2011). Quantitative data was analysed using descriptive statistics and qualitative data was analysed using narratives (Sekaran, 2007).

## Study Findings

### Response Rate

A total of 62 responses from the study survey comprising 68 per cent response rate, were analysed, interpreted and reported as indicated in Table 1 below.

**Table 1: Response Rate for study Participants from UNRA**

Instrument	Planned	Actual	Percentage (%)	Short fall (%)	Total (%)
Questionnaires	91	62	68	32	100

Source: Primary data (2019)      n=62

Table 1 shows that out of 91 respondents, only 62 responded to the study, reflecting a response rate of 68 %. This response rate is in line with Amin (2005) who argues that a response rate > 50 is good enough to represent the survey population.

### Demographic characteristics of the survey study

The demographic characteristics of the questionnaire survey responses that included gender, age group, level of education, position held at UNRA, years worked with UNRA and terms of employment as shown in Table 2 below for the 62 respondents were examined, presented and used to draw conclusions in this article.

**Table 2: Respondents' background characteristics**

Characteristic	Category	Frequency	Percentage
Gender	Male	44	70.1
	Female	18	29.9
Age	20-29 years	23	37.8
	30 - 29 years	27	43.3
	40 - 49 years	12	18.9
Education Level	Bachelor's Degree	30	48.4
	Postgraduate Diploma	22	35.5
	Master's Degree	09	14.5
	PhD	01	1.6
Terms of employment	Temporary staff	05	09
	Contract staff	14	22
	Permanent staff	42	67
	Others specify	01	02



Characteristic	Category	Frequency	Percentage
Tenure with UNRA	Less than a year	08	12.8
	1 - 5 years	18	29
	6 - 10 years	07	11.3
	Support staff	29	46.8

Source: Primary data (2019) n=62

As illustrated in Table 2, in terms of respondents' gender, the majority of the respondents were male, representing 70.1%, and the rest were female, representing 29.9%. This implies that the biggest number of respondents were males since there are a few females in Uganda that qualify to work with UNRA in the adoption of PPP projects. In terms of age of respondents, most predominant age group was 30-39 (43.3%), followed by 20-29 (37.8%) and 40-49 (8.9%). This implies that a big number of respondents were in the 30-39 age group who were the majority of staff that were competent to adopt the use PPP projects. In terms of education, the majority of respondents had Bachelor's degree (48.4%), followed by those with postgraduate diplomas (035.5%, Master's degree holders (14.5%) and those with Doctorates (1.6%). The majority of employees were graduates, implying that most respondents were academically qualified to give a reasonable and well-balanced view on the issues in the study. When it comes to terms of employment for the respondents, the majority of respondents were permanent staff (67%), followed by contract staff (22%), temporary staff (9 %), while staff employed by UNRA on other terms were 2%. This implies that the biggest number of respondents were permanent staff to ensure effective PPP project implementation. Finally, in terms of experience, the majority of respondents had working experience of 11 years and above (46.8%), followed by those of 3-6 years (29%), less than 2 years (12.9%) and 7-10 years (11.3%). This implies that the respondents had adequate experience needed for adoption of PPP projects in Uganda's roads sector

The items on PPP projects being used by UNRA were derived from the research objectives. The items that on which respondents were cross-examined in these objectives were in line with adoption of concession; leasing and contracting PPP projects in the roads sector in Uganda based on the principal-agent relation as shown in Table 1 below.

**Table3: PPP Projects used by UNRA in the roads sector in Uganda based on the principal-agency relationship**

PPP Models to be used by UNRA	SD	D	N	A	SA	Mean	S.Dev
UNRA has adopted Concession PPP Projects based on the principal-agency relationship	7 (11.3%)	34 (54.8%)	12 (19.4%)	8 (12.9%)	1 (1.6%)	<b>2.40</b>	<b>.896</b>
UNRA has adopted Leasing PPP Projects based on the principal-agency relationship	1 (1.6%)	31 (50.0%)	17 (27.4%)	7 (11.3%)	6 (9.7%)	<b>3.08</b>	<b>.821</b>
UNRA has adopted Management Contract PPP Projects based on the principal-agency relationship	2 (3.2%)	3 (4.8%)	10 (16.1%)	19 (30.6%)	28 (45.2%)	<b>3.34</b>	<b>1.114</b>

