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Financial Management Methods and The Efficacy of Advance Financing: a case of the Public Infrastructure in Uganda

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Abstract

In Uganda, advance financing is a common method for financing public infrastructure. While advance financing is thought to considerably alter the way governments in the developing countries improve infrastructure through offering more financing services that might make a real difference to infrastructural developments, there is a continual uproar about the inefficiencies in Uganda National Roads Authority, principally around the advance funded projects. This study focused on assessing the appropriateness of advance financing arrangements on the efficacy of advance financing of this road. A cross-sectional survey was used to collect data from a total of 204 respondents from Uganda National Roads Authority using self-administered questionnaires. The authors focused on financial stability, professionalism, level of government funding and efficacy of advance financing of the roads sector. Data was analyzed using SPSS 26. Ordinal logistic regressions were run to establish the relationships between the study variables. The findings of the study revealed that good financial management methods were significant positive predictors of efficacy of advance financing of public infrastructure. Also, when the Contractor did their part and accepted status quo other than highlighting objections was found to be a momentous predictor of efficacy of advance financing for infrastructure project. Under government funding, scenarios where government had truthfully rewarded contractors with a sense of achievement positively influenced the efficacy of advance financing of Public infrastructure. Generally, both financial stability and professionalism positively influenced efficacy. However, the study findings revealed that when the government meets the agreed target with contractors before full implementation of the project, there is a negative influence on efficacy of the project. This therefore calls for sanction on staff working on these projects which is contrary to construction code on public road construction projects since they are designed for a specific purpose using taxpayer's money through government who are accountable to confirm that the funded projects follow their predetermined targets.

Keywords: Financial Management methods, Financial stability, professionalism, Government funding, Efficacy of advance financing, Public-private partnerships, Public infrastructure

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1. Introduction

Advance financing of national roads means that contractors have to use their own funds to finance the building of roads so that a government can repay the contractor later but in installments (De Nahlik and Fabozzi, 2021). The first advance financing project started in 1943 in Pittsburgh to ensure economic, social and urban development strategies for the city (Surubaru, 2021) and it relates to projects that are immediately directed towards action. Globally, the available funding for infrastructure from traditional sources falls far short of the investment needs (O'Brien and Pike, 2019). Consequently, the state may not be solely responsible for resolution of problems connected with the development of highway infrastructure. Implementation of projects under the conditions of Public-Private Partnership (PPP) is a promising mechanism for attracting private funds (Lyubyashenko and Lyaskin, 2020). PPP is an arrangement that involves advance financing and is legally executed for a certain period of time on mutually beneficial cooperation of public bodies and authorities with business entities in respect to projects that are in the field of direct state interest and control. Around the world, PPP arrangements as advance financing model has become an increasingly popular means for procuring public services and infrastructure. It is mainly due to the fact that PPPs allow governments to secure a much-needed infrastructure without immediately raising taxes or borrowing. Under such conditions, the study of the structure and mechanisms of financing of PPP projects is particularly important.

According to Rahman et al. (2020), the success of highway construction projects required appropriate workflow

design process, resources and third party engagements. In Uganda, several roads have been constructed through advance financing including, Mpigi-Kibibi-Mityana Road (60KM), Kanungu-Hamurwa (47km), Butogota-Buhoma (32km) and Pakwach-Karuma road and Pakwach Bridge, Kisubi-Nakawuka-Natete/Nakawuka-Kasanje-Mpigi/Nakawuka-Mawugulu-Nanziga-Maya/Kasanje-Buwaya and Nakasero-Northern Bypass Express VVIP road (Kazooba, 2021).

