DETERMINANTS OF PRIVATE FINANCE INITIATIVE FOR PROJECT FINANCING; A STUDY OF NATIONAL ROAD CONSTRUCTION PROJECTS IN KENYA

PATRICK MBITHI

RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF SCIENCE IN FINANCE DEGREE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

NOVEMBER, 2017

DECLARATION

This project is my original work and has not been submitted for a degree in any University.

Signature ______________________________ Date__________________________

Patrick Mutuku Mbithi

D63/84013/2016

This project has been submitted for examination with our approval as University supervisor:

Signature______________________________ Date__________________________

Dr. Kennedy Okiro

DEPARTMENT OF BUSINESS ADMINISTRATION,

UNIVERSITY OF NAIROBI.

DEDICATION

This project is dedicated to my family for their prayers, support and encouragement during my studies.

ACKNOWLEDGEMENT

I thank the Almighty God for His provision, strength, knowledge and Wisdom He showered over my life especially during my studies.

I acknowledge my supervisor Dr. Kennedy Okiro for his guidance during the writing of this project. If it was not for his guidance, this work would not have been a success.

I also acknowledge the staff of World Bank, African Development Bank (ADB), Trade Mark East Africa Organization (TMEA), Japan International Cooperation Agency (JICA), The National Treasury (NT) and Ministry of Transport and Infrastructure (MOTI) for their assistance during data collection. This study would not have been possible without the information they provided.

Finally, I acknowledge my colleague Julia Ondeyo for her support and encouragement during the writing of this project.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

ADB	- African Development Bank
JICA	- Japan International Cooperation Agency
KeNHA	- Kenya National Highways Authority
KeRRA	- The Kenya Rural Roads Authority
KPI	- Key Performance Indicators
KRB	- Kenya Roads Board
KURA	- Kenya Urban Roads Authority
MoH	- Ministry of Health
PFI	- Private Finance Initiative
PPP	- Public-Private-Partnership
SPSS	- Statistical Package for Social Science
TMEA	- Trade Mark East Africa Organization
NT	- National Treasury
MOTI	- Ministry of transport and Infrastructure

ABSTRACT

The aim of this study was to assess the determinants project financing for private finance initiative projects; a case of road construction projects in Kenya. The study's aim was to answer the research question on what are the determinants of project financing for private finance initiative projects on road construction projects in Kenya? Target population were the six major partners including: World Bank, African Development Bank (ADB), Trade Mark East Africa Organization (TMEA), Japan International Cooperation Agency (JICA), The National Treasury (NT) and Ministry of Transport and Infrastructure (MOTI). The study specifically targeted those who are charged with the responsibility of assessing the proposed projects for funding. The study's respondents were selected using the purposive random sampling. The main advantage of this sampling technique was that it allowed only those who are perceived to have the information required for the study to participate. A total of 10 respondents were targeted per organization resulting to a total target of 60 respondents. Out of the 60 targeted respondents, 44 participated in the study giving a 73% response rate. Questionnaire was used as instruments for data collection. Both descriptive and inferential statistics were used to analyze the data. Descriptive statistics such as frequencies, means, percentages and standard deviations were used. Inferential statistics such as regression and correlation analysis will be used to analyze the relationship between the study variables. The analyzed data will be presented in form of frequency tables, pie charts and bar graphs. The study found that project attributes is a major determinant of the financing of private finance initiative in Kenya. Aspects of project such as cost, scope and size of the project and project technical feasibility & maintenance influences the financing to a very large extent. It was also found that government attributes influences financing of private finance initiative in Kenya. Aspects of government attributes such as cost of the loan, tax policy, stable macroeconomic conditions, favorable legal framework, project development objectives (PDOs) and sound economic policy were found to influence financing of road projects to a very large extent. The study further found that political environment influences financing of private finance initiatives in Kenya. Aspects such as the stability of the political environment, social support from the general public and good relationship between the project team influences financing of road projects to a very large extent. It was finally found that economic environment influences financing of road projects in Kenya. Aspects of economic environment such as the economic viability of the project, economic stability and economic internal rate of return (EIRR) were found to influence project financing to a very large extent. The study recommends that the government should ensure stable political environment exists. It was finally recommended that another study be done on the challenges facing private finance initiative which was not the concern of this study.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Before the 1980s, the principal providers of public services and infrastructure in many nations were both the state-owned enterprises and the government (Parker and Saal, 2003). Many public sector organizations had been established by the governments both in the developing and developed world to provide the necessary goods, services and other infrastructural services. However, after the 1980, the position of government control in most countries took a different direction. There was a massive privatization of state-owned assets and enterprises; this led to the disposal of public-owned assets to the private sector either partially or completely. Privatization basically entails massive assets transfers, economic activities or employees from the public sector to the private sector. Privatization therefore drove governments to encourage increased involvement of the private sector in public goods and services' delivery in the fields that were initially perceived as the responsibilities of the state (Savas, 2000).

The privatization initiatives were manifested in different forms although their common goal was to restructure the provision of services in the market taking into consideration the fact that there were many service providers. Since 1980, the state has introduced many market mechanisms and encouraged more involvement of companies that are profit-driven into social infrastructure and public service sectors. The World Bank (PPI, 2010) did an investigation on the contribution of the private sector to infrastructural development and found that more than 100 have embraced marketization and privatization strategies.

PFIs have been used for developing and delivering all types of infrastructure and services. Currently in the United Kingdom, approximately 10 to 13% of the total public infrastructure ventures are represented by the PFIs. About 100 PFI projects are undertaken annually. The increasing use of PFIs has encouraged governments across the world to implement PPP arrangements (International Comparative Legal Guide Series, 2008). Numerous infrastructural structures have been implemented by the Australian government through the use of PPPs. Ireland on the other hand has also used PPP for most of its transport projects. In the Netherlands, PPP is used for social housing and urban redevelopment programs. Asian countries such as India also have used PPP highway projects. Japan has about 20 PPP projects set to be undertaken in the future (Nguri, 2009). Canada has about 20% of all its new infrastructure projects designed, built or operated by the private sector (Deloitte, 2010). Other developing countries from South America, Asia and Africa have also been looking in PPP procurements (USCAP, 2007). This study therefore focuses on assessing the determinants of project financing for private finance initiative projects.

1.1.1 Project Financing

Macquarie (1996) defines project financing as the raising of finances as per the the benefits of the project to be executed. Hoffman elaborates rather lengthily on this definition by stating that project financing is generally used to imply to a limited financing structure in which equity, credit and debt enhancement are combined for the refinancing, operation and construction of a specific facility in an industry that is capital intensive. According to

Hoffman (1989), lenders in project financing use projected revenues from a facility's operation to base credit appraisals instead of the credit or general assets of the facility's sponsors and depend on the assets of the facility including all contracts which generate revenue and other forms of cash flows coming from the facility, as debt collateral.

1.1.2 Private Financing Initiatives Projects (PFI)

According to Chiang and Cheng (2009), PFI is an alternative public infrastructure procuring technique through where the private sector is allowed to finance and oversee the implementation of projects. The PFI initiative involves a capital structure that is highly leveraged where the private sector is involved in the designing, construction, operation, maintenance and financing of new infrastructural facilities over a long period of time, normally over 25 years. Engel *et al*. (2010) argues that this long life cycle term results in high risks and uncertainties which hardly attracts the financiers and investors. A study by Schur *et al*. (2006) found close to 160 infrastructural projects that collapsed in the country between 1990 and 2004 due to financing challenges. In this study, PFI is defined as a type of Public-Private-Partnership (PPP), which implies to the combined effort by both the private sector and government to provide social infrastructure and public services.

Many countries across the globe have successfully adopted and implemented the PPP procurement method. This includes Australia, United Kingdom, China, USA, France, Hong Kong, Japan, Germany just to state a few. Most developing nations in Africa, Asia, Central Europe and Latin America are in the PFI implementation stage or have plans of adopting it in future. The principle governing the entire process is to adopt a whole life in the delivery and maintenance of the products until the expiry of the project tenure which is about 20-25 years (El-Haram & Agapiou, 2002).

1.1.3 Road Construction Projects in Kenya

The main institutions that carry out implementation construction and improvement of road networks in Kenya are in two distinct levels; The National government on one hand through the responsible ministries and the county governments which absorbed the services of the now defunct municipal councils. Others include private entities and Non-Governmental Organizations (Republic of Kenya, 2010) The National government discharges its mandates in road infrastructural development through two key ministries - Ministry of Transport and Infrastructure as well as the Ministry of Environment, Water and Natural resources.