Source: Primary data (2019) n=62

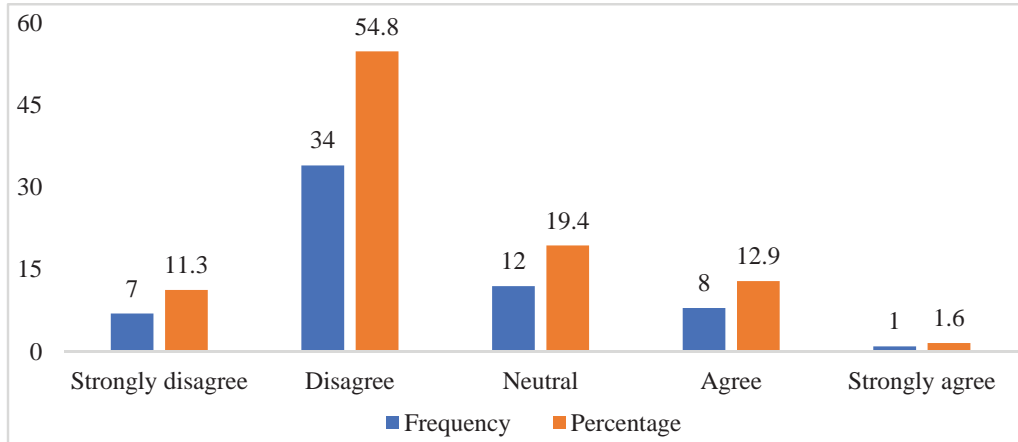
SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, SD = Strongly Disagree, S.Dev = Standard deviation.

In line with the statistical computations in Table 3 above, the details hereunder interrogate the empirical results through advanced statistical tests to demonstrate the views of the respondents on the different PPP projects used by UNRA in the roads sector based on principal-agency relationship.

## UNRA's adoption of the Concession PPP Projects in the roads sector based on Principal-Agency relationship

As to whether UNRA adopted concession PPP projects, Table 3 above shows that 41 respondents, representing a larger percentage of 66.1% disagreed with the statement compared to a smaller number of 9 respondents, representing 14.5 %, that agreed with the statement. However, only 12 respondents that represent 19.4% were not sure about the statement. The mean of 2.40 shows that the majority of respondents disagreed with the item, implying that UNRA has not yet adopted concession PPP projects in the roads sector in Uganda. Therefore this finding is not in line with what the researcher intended to measure as shown in Figure 1 below.

**Figure 1: Histogram for Concession PPP Projects to be adopted by UNRA based on principal agency relationship**



Source: Primary data (2019) =62

Figure 1 is in agreement with the descriptive statistics of Table 3 above. Cumulatively, 41 respondents, representing 66.1% disagreed with the statement, compared to a smaller number of 9 respondents, representing 14.5 % that agreed with it. Twelve (12) respondents that represent 19.4% were not sure. However, findings of a review of the report by African Development Bank Group (2018) on Kampala-Jinja Expressway PPP Project indicated that the African Development Bank is considering extending a financial support to UNRA to implement the Phase 1 of the Kampala-Jinja toll road concession PPP project which consists of a limited access tolled expressway from the Central to the Eastern regions of Uganda.