Although, advance financing arrangements are viewed positively by some scholars, others particularly home-grown companies and policy makers consider they lack transparency, create unsustainable debt, promote interests of funders over the borrowing country, increase unemployment, unfairly compete with home-grown business, deal in corruption, have poor working conditions, and result in substandard construction (Ogwang and Vanclay, 2021; Kazooba, 2021). Nevertheless, Uganda and other developing countries have generally benefited from advance financing and there is more to study about the efficacy of advance financing in various aspects without assessing the financial management methods and the future implications. Understanding of the implications of the effect of various financial management methods instituted during advance financing aspects of public infrastructure can ensure positive development outcomes, governments and construction company's assurance of compliance with international standards, especially relating to: environmental and social impact assessment, human rights and benefit-sharing arrangements. This was swiftly done through assessing the financial management aspects on the advance financing of public infrastructure.

1.1 Statement of the Problem

Advance financing has been one of the has been one of the common methods for financing public infrastructure in Uganda. However, in Uganda anecdotal evidence shows a lot of fraud in advance financing of various government projects, including Public infrastructure, particularly officials conniving with land grabbers and officials from the Uganda Ministry of Lands, Housing and Urban Development (Sengooba, 2022). Yet, advance financing is believed to considerably alter the way the government in the developing world improved infrastructure through offering more financing services that could make a real difference to infrastructural developments. However, despite the relevance of advance financing in providing fast, convenient, reliable and secure infrastructural development, there is a continual uproar that there are a number of inefficiencies in Uganda National Roads (Ogwang and Vanclay, 2021). Government of Uganda still finds it challenging to meet the monthly toll collections to meet to cater for the $350 billion loan obtained from the Exim Bank in China (Kazooba, 2021). This might be due to ineffective methods of financial management adopted. If the situation remains, inefficiencies regarding poor advance financing of the national roads such as the recent demand for user fees on Kampala–Entebbe Expressway might hardly be resolved. This study focused on financial management arrangements and the efficacy of advance financing of public infrastructure in Uganda.

1.2 Purpose and objectives of the study

The purpose of this study was to assess the effect of financial management methods on the efficacy of advance financing of public infrastructure in Uganda. Specifically, the study focused on input (financial stability), norms/policies (professionalism) and output/reward (government funding) on the efficacy of advance financing (workflow) of public infrastructure in Uganda. Specifically, to:

i) Examine the effect of financial stability of the contractor on the efficacy of advance financing of public infrastructure in Uganda;

ii) Establish the relationship between professionalism exhibited by the contractor and the efficacy of advance financing of public infrastructure in Uganda; and

iii) Establish the level of government funding on the efficacy of advance financing of public infrastructure in Uganda.

1.3 Conceptual Scope

The study considered efficacy of advance financing of roads as a concept and all its success is influenced by financial management method factors. These success factors included financial stability, professionalism and government funding. Efficacy of advance financing of roads focused on the workflow.

1.4 Significance of the study

The study is hoped to provide relevant information to stakeholders and policy makers on the relevance of the government in making decisions on whether to pre-finance national roads or not in future. The pre-financers to increase their awareness of how best to improve their efficiency levels in the workflow in design process will use

the findings from the study. The level of third-party involvement will enable the government to improve the performance of pre-financers whereas the findings of this formed a basis for future work in the areas of advance financing of projects.

1.5 Theoretical framework

This study was anchored on two theories including Control Theory by Hurwitz (1895) and Goal Setting Theory by Edwin Locke (1960). The former theory explained financial management methods and proposes that formal controls, which point to input control (financial stability) methods, norms/policy control (professionalism) methods and output control (re-enforcement/rewards or sanctions/government funding) methods rely on officially documented rules and are often implemented by managers, whereas informal controls are based on norms and are often enacted by peers (Baldauf et al., 2005). Formal controls and goals are formal systems of rules, roles, records, and rewards to influence, monitor, and assess performance, in this case advance financing of public infrastructure in Uganda.

Goal Setting Theory by Edwin Locke (1960) was used to explain the efficacy of advance financing of public infrastructure. This theory was adopted because of contractual goals set between contractors and the Government of Uganda. In this study, Goal Setting Theory was used to explain the workflow as a key measure of the efficacy of advance financing of public infrastructure.