The Ministry of Transport and Infrastructure of Kenya discharges this mandate through four key parastatals namely; The Kenya Roads Board (KRB), The Kenya National Highways Authority (KeNHA), The Kenya Rural Roads Authority (KeRRA) and the Kenya Urban Roads Authority (KURA). Kenya Roads Board is mandated with accessing for funds through the Central Government and allocation of these funds on need basis to the other sister Authorities. This study therefore focused on assessing the determinants of project financing for private finance initiative projects.

1.2 Research Problem

According to Riding *et al*., (2007), the ability to acquire funding is largely dependent on the applicant's eligibility and his ability fulfill the financing requirements. Yescombe (2007) argues that every finance institution requires a viable, future project loan repayment cash flow. The borrower must provide the financier with adequate evidence on his ability to pay back the loan since highly leveraged projects come with additional risks and under circumstances of project failure, there is little assurance of loan repayment (Engel *et al*., 2014). The financiers also undertake a follow up to ensure that the proposed project is implemented after the loan is discharged. A great possibility that the revenue generated by the project may not be adequate also exists, this is often caused by failure of the completed projects to function as planned, project delays or over budget, increased operational and maintenance costs and less generated revenue than the anticipated.

Private Finance Initiative seeks to provide an alternative solution for funding infrastructure and public sector services raising taxes or increasing public borrowings (Ruane, 2000). Specifically, after 2013, The Kenya infrastructural sector has highly benefited from the PFI which has led to the improvement of public infrastructure and service. Despite the PFI being viewed by most governments as the most cost effective means of procuring public infrastructure projects, these funds have only been accessed for a few road projects in Kenya. It is therefore in the interest of this study to assess was actually determines financing for private finance initiative projects is still widespread.

Different studies have been done on PFI. For example Mustapa (2013) carried out a study on facilities management knowledge in PFI healthcare projects in UK. Olufemi (2013) examined allocation preferences and risk perceptions the Nigerian public-private partnerships. The results showed that there were three vital risk factors which are: construction cost overrun, construction time delay and excessive contract variation. Minjire (2015) carried out a study on the factors influencing the public-private partnerships' performance in the Kenyan healthcare projects. The findings of the study revealed that regulatory environment and partnership governance are among the major challenges influencing PPP projects at MoH, then funding of projects. However, the researcher is not conversant about any study which has been undertaken on PFI in road construction in Kenya. To fill the existing knowledge gap, this study was thus aimed at answering the research question on what are the determinants of project financing for private finance initiative projects on road construction projects in Kenya?

1.3 Research Objectives

The objective of the study was to assess the determinants of project financing for private finance initiative projects; a case of road construction projects in Kenya

Specific objectives

i) Influence of projects characteristics on financing of road project

ii) Influence of government attributes on financing of road project

iii) Influence of political environment on financing of road project and

iv) Influencing of economic environment on financing of road project

1.4 Value of the study

In practice, the study will contribute to policy makers and governments. By highlighting on the determinants of project financing for private finance initiative projects, governments and policy makers will be able to come up with policies aimed at ensuring favorable environment for the implementation of road projects. Furthermore, government will be at a position to know the factors determining their eligibility for funds for financing particular projects before seeking for the finances.

The study will be of importance to the Private Finance Initiative partners such as World Bank, African Development Bank (ADB), Trade Mark East Africa Organization (TMEA) and Japan International Cooperation Agency (JICA). By highlighting on the determinants of project financing for private finance initiative projects, the partners will be at a position to make more informed decisions when determining the projects to fund. The study will also be of importance to other scholars. By contributing to the literature on project financing, the study will form a basis upon which other studies will be carried out.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents relevant literature on theoretical framework used in the study. It also presents literature on the determinants of project financing for private finance initiative projects

2.2 Theoretical Framework

This study adopted the use of public choice theory, principal agent theory and rational-bureaucratic theory. These theories were used to explain the relation between the study variables. The following subsections presents each of the theories and their relevance to the study.

2.2.1 Public Choice Theory

Public choice theory was first developed by Buchanan in 1949 and later improved by Niksanen. The incentives and behaviors of bureaucrats and politician basically form the basis of public choice theory. The public choice theory is commonly applied when the political decisions are not in line with public interests. The assertion of this theory is that bureaucrats and politicians always seek to attain personal interests rather than the public interests. Among these factors are good working conditions, salary, power, ease of managing the bureau and public reputation (Niksanen, 1971). This assumption drove the public choice theorists to the conclusion that the decisions of politicians in a *liberal democratic state* are influenced by both the lobbying organizations' interest which could guarantee them a win in the coming elections (Tullock and Buchanan, 1962, Downs, 1967).

Thus the decisions and policies formulated by the politicians with personal interests are short-term and hold a limited perspective rather than the long- run social and public welfare. Many consequences were however attributed with self-interested politicians' behaviors which resulted in factors with the public sector management, e.g. a large amount of government deficit and waste of public resource allocation.

Niksanen, (2004) asserts that the 'bureaucrats' are also self-interested. Both government officials and managers in the government, public-owned enterprises and public agencies only wished to fulfill their personal interests such as rising their own benefits, wages so as to expand their budgets. A common practice amongst the bureaucrats is to use the least possible cost to attain the highest possible benefits. The consequences of these bureaucratic practices are huge ineffectiveness and inefficiency in the management of the public sector such as the development of new department budgets, broader public sectors but poor delivery of public services.

The inefficiencies attributed to the public choice theory are highly applicable in the case of social services, state-owned enterprises and public utilities. According to Boyne *et al.* (2003) , there has been a high protection of public organizations from the competition pressures due to their large market share in infrastructure and public services such as education, health, water, housing, public transportation and gas. These social infrastructure and public services were monopolized by these public agencies leaving the public with a limited pool to select the services they desire to consume. This implies that these public agencies' services are equally not favorable to the members of the public. The public however had no option but to embrace and accept these products. The little competition experienced by the bureaucrats in the market makes them avail none incentives to cut costs or improve their products and services. The actual performance or costs incurred by the bureaucrats are also difficult to establish due to poor performance in system evaluation and information asymmetry. This allows for easy manipulation of the politicians by the officials for the allocation of excess budgetary financing that the actual amount required for service provision. Besides the weaknesses of this theory, it was used in this study to explain how the project attributes influence the financing of road projects in Kenya.

2.2.2 Agency Theory

This theory was developed Buchanan in 1950. The agency theory holds the assumption that the interests of the principal (shareholders) and the agent (managers) vary with each seeking to maximize his/ her interests: For instance, the private sector managers maximize their salaries and other non-financial benefits while the shareholders seeks to attain the highest profits. The principal always compels the agent to act as per his/her interests, but the control of the principal over the agent is somehow imperfect due to information asymmetry about the agent's behavior and circumstances. Thus the principal experiences monitoring challenges and other costs attributed to this inadequacy (Vickers and Yarrow, 1988).

This theory further argues that the principal mainly seeks to strengthen the performance and monitoring of the agent and in order to come up with the agents' best incentive scheme so as to solve the dilemma between the principal and the agent to ensure that the firm operates efficiently. It is the responsibility of the principal to closely monitor the principal-agent issues. Both the principal and agent also need to come up with a compensation agreement or contract to establish an agents' incentive , clarify and specify their rights and obligations of the agent.

Boyne (2003) in his study however found the principal-agent theory to have limitations in that the public sector problems seem to be more complex in that the actual principal and what they seek to achieve are hard to identify in the public sector management. Theoretically, the public sector owners are the entire public with many agents acting on its behalf including; members of parliament, government officials, state-owned enterprises and managers of public agencies. Most public sector agents do not however understand who their real 'principal' is and the common interests of the public. Boyne *et. al.*, (2003) & Hassard *et al*. (2007) postulated the second argument of the principal-agent theorists that the agents' performance such as health care and education is quite difficult to identify and evaluate due to the public sector characteristics. The taxpayers and public lack effective information and means of evaluating and monitoring tthese agents' activities in public organizations and agencies. Besides the weaknesses of the theory, it was used in this study to explain how government attributes and political and economic environment influence financing of road projects.

2.2.3 Rational-Bureaucratic Theory

The Max Webber`s theory of Bureaucracy was also utilized in the study due to its influence and relevance on the organizational theory and modern world management practice (Page, 2003). The main premises of the theory postulates the following elements of the modern organizations; (1) well illustrated labor division and authority, (2) The hierarchical structure existing in offices, (3) Well stipulated outlining the performance evaluation criteria, (4) Appointment into offices based on expertise and specialization, (5) office holding as a vocation or career and (6) the duties and responsibilities linked to positions as opposed to persons.