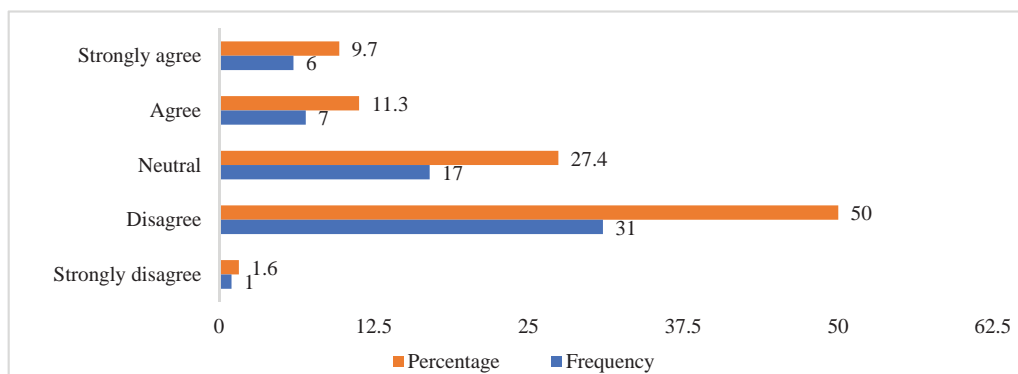


The overall project that includes Phases 1 and 2 comprises the Kampala-Jinja Expressway Mainline from the capital city of Kampala to the town of Jinja in the east and the Kampala Southern Bypass that will be implemented in 2021 based on ensuring good principal-agent relationship since the key social impact assessments and management plans designed by UNRA (Principal) to ensure effective execution of the proposed project component activities are to be strictly observed by the private partner (Agent) when implementing the proposed PPP project in the roads sector in Uganda. In this regard, findings of a review of the report on supporting Uganda's roads by Public-Private Infrastructure Advisory Facility-PPIAF (2014) indicate that since 2000, PPIAF has been providing technical assistance to the government of Uganda to create an environment that enables private investment in infrastructure. In particular, a series of three technical grants have supported the government of Uganda to develop the PPP framework at national level, identify a pipeline of PPPs and provide specific support to strengthen the institutions implementing one of the priority PPP projects in the road sector, the Kampala–Jinja expressway. The above qualitative finding from document review support quantitative data which reveal that UNRA has not yet adopted the use concession PPP projects although she is planning to do so in 2021. This confirms that UNRA is currently not yet using concession PPP projects based on principal-agency relationship and so it is not in line with what the researcher intended to measure.

## UNRA's Adoption of Leasing PPP Projects based on principal-agent relationship

As to whether UNRA adopted Leasing PPP projects based on principal-agent relationship, Table 3 above shows that 32 respondents representing 51.6 % disagreed with the statement compared to 13 respondents representing 21.0% that agreed with it. However, 17 respondents that represent 27.4% were not sure about this statement. The average rating is confirmed by a fair mean of 3.08 and standard deviation of 0.821, implying that, so far, UNRA has not yet adopted Leasing PPP Projects based on principal-agent relationship and so this finding is not in line with what the researcher intended to measure as shown in Figure 2 below.

**Figure 2: Histogram for Leasing PPP Projects to be adopted by UNRA based on principal-agent relationship**



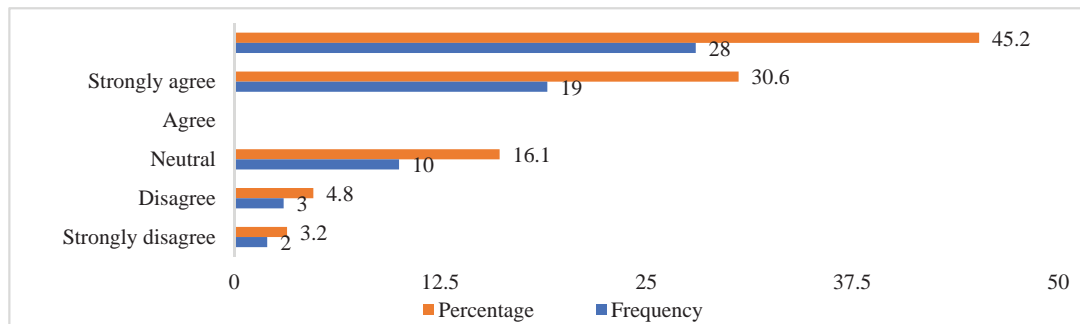
Source: Primary data (2019)  $n=62$

As presented in Figure 2, cumulatively 32 respondents, representing 51.6 %, disagreed with the statement compared to 13 respondents, representing 21.0%, that agreed with the statement. However, a total of 17 that represent 27.4% were not sure about this statement. Again findings of a review of the appraisal report by African Development Bank Group (2018) on Kampala Jinja Expressway PPP Project and African Development Fund (2014) on Road Sector Support Project V indicated that UNRA is not intending to lease any land through which to implement the proposed PPP project. Instead, land needed for the project will be acquired from the locals that will eventually be compensated, although it is expensive to do so and delays project implementation. In fact findings from documents review show that the densely populated, urban context of the project combined with its linear nature and limited availability of vacant land of reasonable proximity and quality to the land that will be acquired for the project, means that cash compensation is an appropriate approach for the setting other than use of leasing PPP project approach. The cash compensation approach was found to be consistent with UNRA policy and approach to compensation and livelihood restoration implemented for other similar projects in Uganda. A findings of a review of scholarly debates by Nuno (2015) on UNRA's Kampala-Entebbe Expressway: Uganda's First Toll Road indicate that UNRA had spent about a fifth of the US\$ 100billion budget on the compensation package. Some delays were attributed to absentee landlords or properties with multiple landlords, Buganda Kabaka's land, and mortgaged land. But the most complicated disputes occurred when landlords challenged the proposed compensation value. The above qualitative findings from document and literature review support quantitative data that shows that UNRA is not using Leasing PPP projects in the roads sector based on principal-agent relationship and so this finding is not in line with what the researcher intended to measure.