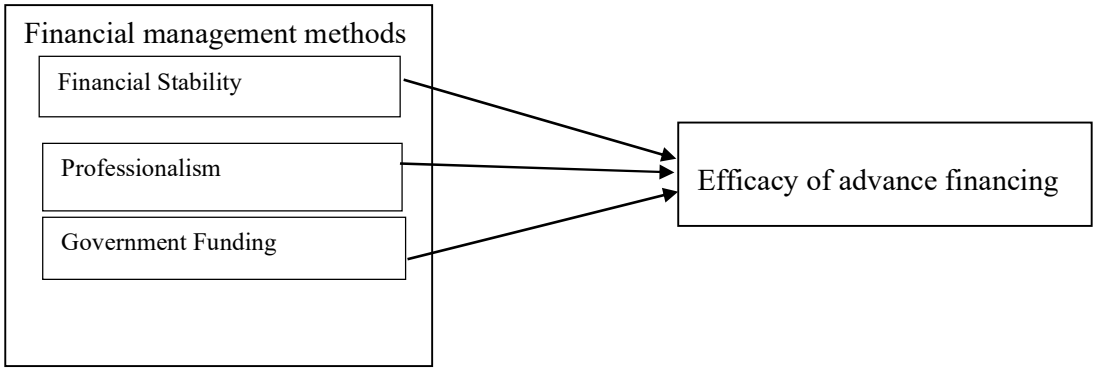

Figure 1: Conceptual framework

Source: Control Theory by Hurwitz (1895), Goal Setting Theory by Edwin Locke (1960) and Nkata (2022).

Figure 1 shows the relationship between financial management methods and the efficacy of advance financing variables. Conceptualization of Figure 1 was derived from two theories; Control Theory by Hurwitz (1895) for financial management methods, Goal Setting Theory by Edwin Locke (1960) for efficacy of advance financing. However, given the context of Uganda, it was found out that a recent study while investigating the impact of cost control techniques on timely completion of construction projects in Uganda, including road reported the intervention of bidding process and third party involvement as key attributes (Nkata, 2022).

Figure 1 also shows that each aspect of financial management methods may solely or together with other aspects influence the efficacy of advance financing in terms of workflow. For instance, the financial stability of the contractor enhances or limits the workflow of a given PPP (Tian et al., 2022). When the financial stability is low then the workflow becomes slow and vice versa. However, there are intervening variables such as nature of the bidding process. For instance, financially stable contractors may not be willing to bid for pre-finance so when the contractor of low financial stability bids that may also limit the workflow. In a recent study to assess the impact of cost control techniques on timely completion of construction projects in Uganda, it was established that the workflow to road completion was interfered with mostly by bidding (choice of contractor) and third party involvement such as Local Government officers (Nkata, 2022). Thus, bidding and third-party involvement aspects were considered in this study. This framework shows that there is a dire need to assess the contribution of financial management methods as a whole or its constructs on the efficacy of advance financing, including advance financing of public infrastructure.

2. Literature Review and Formulation of Hypotheses

2.1 Effect of financial stability and advance financing of Roads

Financial stability refers to monetary input capability of the contractors to fund a sequence of activities, administration, or other processes through which work goes from start to finish. Yet financial stability varies from project to project in different contexts and thus affecting the efficacy of a given project such as advance financing of roads. Oudshoorn (2017), while evaluating the dynamics within the initial planning process of the Meerjarenprogramma Infrastructuur Ruimte en Transport project in the Netherlands revealed differences in project scope, feasibility of pre-finance preferred project alternatives, and urgency and necessity of the project. Stakeholder attitudes, budget allocations, and the (political) cause of the project also influence the course of the exploratory phase. In both cases, decision support methods are used. Advance financing has proven to help ensure the effectiveness of the recommended alternatives from the outset and justify the added value of the project. Kazooba (2021) reported lack of transparency in the procurement of works and services with regard to value for money during advance financing of projects in Uganda. Thus, this created the dire need to assess the contribution of financial stability of contractors on the advance financing of Roads in Uganda, with a case study of public infrastructure in Uganda.