The six elements define the way in which individuals are recruited, controlled and distributed within bureaucratic organizations. The elements also prescribe how individuals are hired on merit, assigned positions with defined duties, responsibilities and authority which are only relevant to a given position and therefore not transferable to other positions within the organization. Each of the elements is intended to control individual behavior towards the organizational goals. The elements also define that legal documents demonstrate information the information formalization specifying task assignments and regulations of the whole organization.

Weber`s theory points out several organizational characteristics and processes such as well defined goals which are best attained through formal structure, an organizational behavior that is based on formal structure which seeks to achieve the goals, information-based organizational decisions through cost-benefit analysis, and enhanced efficiency based on adherence to rules and policies of the organization. There are 3 important principles of rational bureaucracy as elucidated by Weber, namely formalization, instrumentalism and rational-regal authority. Formalization implies to the extent to which rules, task assignments, procedures and regulations are documented. Written documentations such as organizational chart, exist prior to the entry of people into various positions and are intended to direct and regulate organizational behavior. Instrumentalism conotates a tool or machine for achieving specific purpose, that is, means to an end. The rational bureaucratic organization is itself an instrument intended to attain given objectives. The formal internal structure-positions, procedures, rule, interaction patterns are instruments in the mission of the organization.

The rational-legal authority principle emphasizes on the most efficient and rational means to gain compliance of members in a project management organization. Rather than resort to coercive authority or charisma, legitimate (legal) authority derives its power from the formal position and the belief by the subordinates that the structures in place provides the best means to achieve the set organizational objectives. Individuals should be recruited in various positions on basis of ability and qualification giving thrust to legitimacy to the exercise of authority. This would improve accountability and governance especially in a partnership project there are highly specific and time-bound goals and objectives with budgetary among other constraints. This theory was therefore used to explain how the characteristics of the project implementing organization influences project financing for private finance initiative.

2.3 Determinants Private Finance Initiative Project Financing

Under private finance initiative arrangement, the infrastructural facilities are designed, constructed and operated by the private sector. The process of acquisition of the private sector by the public sector involves long- term agreements. Thus PFI projects can be said to have direct financial obligations to government. Therefore, upon the expiry of the contract, the ownership of assets is repossessed by the public sector under the PFI arrangement. (Rossi and Civitillo, 2014) opine that the PFI mode of contractual agreement minimizes the chances of cost overrun risks when choosing an efficient technology or in the design and construction process since the operator's future earnings are determined by the level of cost control. The following sub-sections presents relevant literature on the determinants for private financing initiative projects.

2.3.1 Project Characteristics

Project characteristics are the projects' parameters and attributes which avail important information about the project. Studies by Singh & Kalidindi (2009); Chiang & Cheng (2009; Asenova & Beck 2010; Hampl 2011 and Marco (2012) emphasized on a project's economic viability as the determinant in credit acquisition. Sustainable projects thus ensure adequate cash flows to service the debt, recover costs so as to derive the highest benefits out of an investment (Demirag *et al*. 2011). It also demonstrates the efficiency in project completion and project management which enables the SPV to recover the initial cost and to guarantee a constant and reliable monthly loan payment without default (Engel *et al*. 2014). The concession agreements are equally vital as they provide a regulatory framework for securing value for public funds and providing users with services that are cost effective (Kalidindi and Siggh 2009; Marco 2012; Engel *et al*. 2014).

A study by Yuan et al (2012) provided a survey consisting of 48 factors that can be used to ascertain the stakeholders' perception regarding the factors influencing measurement for PPP and performance management. These factors were split into five categories (1) The attributes of the inputs of the physical construction project (2) Market and financial package (3) A package of invention learning and knowing (4) stakeholders and finally (5) The construction projects' applicability. 5 key performance indicators (KPI) model was also developed from the study where 41 indicators of project performance were utilized. From the model, it was concluded that performance improvement was greatly influenced by (design, affordable procurement, the level of satisfaction for public and private parties and effectively and planning and scheduling stage provided by public sector)

2.3.2 Government attributes

This refers to the characteristics of the government including its role, management and power. According to Gupta (2013), public sector agencies are mandated to ensure successful development of the PFI with updated regulations, policies and guidelines. Government participation can be enhanced through initiation of engagement policies which guarantee success in project implementation, execution and an assurance of project continuity until the its objectives are achieved (Cheng and Chiang 2009). The confidence of the financers is driven by adequate government support. There are various forms of government support including subsidies, tax exemption, guarantee revenue and equity participation (Meng and McKevitt 2011; Chiang and Cheng 2009; Gupta *et al*. 2013). The government should also provide a legal framework that is clear, consistent and enforceable through comprehensive policies and legislation governing the PFI so as to attract the participation of the private sector investor (Shendy *et al*. 2011).

A questionnaire was established by Ismail and Ajija (2012) to examine the effects of 18 factors for embracing the PPP projects in Malaysia, and a comparison of the most vital CSFs in Malaysia and those in the U.K, Australia and Hang-Kong. It was concluded from the study that ideal governance; favorable legal framework; public and private parties commitments; appropriate financial market and good economic policies are of great importance in the Malaysian adoption of PPP. The factors contributing to the successful attainment PPP projects in U.K are further split into five packages (1) An efficient procurement system (2) A successful project implementation process (3) government warranty (4) conducive economic circumstances and (5) accessible financial market (Li et al 2005). It was further concluded from the study that appropriate risk allocation, available financial market and strong and good private consortium are the most vital factors influencing the U.K's successful PPP projects

2.3.3 Political Environment

The activities of the financiers within any business or industry is highly influenced by the political environment. Political barriers and financial market risks prevent the participation of financial institutions in the financing of PFI projects (Chiang and Cheng 2009). Policy and regulatory matters are also affected by political instability which leads to changes in government leadership (Sundaraj and Eaton 2011). Both social support and acceptability seek to ensure the success of the projects and guarantee the public that it will be of benefit (Kalidindi and Singh 2009; Cheng and Chiang 2009).

Fosu (2004) asserts that at the macro level, political instability slows down the rate of economic growth. An article by (David Fielding 2003) on the effects of political instability on employment and investment in Northern Ireland, a nation that has experienced political challenges for many years. He noted that the country's productivity had been highly deteriorated by political instability which had consequently affected investment and labour due to property attacks and higher returns to investment uncertainties.

2.3.4 Economic Environment

All the previous studies seek to improve the propensity of the lender to grant PFI projects with finances. The concept here is to acquire finances from any available source. The identification of success factors is of benefit to the stakeholders in the preparation of PFI projects' participation and application funding (Cheng and Chiang 2009; Kalidindi and Singh and 2009; Hampl 2011). There are 18 factors influencing PPP adoption in the People's Republic of China, which can be placed into five categories on the basis of fundamental success factors: (1) A macroeconomic environment that is stable (2) Combined effort between private and the public sectors (3) Transparency and efficiency in the procurement process (4) Stable social and political environment and (5) wise government control (Chan *et al.* 2010).

2.4 Empirical Literature

Chiang and Cheng (2009) carried out a study on the financial institutions' perception towards the financing of PFI projects in Hong Kong. The study investigated the financial issues of PFI's from financial suppliers' perspective. The purpose of the study was to establish the factors that could influence the supplier's perception and determine ways of facilitating their participation in the PFI projects. This study's findings revealed low level of understanding and knowledge among the respondents with regard to the PFI and the opinion that PFI public projects resulted in average performance and risks was held by most respondents.

Kahwajian et al. (2014) conducted a study to identify the CSFs for Syrian PPP Construction Projects. This study's aim was to identify the major success factors influencing the Cyrian PPP projects based on the basis of the previous studies in the same field. Data was collected from the respondents using a structured questionnaire so as to deduce generalizations. The study further seeks to unveil the current PPP practice and identify the main barriers hindering PPP implementation in the construction industry in Syria. The listed CSFs were then ranked in the order of their relevance, for private and public sectors collectively and independently. This study basically seeks to develop a practical framework enable both private and public sectors decision makers in the selection of the optimum PPP contract for the Syrian construction industry with great consideration of the most critical CSFs.

Lop, Ismail and Isa (2017) carried out a study on key performance indicators' implementation in the private finance initiative projects in Malaysia. The study's aim was to identify the importance and challenges of KPIs in measuring this performance. A qualitative approach via semi-structured interview was adopted. The findings discovered that the current Key Performance Indicators (KPIs) do not meet the criteria and this can lead to the difficulties in measuring the PFI projects' performance. The outcome of this research can act as a theoretical basis for developing effective KPIs for PFI projects implementation in Malaysia.