### **UNRA's Adoption of Management Contract PPPs Projects based on Principal-agent relationship**

As to whether UNRA adopted management contract PPP Projects based on Principal-agent relationship, Table 3 above shows that cumulatively 47 respondents, representing 75.8 %, agreed with the statement compared to a smaller number of 10 respondents, representing 16.1%, that disagreed with the statement. However, only 10, representing 16.1%, were not sure of the statement. The lower standard deviation of 0.1 implied that there was low variation in response and a mean of 3.34 implied that the majority of the respondents were of the view that UNRA is mainly using management contract PPP projects, which finding is in line with what the researcher intended to measure. As illustrated above, the scale was intended to measure whether UNRA is currently using the above PPP projects in the roads sector in Uganda based on principal-agent relationship. These findings are illustrated in Table 3 above and in Figure 3 below.

**Figure 3: Histogram for Management Contract PPP Projects to be adopted by UNRA based on principal-agent relationship**



Source: Primary data (2019)

$n=62$

Figure 3 above shows that 47 respondents, representing 75.8 %, agreed with the statement compared to a smaller number of 10 respondents, representing 16.1%, that disagreed with it. However, only 10 that represent 16.1 were not sure about the statement. Findings of a review of scholarly debates by Nuno (2015) on UNRA's Kampala-Entebbe Expressway: Uganda's First Toll Road indicate that UNRA intends to use management contract PPP project based on principal-agent relationship, **a move that will further boost private sector investment in the roads sub-sector. The findings go ahead to indicate that UNRA intends to tender out the management of three toll plazas that were erected on the Kampala-Entebbe expressway to the private sector.** In this regard, according to a review of the report on management of Kampala-Entebbe expressway by New Vision (2014, 19 June), UNRA has consulted the International Finance Corporation, the World Bank's business arm, to draft modalities on how tolls at Busega, Abayita Ababiri and Kajjansi will be managed by getting a private firm to collect toll fees through management contract PPP project arrangement. Once the management contract PPP project arrangement commences, all motorists, motorcycle riders and bicycle riders will pay toll fees for use of the Kampala-Entebbe Expressway. This finding further indicates that UNRA will pay the private agency an agreed amount of money to cover the overhead costs incurred in the operation and maintenance of the Kampala-Entebbe expressway. The above qualitative findings from documents and literature review support the quantitative results on the adoption of management contract PPP project in the roads sector by UNRA based on the principal-agency relationship and these findings are in line with what the researcher intended to measure.

## Discussion of the Study Findings

The quantitative findings revealed that UNRA has not yet adopted the use of concession PPP projects in the roads sector in Uganda based on the principal-agent relationship. However, qualitative findings indicated that the African Development Bank is considering financial support for the Phase 1 of the Kampala-Jinja toll road concession PPP project to be adopted by UNRA which consists of a limited access tolled expressway from the Central to the Eastern regions of Uganda. Therefore, this finding of the study reflects the reviewed debates by scholars such as Kwak et al. (2009), Delmon (2011), Yescombe (2007) and Mouraviev et al.

(2016) who assert that a concession is a PPP project structure where the public sector grants a concession or a series of rights to the private contractor to construct or renovate and operate an asset for a pre-determined period (usually 20 and 30 years) referred to as a concession period. Quantitative findings further indicated that UNRA has not yet adopted the use of leasing PPP projects in the roads sector in Uganda based on the principal-agent relationship. Further, qualitative findings indicated that UNRA is not intending to lease any land through which to implement the proposed PPP projects. Instead land needed for the implementation of PPP projects will be acquired from the locals that will eventually be compensated although it is expensive to do so and delays project implementation. Therefore, this finding is not in line with the reviewed debates by scholars and development partners such as Warner et al. (2008), Delmon (2010,) Farquharson and Yescombe (2011), World Bank (2017), Bouman et al. (2013) and ADB (2008) who note that leasing is a longer-term arrangement where a private entity can design, build, refurbish, operate and maintain a service delivered directly to consumers. The financial risk for operation and maintenance is borne entirely by the private sector operator. In addition, quantitative findings revealed that UNRA intends to adopt the use management contract PPP projects in the roads sector in Uganda based on the principal-agent relationship. In this regard, qualitative findings showed that UNRA intends to use management contract PPP project based on the principal-agent relationship, **a move that will further boost private sector investment in the roads sub-sector. The findings go ahead to indicate that UNRA intends to tender out the management of three toll plazas that were erected on the Kampala-Entebbe expressway to the private sector.** This implies that UNRA may be intending to use such PPP project in the roads sector in Uganda. This finding agrees with the reviewed debates by scholars and development partners such as Kwak et al. (2009), Gwary et al. (2016), Delmon (2011), Bouman et al. (2013) and ADB (2008) who believe that management or operation and maintenance (O&M) contract are PPP project arrangements where a private entity provides some operation and maintenance services for a fee, usually based on delivering satisfactory services. So these scholars believe that a management contract is usually where a private agency carries out maintenance of a facility on behalf of the public entity for a fee as long as it satisfies the public entity that the service has been provided in line within agreed parameters