H_{0a}: Financial stability of the contractor has no effect on the efficacy of advance financing of public infrastructure in Uganda;

2.2 Effect of professionalism on advance financing of Roads

Professionalism of the contractors and subcontractors is key in the advance financing of roads, including proper utilization of resources, which involves labour especially competence of project managers/availability, availability of materials and availability of equipment determine the success of a project, including pre-financed roads. Khmel and Zhao (2016) observed that technology of highway construction requires expertise selection of different stationary and mobile equipment, which cost up to several hundred thousand dollars. Moreover, the unique technical specification of such projects may require special equipment. In this regard, the indispensable source implied by the project company financial strategy is financial leasing which allows attracting the necessary equipment at the expense of the lessor. It is possible to use the commercial lending at a certain stage of the object readiness. Having set a stable relationship with the Project Company, suppliers and contractors can supply materials and raw materials to perform project works as well as to perform the work themselves with a payment delay, thus providing commercial lending. Private supplier companies that seek concessions to own or operate infrastructure facilities are more likely to apply for commercial loans (Grigg, 2010). This makes governments adopt advance financing approach to infrastructure development.

Ofori et al. (2017) realized that contractors working with the public sector encounter numerous challenges in financing projects in Ghana revealed that inadequacy in accounting expertise leading to delayed payments and inadequate cash flow on the part of government, lack of credit worthiness and inadequate collateral security from contractors are key determinants to challenges associated with financing public sector projects in Ghana. This paper recommended the establishment of a Construction Development Authority (CDA), within the Ministry of Works and Housing to develop financial plans, policies and laws for this important sector of the economy.

In Uganda, Kazooba (2021) argued that advance financing in Uganda might falls short of proper bidding process thus the competition that would otherwise examine competency, efficiency, and consistency of companies with minimum corruption tendencies is eloped. This perceived gap identified might show a dire need to assess the extent of the contribution of professionalism exhibited on the advance financing of various projects, starting with public infrastructure in Uganda. We therefore hypothesize that:

H_{0b}: Level of professionalism exhibited by contractor has no effect on efficacy of advance financing of public infrastructure in Uganda;

2.3 Effect of government funding on advance financing of Roads

The level of government rewarding or even sanctioning contractors or even third-party involvement, which includes engagement of top management, support from clients, public acceptance and efficiency of authorities during road construction initiation to completion varies in various contexts (Mulati, 2022). Advance financing

was reported as an important affiliation is more important to firms with low levels of human and social capital (Kleinert et al., 2020). It was found as a better method as opposed to traditional forms of entrepreneurial finance. In addition, third party has a signaling effect by providing substantive additional benefits, such as resources, knowledge, and networks that might help firms to outperform their non-financed counterparts and be a preferred investment target for investors in later funding rounds (Kleinert et al., 2020).

Kazooba (2021) reported a disagreement in the third-party involvement as the president disregard the contributions of other third-party engagements. The president gives directives to UNRA officials to enter into contract with pre-determined construction companies. In another study, research emphasized on the role of external entities that partially co-finance projects and thus mitigate information asymmetry problems is almost non-existent (De Crescenzo et al., 2022). Through a qualitative comparative analysis study in Italian crowd funding platform indicated a vast role of third-party investors, key relevance of content communication that varies depending on the presence or absence of a third-party investor. The study also highlights the role of a broad content communication approach among third party. Such level of third-party involvement needs to be studies in various settings, including advance financing.