Hayes, Sourani and Sertyesilisik (2015) investigated into the processes of tendering improvement and competition level for the PFI construction projects. The study's aim was to establish the practical attributed to PFI before the commencement of the construction. Nine individuals with experience in PFI tendering were selected and interviewed as to make deductions. The issues regarding the process of PFI tendering and the main contractors' bidding strategies within the PFI market are examined in this study. It explored their influence on the ability of the public sector to intensify the PFI projects' competition. The findings affirm that most of the highlighted issues in literature do not change. This includes poor public sector team performance at the time of tendering and inadequate political support. It was then concluded from the study that the actual considerable economies of scale with regard to tender costs as opposed to the PFI projects' capital value. The findings indicated that some prominent contractors fail to utilize all available opportunities to put in use the entire sum of funds available conduct PFI projects. The construction companies were also noted to use market intelligence to avoid PFI projects' bidding under tight competition. The study concluded that the adoption of competitive dialogue procedures for PFI projects have limited contribution in determining the competition level due to the ability of the construction company to regulate the levels of competition levels.

Diba (2012) carried out a study on the critical success factors for the public private partnership road sub-sector in Kenya. The study basically wanted to establish the CSFs for PPP projects for the road sub-sector in Kenya. The measurable factors within the environment of the project and affect the successful project implementation are referred to as the CSFs. This study was self-exploratory and adopted the purposive expert sampling technique to collect data from the experts with insight or involvement in PPP road projects. The existing literature review was used to select 18 CSFs and consolidated by the interviews with the country's PPP professionals. The respondents were then handed a questionnaire containing the selected 18 CSFs reflecting the PPP road projects both in the private sector and private sector. The three most vital aspects as per the findings are: a regulatory framework that is clear and favorable, a realistic assessment of costs and benefits and a procurement process that is free and transparent.

Bosire (2015) carried out a study on the determinants of success of urban infrastructure projects financed by public private partnerships in Kenyan counties. Primary data was collected using a semistructured questionnaire targeting 47 county employees responsible for PPP projects implementation. 41 questionnaires were returned providing a response rate of 87.23%. The study found that all the counties have PPP units which is in line with the national governments initiative to encourage PPP funding for projects for improving infrastructure levels across the counties. It also found that 70.73% of the counties have in place PPP implementation guidelines which are instrumental in guiding the process. The study further found that 26.2 % of variations in the proportion of urban infrastructure projects funded within the PPP framework are explained by changes in macro economic conditions, government guarantees, project implement ability and procurement process. The findings indicate a statistically significant positive association between government guarantees and success of the projects. There was also a statistically significant negative relationship between macro-economic conditions and success of the projects. The study also noted a positive relationship between project implementability and success as well as a negative relationship between procurement process and project success. The relationships are not statistically significant. The study recommended that government should support infrastructural development by providing project guarantees and ensuring the macro-economic environment is sound for private investments. Further, counties should address the concerns on procurement transparency and they should enhance their capacity for project feasibility inquiries, design and implementation. The study finally recommended further investigations on why various proposed projects are not financed and the studies should consider the other possible control variables outside the scope of the current study that may explain the variations in the success of the projects.

Achieng (2015) carried out a study on performance measurement approaches in public - Private partnership in Kenya. The principal objective of this study is to determine if implemented Public Private Partnerships in Kenya measure performance. Specifically, the study sought to identify the approaches/criteria used and the factors that influence performance measures employed. The research adopted a descriptive survey with the target population comprising seven implemented and concluded PPP projects. The study was a census survey, a complete enumeration of the objects to be studied. The study collected primary data through the use of a questionnaire which contained both open ended and closed ended questions. The study established that indeed implemented PPPs measured their performance using various criteria which included appropriate risk allocation, compliance with technical specifications of time, quality and functionality, project social benefit, financial performance indicators and environmental factors. Further, the study identified multi stakeholder expectations, difficulty in defining performance output, inability to measure total cost-benefit of projects, political influence and communication challenges as the major factors that influenced performance measurement. The study recommended that further partnerships should be encouraged using PPP models and that performance measurement should be a key consideration.

2.5 Conceptual Framework

The associations among the variables being studied is demonstrated by the conceptual framework below. The independent variables for the study are: adoption project characteristics, government attributes, special purpose vehicle attributes and political and economic environment while the dependent variable is financing for private finance initiative.

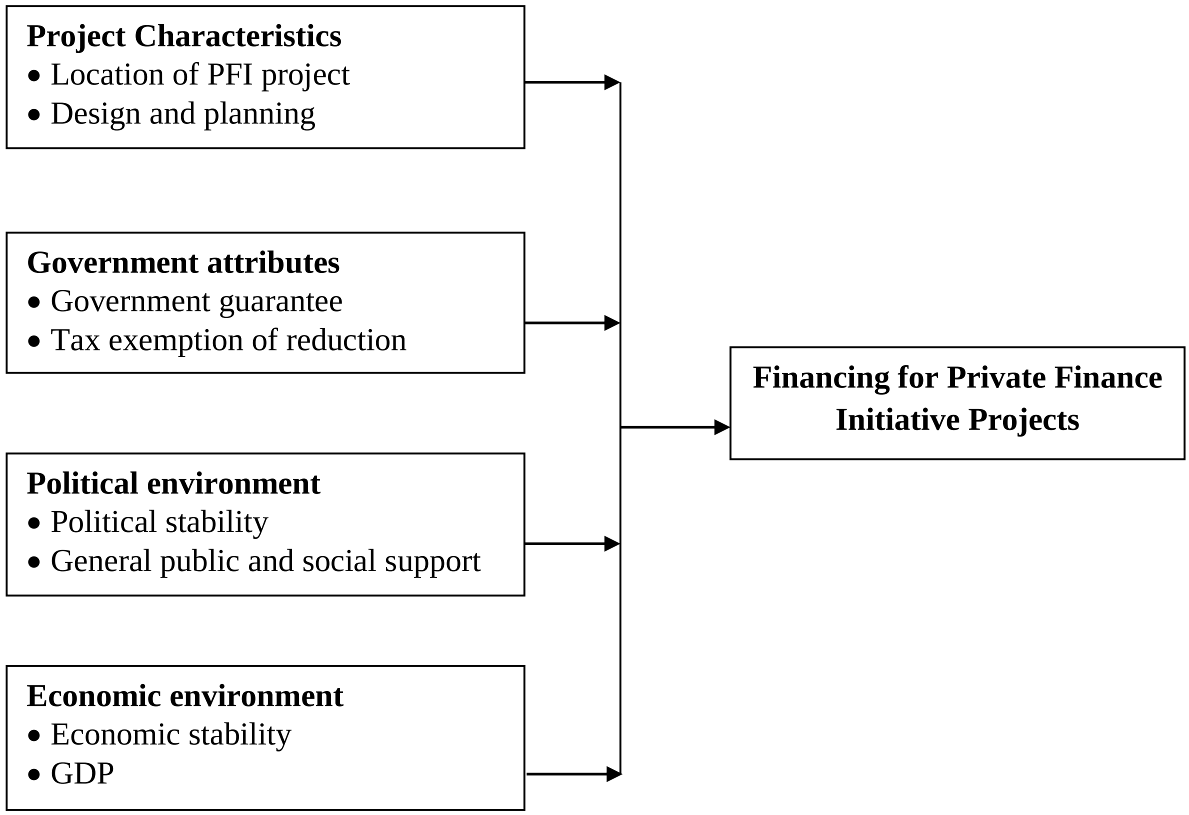


Figure 2.1 Conceptual Framework

2.6 Summary

This chapter has presented the relevant theories which will be used in the study. Theories such as public choice theory, principal agent theory and rational-bureaucratic theory will be used to explain the relation between the study variables. Relevant literature has also been presented on the influence of project characteristics, government attributes, political environment and economic environment on financing of private finance initiative projects. Different empirical studies in the line of study have also been presented. The chapter ends with a presentation of the conceptual framework showing the associations between the study variables.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research design, population of study, sampling technique and procedure, instruments of data collection and data collection data analysis procedures are described in this chapter. The various scientific methods which were adopted to achieve the objectives of the study are reviewed here.

3.2 Research Design

Across-section survey research design was used in this study. A cross-section design entails the execution of a population survey in order to collect data from a given sample during a specific time frame Olsen and Marie (2004). According to Kozloff (2000), a cross-section design is the means used by a researcher to gather data from a sample population regarding specific variables of interest at a given instance. From these studies, it can be concluded that cross-section designs aims to obtain findings on the associations between the variables being examined by the researcher and at a given point of time. Since this study aimed at assessing the determinants project financing for private finance initiative projects; a case of road construction projects in Kenya, a cross-sectional survey was deemed appropriate as it gave the researcher the opportunity to question donor partners on what actually influences their decision to finance private finance initiatives.