## Conclusion

The quantitative findings revealed that UNRA has not yet adopted the use of concession PPP projects in the roads sector in Uganda based on the principal-agent relationship. However, qualitative findings indicated that the African Development Bank is considering to extend financial support to UNRA for execution of Phase 1 of the Kampala-Jinja toll road concession PPP Project which consists of a limited access tolled expressway from the Central to the Eastern regions of Uganda. Quantitative findings further indicated that UNRA has not yet adopted the use of leasing PPP projects in the roads sector in Uganda based on the principal-agent relationship. Qualitative findings also indicated that UNRA is not intending to lease any land through which to implement the proposed PPP projects. Instead, land needed for the implementation of PPP projects will be acquired from the locals that will eventually be compensated although it is expensive to do so and delays project implementation. In addition, quantitative findings revealed that UNRA intends to adopt the use management contract PPP

projects in the roads sector in Uganda based on the principal-agent relationship. Qualitative findings also showed that UNRA intends to use management contract PPP project based on principal-agent relationship, **a move that will further boost private sector investment in the roads sector. The findings go ahead to indicate that UNRA intends to tender out the management of three toll plazas that were erected on the Kampala-Entebbe expressway to the private sector.** Overall, a healthy relationship between the principal and the agents is required if PPP projects are to be effectively used to deliver high quality services in the roads sector in any part of the world to the satisfaction of the different PPP project stakeholders.

## Recommendations

From the quantitative study findings, the majority of the UNRA stakeholders were of the view that UNRA is not currently using concession PPP projects, but the qualitative findings indicated that UNRA is planning to adopt the use of toll road concession PPP project for the Kampala-Jinja highway based on principal-agent relationship. In line with this finding, UNRA as a principal needs to get a private partner that has both good technical and financial capacity to work with in the implementation of the proposed PPP project of Kampala-Jinja highway based on favourable terms and conditions that ensure that the two parties work together harmoniously and amicably in much better cordial and mutual relations. Secondly, quantitative findings indicated that UNRA is currently not intending to adopt the use of leasing PPP projects in the roads sector based on principal-agent relationship. Qualitative findings indicated that UNRA is not intending to use leasing PPP project in acquisition of land for implementing road construction and maintenance PPP projects. Instead land needed will be acquired from the locals that will eventually be compensated, although this has proved to be very expensive and leads to delays in PPP project implementation. In line with this finding, UNRA needs to embark on the use of leasing PPP projects to acquire land for construction of various roads in Uganda since compensating all land owners has proved to be very expensive on top of delaying PPP project implementation. Finally, quantitative findings revealed that UNRA is currently not using management contract PPP projects in the roads sector based on principal-agent relationship compared to qualitative findings that indicated that UNRA is planning to get a private firm to operate and maintain the Kampala-Entebbe expressway using management contract PPP project. In line with this finding, UNRA as a principal needs to expedite the process of getting a firm to manage the Kampala-Entebbe expressway through collecting toll fees from the road users so that there is no more loss of revenue as motorists, motorcycle and bicycle riders are currently using the road without paying the toll fees and yet such toll fees are needed to pay back the Chinese Exim Bank loan that was used to construct the road. In addition, once UNRA adopts the use of the management contract, she needs to ensure that she pays the private agency as a way of sharing the profits once the agreed milestones have been accomplished. However, UNRA as the principal still needs to remain responsible for overall delivery of the toll road transport service to the public and should also effectively monitor the private agency that will be authorised to carry out day-to-day maintenance and management of the road facility in the most efficient and effective manner. Overall, once UNRA as a principal adopts the use of concession, leasing, and management contract PPP project, she should ensure a healthy working relationship with her private partners as agents when planning, designing, financing, implementing, maintaining, monitoring, sustaining and managing such PPP projects

in the roads sector in Uganda. This is because a healthy relationship between the principal and the agents is necessary if PPP projects are to be effectively used to deliver high quality services to the short-term, intermediate and long-term users of such PPP projects in the roads sector.

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