India has been adversely affected by its inability to compete globally due to infrastructure limitations. This is very important to improve the country's productivity in all sectors (Taktawala and Saraf, 2018). The problem is not only related to the lack of funding, but also to the government's inability to implement the programme. India has increasingly limited government budgets to fund economic infrastructure projects. For these reasons, public-private partnerships (PPPs) are the only viable option to fund such infrastructure needs. The recent trend in such PPP lending has highlighted a number of issues related to the impact on the massive her PPP lending program pledged by the Indian government. Such PPPs have largely relied on commercial banks to finance their projects, and it remains to be seen how this reliance will be maintained. Long-term finance exposes banks to the risk of asset-liability mismatches. We need active bond markets that increase the flow of such long-term funds and, in turn, reduce our reliance on banks for advance financing. Such levels of government involvement should be explored in a variety of contexts, including advance financing in Uganda. This explains why this particular study assessed the contribution of government funding on the efficacy of advance financing of public infrastructure development in Uganda.

H_{0c}: Level of government funding has no effect on the efficacy of advance financing of public infrastructure in Uganda.

3. Methodology

A descriptive cross-sectional survey design was adopted, utilizing quantitative techniques in collecting and analyzing data. Primary data was collected using close-ended questionnaires from study participants during the study period. Our target population for this study were 1400 UNRA staff who are involved in public infrastructure development. Sample size for this study was 302 UNRA staff as recommended by Krejcie and Morgan (1970) table for cross-sectional survey to consider adequate representation. We however got 68 percent (204 respondents) response rate.

3.1 Data Collection methods and analysis

Questionnaires were administered to solicit responses on bio-data, financial management methods (financial stability, professionalism, government funding) and advance financing (workflow) in the construction of advance funded roads. Reliability is the degree to which a measurement technique depends upon to secure consistent results upon repeated application (Shi et al., 2012). The reliability of instruments was ascertained using the Cronbach's coefficient alpha. Before using the questionnaire, a pretest study was carried out first so as to pre-test the questionnaire and determine its reliability. A pretest included of a total of 20 respondents equal to 10 percent of the study sample size. Subsequently, Cronbach's alpha coefficients (Tavakol and Dennick, 2011) were computed with the help of a Statistical Package for Social Sciences (SPSS) version 26 computer program to determine the internal consistency. Since the Cronbach's alpha score obtained of $\alpha \geq 0.70$, internal consistency of the instrument was confirmed for reliability (Amin et al., 2015).

Validity was obtained through the development of the item scales with the help of experts in the field of financial management methods and advance financing of roads. Content validity is also regarded as the degree to which an instrument has an approximate sample of items for the construct being measured (Shi et al., 2012). Consultation from the supervisors helped the researcher to check the items consistence, relevancy and clarity.

Validity for each study variable and each construct was determined using the Content Validity Index (CVI).

CVI = Number of relevant items

Total number of items in the variable/construct

Since the CVI value was > 0.6, then the content validity index was good for the study (Polit and Beck, 2006) and therefore for the authors to go ahead with the full data collection

3.2 Data analysis

All data from questionnaires was entered into Microsoft Excel version 16. Data was then imported in Statistical Package for Social Sciences (SPSS) version 26 for analysis. To achieve the first objective, the researcher computed the correlations and hierarchical linear regression to reject or accept the hypotheses. A null hypothesis was rejected if $p<0.05$. Coefficients and p-values were presented according to study objectives.

3.3 Ethical Considerations

The authors obtained approval and administrative clearance from Makerere University, written informed consent was obtained from every participant before completing the data collection instrument. Regarding confidentiality, participant information was kept a secret and was kept in a lockable container that does not allow any other person to get access. Similarly, the questionnaire contained only participant codes, no names were written on the data collection instruments.

4. Research Findings

4.1 Demographic characteristics of the respondents

In this study, a total of 204 participants were included. Out of these, more than half of them were between 31-45 years of age and only 20 (9.8%) were above 45 years. More men 142 (69.6%) than women 62 (30.4%) were also used in the study and the majority 154 (75.5%) were degree holders as shown in table 4-1 below.