3.3 Target Population

A study population is any group of institutions or individuals which have one or more attributes which the researcher is interested in examining (Cooper, 1996). The target population will be the six major partners including: World Bank, African Development Bank (ADB), Trade Mark East Africa Organization (TMEA), Japan International Cooperation Agency (JICA), The National Treasury (NT) and Ministry of Transport and Infrastructure (MOTI). The study will specifically target those who are charged with the responsibility of assessing the proposed projects for funding.

3.4 Sampling technique and Sample Size

Purposive sampling technique was used in the study. This sampling technique was deemed ideal since only those who are thought to possess the required information for the study were allowed to participate. This sampling technique was appropriate for this study as only people in the management positions perceived to have information required for the study were targeted. A total of 10 respondents were targeted per organization resulting to a total target of 60 respondents.

3.5 Data Collection

The objectives of the study were put into perspective before the selection of the most suitable instrument for data collection. The researcher also considered the respondent's availability and literacy levels. The study therefore used questionnaires to collect the primary data for the study.

According to Orodho (2004), a questionnaire is a data collection instrument which allows a particular viewpoint to be measured. The author argues that large volumes of information can be gathered within the quick span of time using the questionnaire. The questionnaire was adopted by the researcher to collect data from officers from the donor partners. The instrument was chosen because the targeted population were considered learned and therefore the data required for the study was extracted easily. The instrument was divided into varying sections where each section comprised of questions addressing a specific objective of the study. The questionnaire contained both open and close ended questions. Likert scale was used for the questions examining the extent or degree of the factor being examined. The researcher administered the questionnaires personally to the respondents.

3.6 Data analysis

The collected data was first edited where errors made during the data collection were eliminated. The data was then be coded to translate the responses into specific categories where code numbers were assigned to each survey response and from these a coding frame was acquired. The SPSS software version 21 was then used to analyze the coded data. Quantitative data collected through the closed ended questions were analyzed using both inferential and descriptive statistics while the qualitative data collected through the open ended questions were analyzed thematically. Inferential statistics such as regression and correlation analysis were used in analyzing the association between the study variables. Pie charts, bar graphs and tables were then used to present the analyzed data.

Multiple regression model was used in the study to establish the associations between the dependent variable and two or more independent variables. The multiple regression analysis is beneficial since it allows for; prediction, theory building and explanation. For the effective utilization of this design, there must one dependent variable (criterion) and two or more independent variables (predictor variables). In this research the response (criterion) variable (Y) is financing for private finance initiative while the independent (predictor) variables are project attributes (X_1), Government attributes (X_2), Political environment (X_3) and Economic environment (X_4). The following is the model that was used in this study:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma$$

Where:

Y is the dependent variable (Financing for Private Finance Initiative)

X is the set of five independent variables, i.e.

X_1– Project characteristics

X_2– Government attributes

X_3– Political environment

X_4– Economic environment

$\beta_{i\ (i=1,2,3,4)}$ are the parameters linked to the corresponding independent variable which are to be estimated

β_0 is the intercept

Σ is the error term.

3.7 Test of Significance

The tests for statistical significance examines whether the differences observed between assessment results occur due to sampling chance or error. Test of significance is therefore a statistical test which challenges a hypothesis to investigate whether the adopted hypothesis produces a pre-established significance level. The test of significance seeks to disagree with the concept of "chance" and reject a null hypothesis by conforming to the observed patterns. In this study, the test for significance was done at 95% confidence level (0.05).

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents respondents' demographic information and the findings of the study. The chapter begins with a presentation of the response rate. Other sub-sections include demographic information of the respondents and the determinants of private financing initiatives for road projects.

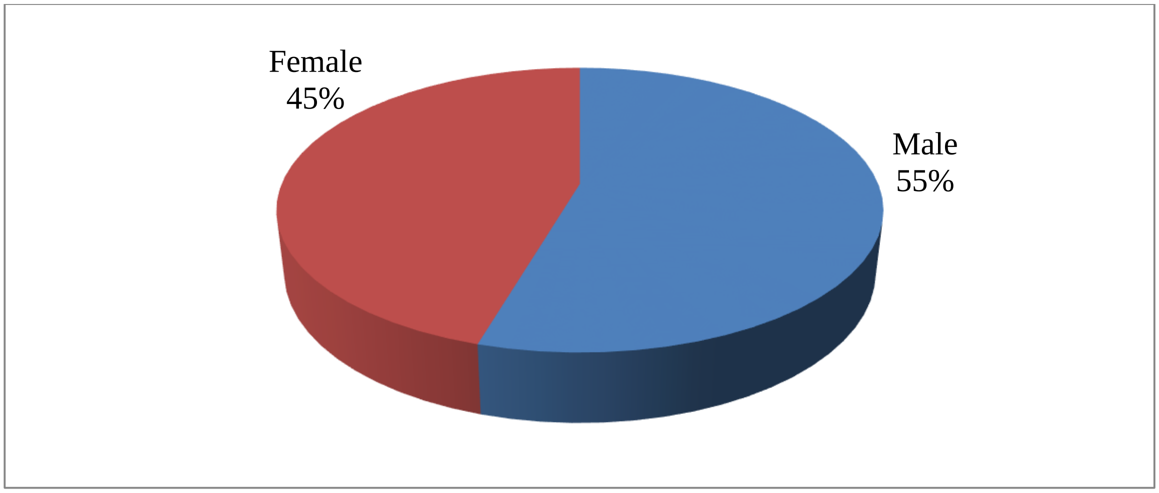
4.2 Response Rate

The study targeted 60 respondents from donor partners including: World Bank, African Development Bank (ADB), Trade Mark East Africa Organization (TMEA), Japan International Cooperation Agency (JICA), The National Treasury (NT) and Ministry of Transport and Infrastructure (MOTI). A total of 44 respondents participated in the study giving a response rate of 73%.

4.3 Respondent Characteristics

4.3.1 Distribution of the respondents by Gender

On gender distribution of the respondents, the study found that 55% were male while 45% were female. The findings are presented in Figure 4.1.

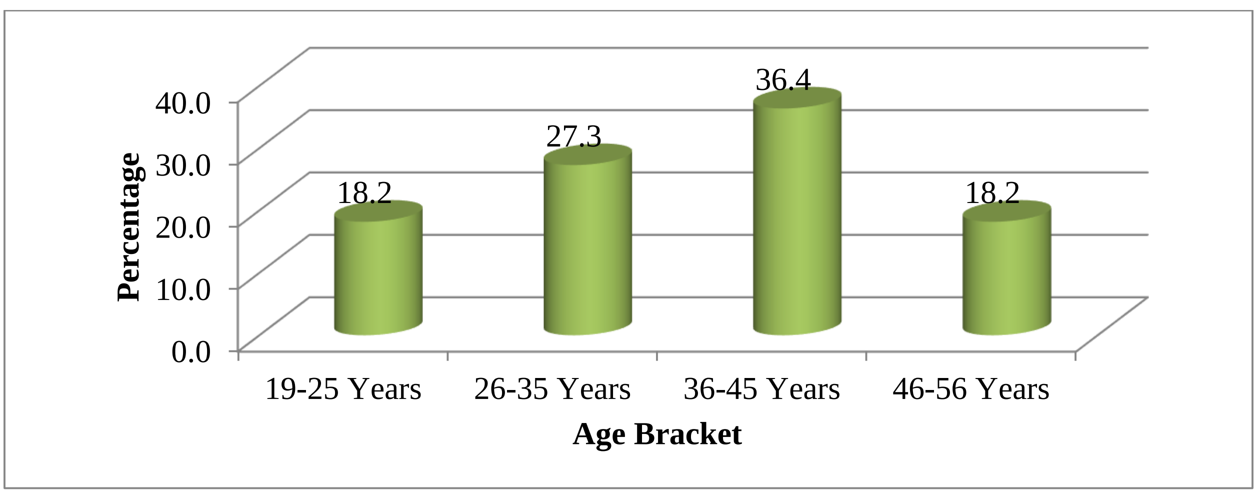


Source: (Primary Data)

Figure 4.1 Distribution of the Respondents by Gender

4.3.2 Distribution of the Respondents by Age Bracket

On the distribution of the respondents by age bracket, the study found that 36.4% were between 36-45 years. It was also found that 27.3% between 26-35 years, 18.2% were between 46-55 years and another 18.2% were between 19-25 years. The findings are presented in Figure 4.2.

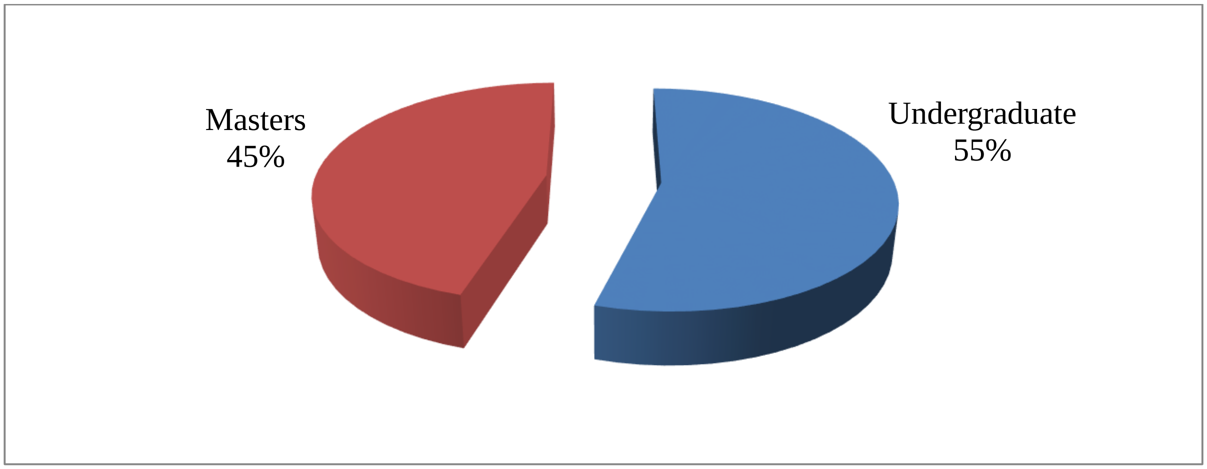


Source: (Primary Data)

Figure 4.2 Distribution of the Respondents by Age Bracket

4.3.3 Distribution of the Respondents by Level of Education

On the distribution of the respondents per their education level, the study found that 55% were Bachelors Degree holders while 45% were Masters degree holders. The findings are presented in Figure 4.3.

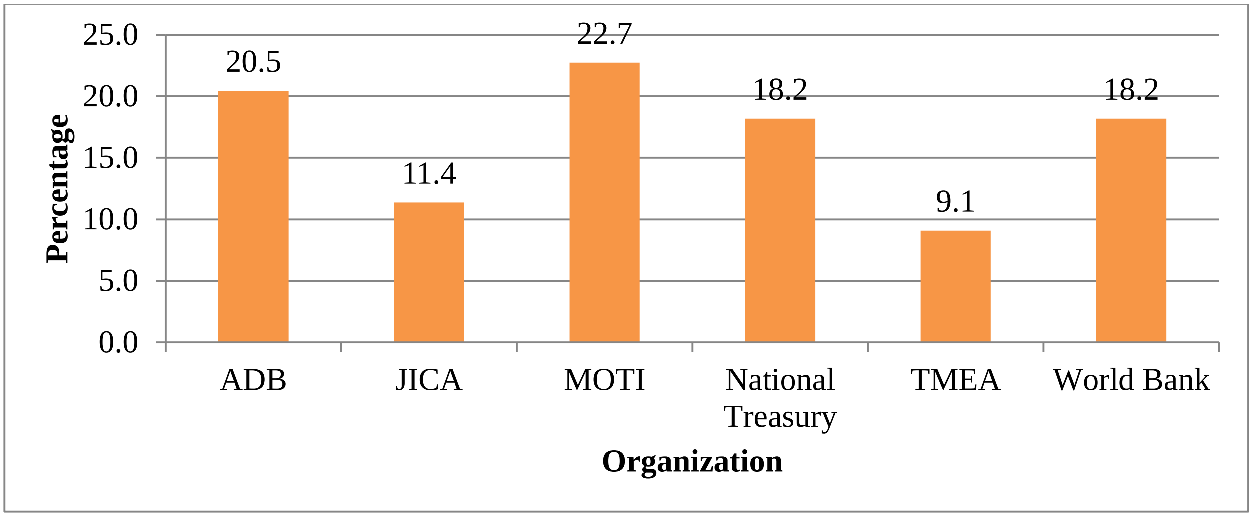


Source: (Primary Data)

Figure 4.3 Distribution of the Respondents by Level of Education

4.3.4 Distribution of the respondents by Organization

The respondents were asked to indicate their organization. It was found that 22.7% of the respondents who participated in the study were from Ministry of Transport and Infrastructure (MOTI). The study further found that 20.5% were from African Development Bank (ADB), 18.2% were from National Treasury (NT), another 18.5% were from World Bank, 11.4% from Japan International Cooperation Agency (JICA) and that 9.1% were from Trade Mark East Africa Organization (TMEA). The findings are presented in Figure 4.4.

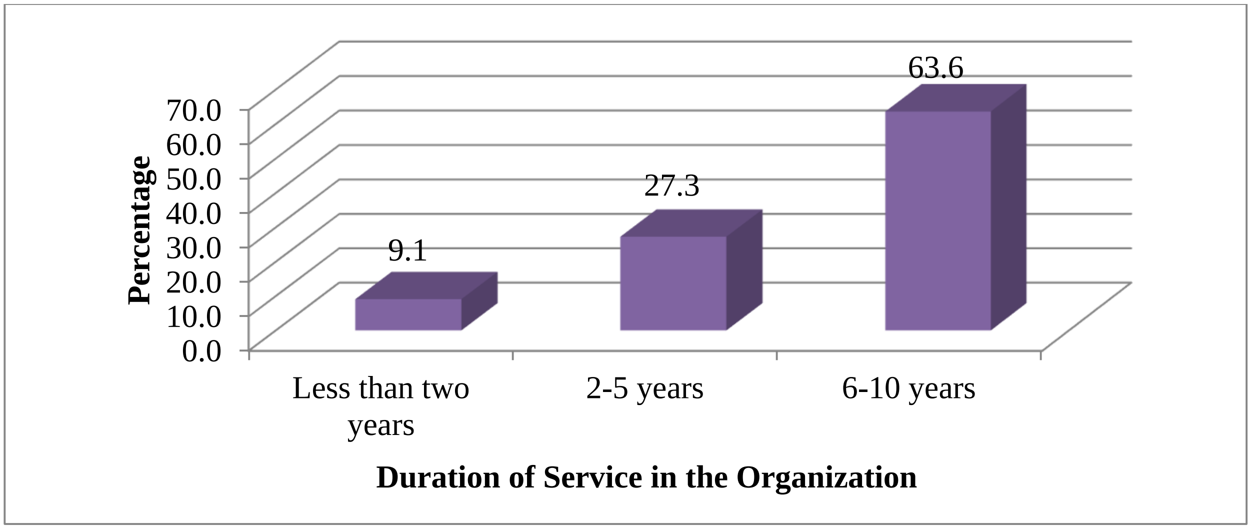


Source: (Primary Data)

Figure 4.4 Distribution of the respondents by Organization

4.3.5 Distribution of the Respondents by Duration of Service in the Organization

The respondents were asked to indicate the duration for which they had served in the organization. The findings showed that 63.6% of the respondents had served in the organization for a period of 6-10 years. It was also found that 27.3% of the respondents had served in the organization for a period of 2-5 years and that 9.1% had served in their organizations a period less than two years. The findings were presented in figure 4.5.



Source: (Primary Data)

Figure 4.5 Distribution of the Respondents by Duration of Service in the Organization

4.4 Determinants of project financing for private finance initiative for road construction projects in Kenya

To assess the determinants for **private finance initiative for road construction projects in Kenya,** the respondents were required to respond to different statements with regards to different perceived determinants and asked to tick the extent to which each influenced the funding. The five point likert scale of 1-5 was employed in this case; and the representation was as follows; 1-'No extent at all', 2 -'Small extent', 3- 'Neutral', 4-'Large extent' and 5-'Very large extent'.

The scores 'No extent at all' was interpreted as an equivalent of mean score ranging from 0.0 to 1.0, 'Small extent' with mean score ranging from 1.1 to 2.0, 'Neutral' with a mean score ranging from 2.1 to 3.0, 'Large extent' with a means score ranging from 3.1 to 4.0

and ‘Very large extent’ with a means score ranging from 4.1 to 5.0. A SD of > 1 indicated significant difference in the given responses.

4.4.1 Influence of Project Characteristics on Financing of Road projects

To determine the extent to which project characteristics influences the financing of road projects in Kenya, the respondents were required to tick the extent to which different projects characteristics influences financing by donors. The results of the descriptive statistics were as presented in Table 4.1.