Table 0-3: Demographic characteristics of the respondents

Characteristic		**Frequency**	**Percent**
Age of correspondent	30 years and below	70	34.3
	31-45 years	114	55.9
	Above 45 years	20	9.8
Gender	Male	142	69.6
	Female	62	30.4
Highest level of Education	Certificate	10	4.9
	Diploma	34	16.7
	Bachelor's degree and above	154	75.5
	Others (specify)	6	2.9

4.2 Efficacy of advance financing of public infrastructure

The efficacy of advance financing was assessed using a total of five (5) questions whose responses were collapsed into either "disagree" (for 3-Not sure, 2-Disagree and 1-Strongly disagree). or "agree" (5-Strongly agree, and 4-Agree). The study findings revealed that majority 164 (80.4%) of the respondents reported that workflow was done according to the planned sequences of work activities and most 184(90.2%) of them agreed that administration kept in mind the work flow through supervision. It was also found out that the highest number of respondents agreed that UNRA staff/other stake holders set priorities of the work flow and to 182(89.2%) of the respondents, there was agreement that the project was carried out efficiently. However, there was relatively lower agreement among most 160 (78.4%) of the respondents regarding whether a new project was started only after finishing an old one as shown in table 4-2 below.

Table 0-4: Efficacy of advance financing of public infrastructure

Efficacy of advance financing	Disagree n (%)	Agree n (%)
Workflow was done according to the planned sequences of work activities	40(19.6)	164(80.4)
Administration kept in mind the work flow through supervision	20(9.8)	184(90.2)
UNRA staff/other stake holders set priorities of the work flow	18(8.8)	186(91.2)
The project was carried out efficiently	22(10.8)	182(89.2)
Another project was started when old project was completed	44(21.6)	160(78.4)

4.3 Financial stability of the contractor of public infrastructure developments

In regards to the financial stability of the contractor, most 164(80.4%) of the study participants agreed that there was proper use of debt/ borrowed capital and 186 (91.2%) of them agreed that the contractor exhibited relatively good assets such as machinery. However, there was a very low 120 (58.8%) level of agreement when asked whether there was balance stricken throughout road construction similar to previous projects as shown in table 4-3 below.

Table 0-5: Financial stability of the contractors of public infrastructure

Financial stability questions	Disagree	Agree
There was proper use of debt/ borrowed capital	40(19.6)	164(80.4)
Contractor exhibited relatively good assets such as machinery	18(8.8)	186(91.2)
There was balance stricken throughout road construction similar to previous projects	84(41.2)	120(58.8)

4.4 Effect of financial stability of the contractor on the efficacy of advance financing of public infrastructure

Ordinal logistic regression was used to analyze the relationship between financial stability of the contractor on the efficacy of advance financing of public infrastructure. The financial stability was assessed through examining proper use of the debt, exhibition of good assets like machinery and striking of balance throughout road construction. Proper utilization of borrowed money was a significant positive predictor of efficacy of advance financing of public infrastructure (B= 0.885, p= 0.008, OR= 2.422, CI (1.258, 4.664). The positive coefficient means that for every unit increase in proper utilization of borrowed project money, there was a predicted increase of 0.885 in the log odds of efficacy of advance financing of public infrastructure. The odds ratio also indicated that the odds of efficacy of advance financing of public infrastructure increased by a factor of 2.422 for every unit increase in proper utilization of borrowed money. As shown in the table below. Although there also existed positive prediction on efficacy of advance financing of public infrastructure, there was no statistically significant effect by having good assets and striking a balance throughout road construction as shown in the table 4-3 below.