Table 4.1 Influence of Project Characteristics on Financing of Road projects

	N	**Mean**	**Std. Deviation**
Cost, scope and size of the project	44	4.55	0.504
Project technical feasibility and maintenance	44	4.09	0.52
Environmental impact considerations	44	4.00	0.863
Competitive tender procedure	44	4.00	1.364
Project risk	44	4.00	1.057
Project Location	44	3.82	1.281
Project beneficiaries	44	3.82	0.947
Project duration	44	3.73	1.37
Complexity of design and planning	44	3.55	1.517
Insurance coverage	44	2.45	1.088
Mean		**3.80**	**1.05**

Source: (Primary Data)

The findings on Table 4.1 show that the respondents indicated that cost, scope and size of the project (Mean 4.55) and project technical feasibility & maintenance (Mean 4.09) are project aspects which influence the project financing of road projects to a very large extent. The study further revealed that environmental impact considerations (Mean 4.00), competitive tender procedure (Mean 4.00), project risk (Mean 4.00), project location (Mean 3.82), project beneficiaries (Mean 4.82), project duration (Mean 3.73) and project complexity of design & planning influences the financing of road project to a large extent. The respondents were neutral on the influence of insurance coverage on road projects financing (Mean 2.45). An average mean on 3.80 was obtained; an indication that project characteristic is one on the major determinants of road project financing. There was significant difference in the responses given on the financing of road projects (Mean Standard deviation>1).

4.4.2 Influence of Government attributes on Financing of Road projects

To determine the extent to which government attributes influences the financing of road projects in Kenya, the respondents were required to tick the extent to which different government attributes influences financing by donors. The results of the descriptive statistics were as presented in Table 4.2.

Table 4.2 Influence of Government attributes on Financing of Road projects

Aspects	N	Mean	Std. Deviation
Government involvement by providing a guarantee	44	4.00	1.141
Government permit and approval	44	3.91	0.802
Debt Level policy	44	4.00	0.863
Favorable legal framework	44	4.18	0.843
Tax policy	44	4.27	0.624
Cost of the loan	44	4.73	0.451
Stable macroeconomic conditions	44	4.27	0.624
Sound economic policy	44	4.09	0.52
Project Development Objectives (PDOs)	44	4.18	0.724
Mean		**4.18**	**0.73**

Source: (Primary Data)

The findings on Table 4.2 show that the respondents indicated that cost of the loan (Mean 4.73), tax policy(Mean 4.27) stable macroeconomic conditions (Mean 4.27), favorable legal framework (mean 4.18), project development objectives (PDOs) (Mean 4.18) and sound economic policy (4.09) influences financing of road projects to a very large extent. The findings further showed that government involvement by providing a guarantee (Mean 4.00), debt Level policy (Mean 4.00) and government permit & approval (Mean 3.91) influences project financing to a large extent. An average mean on 4.18 was obtained; an indication that government attributes is one on the major determinants of road project financing. There was no significant difference in the responses given on the financing of road projects (Mean Standard deviation<1).

4.4.3 Influence of Political Environment on Financing of Road projects

To determine the extent to which political environment influences the financing of road projects in Kenya, the respondents were asked to indicate the extent to which different aspects of political environment influences financing by donors. The results of the descriptive statistics were as presented in Table 4.3.

Table 4.3 Influence of Political Environment on Financing of Road projects

Aspects	N	Mean	Std. Deviation
Stable of political environment	44	4.73	0.451
General public and social support	44	3.73	0.872
Good relationship with project team	44	3.55	0.791
Mean		**4.00**	**0.70**

Source: (Primary Data)

The findings on Table 4.3 show that stable of political environment was cited to influence project financing to a very large extent (Mean 4.73). The findings further revealed that general public and social support (Mean 3.73) and good relationship with project team (Mean 3.55) influences project financing to a large extent. An average mean on 4.00 was obtained; an indication that political environment is one on the major determinants of road project financing. There was no significant difference in the responses given on the financing of road projects (Mean Standard deviation<1).

4.4.4 Influence of Economic Environment on Financing of Road projects

To determine the extent to which economic environment influences the financing of road projects in Kenya, the respondents were asked to indicate the extent to which different aspects of economic environment influences financing by donors. The results of the descriptive statistics were as presented in Table 4.4.

Table 4.4 Influence of Economic Environment on Financing of Road projects

Aspects	**N**	**Mean**	**Std. Deviation**
Economic viability of the project	44	4.55	0.663
Economic stability	44	4.27	0.624
Economic Internal Rate of Return (EIRR)	44	4.18	0.724
GDP of a Country	44	3.91	0.676
Mean		**4.23**	**0.67**

Source: (Primary Data)

The findings on Table 4.4 show that economic viability of the project (Mean 4.55), economic stability (Mean 4.27) and economic internal rate of return (EIRR) (Mean 4.18) were cited to influence project financing to a very large extent. The findings further revealed that GDP of a Country influences project financing to a large extent (Mean 3.91). An average mean on 4.23 was obtained; an indication that economic environment is one on the major determinants of road project financing. There was no significant difference in the responses given on the financing of road projects (Mean Standard deviation<1).

4.4.5 Project Finance Initiatives

To determine the indicators for successful project initiatives for road projects in Kenya, the respondents were asked to indicate the extent to which different aspects are used to measure the success of the projects. The results of the descriptive statistics were as presented in Table 4.4.

Table 4.5 Project Finance Initiatives

Aspects	**N**	**Mean**	**Std. Deviation**
Amount of finance allocated to a particular project	44	4.00	1.057
Successful completion of the previous projects	44	4.00	1.057
Number of projects supported by the organization	44	3.55	1.247
Mean		**3.85**	**1.12**

Source: (Primary Data)

The findings on Table 4.5 show that amount of finance allocated to a particular project (Mean 4.00), successful completion of the previous projects (Mean 4.00) and number of projects supported by the organization (Mean 3.55) measured the success of road financing projects to a large extent. An average mean of 3.85 was obtained; an indication that the three indicators are good measures of the success of funded road projects. There was significant difference in the responses given on the financing of road projects (Mean Standard deviation>1).

4.5 Correlation Analysis

The association between the variables used in the study was tested by undertaking correlation analysis. The association between two continuous numeric variables is measured using correlation. Correlation shows both the direction and extent to which the variables differ from one another independently from case to case. The outcome of a correlation analysis is a correlation coefficient which tests the linear relationships between two variables (Crossman, 2013).

The correlation coefficient values range between -1 and +1. A perfect positive linear correlation between two variables is indicated by a correlation coefficient of +1 whereas a correlation of -1 shows a negative linear correlation between two variables. A correlation efficient of 0 means that no linear association exists between two variables (Wond, 2012). The findings from correlation analysis are as presented in table 4.6

Table 4.6: Correlation Analysis

Correlations						
		Financing for Private Finance Initiative	Project Characteristics	Government attributes	Political environment	Economic environment
Financing for Private Finance Initiative	Pearson Correlation (r)	1	.402**	.503**	.507**	.814**
	Sig. (2-tailed)		.007	.001	.000	.000
	N	44	44	44	44	44
Project Characteristics	Pearson Correlation	.402**	1	.479**	.410**	.396**
	Sig. (2-tailed)	.007		.001	.006	.008
	N	44	44	44	44	44
Government attributes	Pearson Correlation	.503**	.479**	1	.282	.631**
	Sig. (2-tailed)	.001	.001		.063	.000
	N	44	44	44	44	44
Political environment	Pearson Correlation	.507**	.410**	.282	1	.439**
	Sig. (2-tailed)	.000	.006	.063		.003
	N	44	44	44	44	44
Economic environment	Pearson Correlation	.814**	.396**	.631**	.439**	1
	Sig. (2-tailed)	.000	.008	.000	.003	
	N	44	44	44	44	44
**. Correlation is significant at the 0.05 level (2-tailed).						

Source: (Primary Data)

The results of the correlation analysis on Table 4.6 shows that Financing for Private Finance Initiative is positively associated with project characteristics with r = 0.402 and that at a significance level of 0.007, it is statistically significant at p value < 0.05. The results also show that there is a positive correlation between Financing for Private Finance Initiative and government attributes with r = 0.503 and a significance level of 0.001 (statistically significant). The results further show that Financing for Private Finance Initiative has a positive relation with political environment with r= 0.507 and 0.000 significance of level. The results finally show that Financing for Private Finance Initiative have a positive relation with economic environment with r =0.814 and 0.000 significance level. The significance values tell us that the probability of the correlation being a fluke is very low; hence the study can have confidence that the relationship between the variables is genuine.