Table 0-6: Effect of financial stability of the contractor on the efficacy of advance financing of public infrastructure

			95% Wald CI				95% CI for Exp(B)	
Parameter	Parameter Estimates	Std. Error	Lower	Upper	P value	Exp(B)	Lower	Upper
There was proper use of debt/ borrowed capital	0.885	0.3344	0.229	1.54	0.008	2.422	1.258	4.664
Contractor exhibited relatively good assets such as machinery	0.185	0.4471	-0.692	1.061	0.68	1.203	0.501	2.889
There was balance stricken throughout road construction similar to previous projects	0.046	0.2492	-0.442	0.535	0.852	1.048	0.643	1.707

4.5 Professionalism exhibited by the contractor of public infrastructure

This study also collected data concerning professionalism exhibited by the contractor of public roads. Majority 174(85.3%) of the study participants agreed that the contractor exhibited high professional responsibility especially in keeping accurate records and 156 (76.5%) agreed that the contactor exhibited mutual respect to other stake holders. Similarly, majority of the respondents agreed that the contactor did their part and accepted status quo without raising difficult questions as shown in table 4-5 below.

Table 0-7: Professionalism exhibited by the contractor of public infrastructure

Professionalism	Disagree	Agree
High professional responsibility such as keeping accurate records.	30(14.7)	174(85.3)
Contactor exhibited mutual respect to other stake holders	48(23.5)	156(76.5)
contactor did their part and accepted status quo without raising difficult questions	56(27.5)	148(72.5)

4.6 Effect of professionalism exhibited by the contractor on the efficacy of advance financing of public infrastructure.

Out of the three aspects used in the analysis of the effect of professionalism exhibited by the contractor on the efficacy of advance financing of public infrastructure, only when the Contactor did their part and accepted status quo without raising difficult questions (B= 0.82, p= 0.007, OR= 2.271, CI (1.252, 4.122) was a significant predictor of efficacy of advance financing for the project. The rest were also positive predictors but the relationship was statistically non-significant as shown in the table 4-6 below.

Table 0-8: Effect of professionalism exhibited by the contractor on the efficacy of advance financing of public infrastructure.

	B		95% Wald CI			95% CI for Exp(B)		
Parameter	Parameter Estimates	Std. Error	Lower	Upper	P value	Exp(B)	Lower	Upper
High professional responsibility such as keeping accurate records.	0.637	0.357	-0.063	1.337	0.074	1.891	0.939	3.806
Contactor exhibited mutual respect to other stake holders	0.379	0.3168	-0.242	1	0.231	1.461	0.785	2.719
Contactor did their part and accepted status quo without raising difficult questions	0.82	0.3041	0.224	1.416	0.007	2.271	1.252	4.122

4.7 Level of government funding of public infrastructure

The results from the study show that most 158 (77.5%) of the respondents agree that government had properly rewarded contactors with a sense of achievement and majority 176 (86.3%) of them agreed that government had met the agreed target with contractors for similar future projects. Most 162 (79.4%) of the respondents also agreed that government had reinforced contractors experience and inspired loyalty. This is as depicted in table 4-7 below.

Table 0-9: Level of government funding of public infrastructure

Government Funding	Disagree	Agree
Government has properly rewarded contactors with a sense of achievement	46 (22.5)	158 (77.5)
Met the agreed target with contractors for similar future projects	28 (13.7)	176 (86.3)
Government has reinforced contractors enhances contactor experience and inspires loyalty.	42 (20.6)	162 (79.4)

4.8 Effect of the level of government funding on the efficacy of advance financing of Public infrastructure.

Under government funding, scenarios where government has properly rewarded contactors with a sense of achievement (B = 1.22, p = 0.000, OR= 3.389, CI (1.861, 6.172) was found to positively influence efficacy of advance financing of public infrastructure. When the government meets the agreed target with contractors and reinforces the contractors' experiences, these negatively influenced efficacy of the project as shown in the table 4-8 below.

Table 0-10: Effect of the level of government funding on the efficacy of advance financing of public infrastructure.

		Std. Error	95% Wald CI			Exp(B)	95% CI for Exp(B)	
Parameter	**B**		**Lower**	**Upper**	**Sig.**		**Lower**	**Upper**
Government has properly rewarded contactors with a sense of achievement	1.221	0.306	0.621	1.82	0.000	3.389	1.861	6.172
Met the agreed target with contractors for similar future projects	-0.023	0.026	-0.073	0.027	0.368	0.977	0.93	1.027
Government has reinforced contractors experience and inspires loyalty	-0.133	0.342	-0.803	0.536	0.696	0.875	0.448	1.71

5. Discussion, Conclusion and Recommendation

The financial stability was assessed through examining proper use of the debt, exhibition of good assets like machinery and striking of balance throughout road construction. Proper utilization of borrowed money was a significant positive predictor of efficacy of advance financing of public infrastructure. Similarly, having relatively good assets such as machinery and striking a balance throughout the construction process were positive predictors of efficacy of advance financing of public infrastructure. This is consistent with previous studies that have shown that that cost overrun and financial constraints were the main factors that affected road construction projects. For instance, Ling et al. (2009) reported that cost management significantly influenced the outcomes of road construction projects in Singapore with similar findings also reported in Dar es Salaam (Karim and Marosszeky, 1999). This could be attributed to the fact that lack of sufficient funds results into inadequate planning, delayed government approvals and regulations which eventually result into delayed construction of road projects. Use of modern equipment, technical skills by project managers also becomes possible with availability of finances and these are known to enhance completion of road projects in time with quality outcomes (Wambui et al., 2015).

Out of the three aspects used in the analysis of the effect of professionalism exhibited by the contractor on the efficacy of advance financing of public infrastructure, only when the contactors did their part and accepted status quo without raising difficult questions was a significant predictor of efficacy of advance financing for the project. The rest were also positive predictors but the relationship was statistically non-significant. Generally, having professional staff on the public infrastructure positively influenced the efficacy of advance financing of the project. This was achieved through effective enforcement, staff skills and knowledge to achieve organizational objectives. Similar to this finding, previous research by Greenwood and Hinings (1996) and Ogunlana et al. (2003) who showed that investing in road construction staff competence by improving their skills and knowledge coupled with a professional code is of paramount importance for project success. Furthermore, workforce diversity and structural differentiations are drivers of successful organizational performance and could have greatly contributed to the success of the project.

The study revealed that scenarios where government has properly rewarded contactors with a sense of achievement was found to positively influence efficacy of advance financing of public infrastructure. However, the study findings revealed that when the government meets the agreed target with contractors before full implementation of the project, there is a negative influence on efficacy of the project. This calls for sanction on staff working contrary to construction code on public road construction projects which are designed for a specific purpose using taxpayer's money through government who are accountable to confirm that the funded projects follow their predetermined targets. Punitive measures are proposed to tame deviant stakeholders in achieving these targets. If this is not done, a lot of resources will be lost in construction projects that fail because of laxity in enforcing disciplinary actions and ineffective sanctions which encourage unethical acts among

projects.

Conclusions

Proper utilization of borrowed money was a significant positive predictor of efficacy of advance financing of public infrastructure (B= 0.885, p= 0.008, OR= 2.422, CI (1.258, 4.664). similarly, when the Contactor did their part and accepted status quo without raising difficult questions (B= 0.82, p= 0.007, OR= 2.271, CI (1.252, 4.122) was a significant predictor of efficacy of advance financing for the project.

Under government funding, scenarios where government had properly rewarded contractors with a sense of achievement (B= 1.22, p= 0.000, OR= 3.389, CI (1.861, 6.172) was also found to positively influence efficacy of advance financing of public infrastructure. However, the study findings revealed that when the government meets the agreed target with contractors before full implementation of the project, there is a negative influence on efficacy of the project.

This therefore implies a need for sanction to be instituted on staff working contrary to construction code because public road construction projects are designed for a specific purpose using taxpayer's money through government who are accountable to confirm that the funded projects follow their predetermined targets.

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