4.6 Regression Analysis

Multiple regression analysis was done to test on the extent to which different variables influences financing for private finance initiative. The independent variable included: project characteristics, government attributes, political environment and economic environment. Multiple regression model presented below was used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \Sigma$$

Where:

Y is the dependent variable (Financing for Private Finance Initiative)

X is the set of five independent variables, i.e.

X_1– Project characteristics

X_2– Government attributes

X_3– Political environment

X_4– Economic environment

$\beta_{i\ (i=1,2,3,4)}$ are the parameters linked with the corresponding independent variable to be estimated (partial regression coefficients)

$\beta_0$is the intercept

Σ is the error variability (error term).

The study carried out an overall regression model to determine the significance of each of the independent variables on the dependent variable. As can be observed in Table 4.7, R Square was 0.693 and R was 0.832 at 0.05 level of significance. The coefficient of determination indicates that 69.3% of the variations on Financing for Private Finance Initiative can be explained by project characteristics, government attributes, political environment and economic environment. The remaining 30.7% can be explained by other variables not included in the study. R square and adjusted R is above average an implication that an above average variation can be explained by the model.

Table 4.7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832[a]	.693	.661	.691
a. Predictors: (Constant), Economic environment, Project Characteristics, Political environment, Government attributes				

Source: (Primary Data)

Further analysis of ANOVA as shown in Table 4.8 showed that significance of F statistics is 0.000, which is less than 0.05 and the value of F (21.958) being significant at 0.00 confidence level.

Table 4.8 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	41.928	4	10.482	21.958	.000[b]
	Residual	18.618	39	.477		
	Total	60.545	43			
a. Dependent Variable: Financing for Private Finance Initiative						
b. Predictors: (Constant), Economic environment, Project Characteristics, Political environment, Government attributes						

Source: (Primary Data)

Table 4.9 presents the beta coefficients of all independent variables versus the dependent variable.

Table 4.9 Coefficients[a]

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.533	.570		.935	.037
	Project Characteristics	.085	.154	.059	.549	.000
	Government attributes	.037	.109	.041	.341	.000
	Political environment	.145	.089	.169	1.631	.005
	Economic environment	.753	.124	.742	6.071	.000
a. Dependent Variable: Financing for Private Finance Initiative						

Source: (Primary Data)

The regression model is written as: Financing for private finance initiative = 0.085* project characteristics +0.037* government attributes + 0.145* political environment + 0.753* economic environment.

The Beta Coefficients in the regression show that all the variables tested: project characteristics, government attributes, political environment and economic environment have positive relationship with financing for private finance initiative

The findings show that all the variables tested are statistically significant with p-values less than 0.05.

4.7 Discussion of Findings

The study found that project characteristic is a major determinant of financing of road projects. Aspects of project characteristics such as cost, scope and size of the project (Mean 4.55) and project technical feasibility & maintenance (Mean 4.09) were found influence the project financing of road projects to a very large extent. An average mean on 3.80 was obtained; an indication that project characteristic is one on the major determinants of road project financing. These findings are in line with that of Engel *et al*. (2014) who found that the efficiency in project completion and project management which enables the success of a project hence its potential to recover the initial cost and to guarantee a constant and reliable monthly loan payment without default. This clearly explains the aspects of project technical feasibility and maintenance.

The study also found that government attributes is another determinant of financing of road projects in Kenya. Aspects of government attributes such as cost of the loan (Mean 4.73), tax policy(Mean 4.27) stable macroeconomic conditions (Mean 4.27), favorable legal framework (mean 4.18), project development objectives (PDOs) (Mean 4.18) and sound economic policy (4.09) were found to influence financing of road projects to a very large extent. These findings are in line with that of Gupta *et al*. (20130 who found that there are various forms of government support including subsidies, tax exemption, guarantee revenue and equity participation. Diba (2012) found that three most vital aspects are: a regulatory framework that is clear and favorable, a realistic assessment of costs and benefits and a procurement process that is free and transparent influences the successful implementation of the project. These factors are also considered in accessing the finances for development projects as well. According to Kalidindi and Siggh (2009), the concession agreements are equally vital as they provide a regulatory framework for securing value for public funds and providing users with services that are cost effective.

Political environment was also found to be among the major determinants of the financing of road projects in Kenya. Stable of political environment was found to influence project financing to a very large extent (Mean 4.73). The findings further revealed that general public and social support (Mean 3.73) and good relationship with project team (Mean 3.55) influences project financing to a large extent. An average mean on 4.00 was obtained; an indication that political environment is one on the major determinants of road project financing. These findings are in line with that of Chiang and Cheng (2009) who found that political barriers and financial market risks prevent the participation of financial institutions in the financing of PFI projects. According to Sundaraj and Eaton (2011), policy and regulatory matters are also affected by political instability which leads to changes in government leadership.

The study finally showed that economic environment was the major determinant of financing of road projects in Kenya. Aspects of economic environment such as economic viability of the project (Mean 4.55), economic stability (Mean 4.27) and economic internal rate of return (EIRR) (Mean 4.18) were found to influence project financing to a very large extent. These findings are in line with that of Demirag *et al*. (2011) who found that project economic viability is a major determinant of financing. He mentioned that sustainable projects thus ensure adequate cash flows to service the debt, recover costs so as to derive the highest benefits out of an investment.

Findings from regression analysis showed that the coefficient of determination indicated that 69.3% of the variations on financing for private finance initiative can be explained by project characteristics, government attributes, political environment and economic environment. This is an indication that the variables tested were very strong determinants of the financing of the road projects in Kenya under the private finance initiative. The findings conform with that of Chan *et al.* (2010) who found that there are 18 factors influencing PPP adoption in the People's Republic of China, which can be grouped into five categories on the basis of critical success factors: (1) Stability within the macroeconomic environment (2) Joint effort between private and public sectors (3) Transparency and efficiency in the procurement process (4) Stable social and political environment and (5) wise government control..

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The objective of this study was to assess the determinants project financing for private finance initiative projects; a case of road construction projects in Kenya. This chapter presents summary, conclusion, limitations of the study and recommendations.

5.2 Summary of Findings

The findings from the study revealed that project characteristic is a major determinant of financing of road projects. Aspects of project characteristics such as cost, scope and size of the project (Mean 4.55) and project technical feasibility & maintenance (Mean 4.09) were found influence the project financing of road projects to a very large extent. An average mean on 3.80 was obtained; an indication that project characteristic is one on the major determinants of road project financing. The findings from correlation analysis showed that that financing for private finance initiative is positively associated with project characteristics with a Pearson's Correlation Coefficient of $r = 0.402$ and that at a significance level of 0.007 showing that it is statistically significant at p value less than 0.05.

The study also found that government attributes is another determinant of financing of road projects in Kenya. Aspects of government attributes such as cost of the loan (Mean 4.73), tax policy(Mean 4.27) stable macroeconomic conditions (Mean 4.27), favorable legal framework (mean 4.18), project development objectives (PDOs) (Mean 4.18) and sound economic policy (4.09) were found to influence financing of road projects to a very large extent. An average mean on 4.18 was obtained; an indication that government attributes is one on the major determinants of road project financing. Findings from correlation analysis showed that there is a positive correlation between financing for private finance initiative and government attributes with a Pearson's Correlation Coefficient of r = 0.503 and a level of significance of 0.001 an indication that it is statistically significant.

Political environment was also found to be among the major determinants of the financing of road projects in Kenya. Stable of political environment was found to influence project financing to a very large extent (Mean 4.73). The findings further revealed that general public and social support (Mean 3.73) and good relationship with project team (Mean 3.55) influences project financing to a large extent. An average mean on 4.00 was obtained; an indication that political environment is one on the major determinants of road project financing. Findings from correlation analysis that financing for private finance initiative has a positive relation with political environment with a Pearson's Correlation Coefficient of 0.507 and 0.000 significance of level.

The study finally showed that economic environment was the major determinant of financing of road projects in Kenya. Aspects of economic environment such as economic viability of the project (Mean 4.55), economic stability (Mean 4.27) and economic internal rate of return (EIRR) (Mean 4.18) were found to influence project financing to a very large extent. Findings from correlation analysis showed that financing for private finance initiative have a positive association with economic environment with a Pearson's Correlation Coefficient of 0.814 and 0.000 level of significance.

Findings from regression analysis showed that the coefficient of determination indicated that 69.3% of the variations on financing for private finance initiative can be explained by project characteristics, government attributes, political environment and economic environment. The remaining 30.7% can be explained by other variables not included in the study. R square and adjusted R is above average an implication that an above average variation can be explained by the model. This is also an indication that the variables tested were very strong determinants of the financing of the road projects in Kenya under the private finance initiative.

5.3 Conclusion

The following conclusions were made from the study findings:

The study concludes that project attributes is a major determinant of the financing of private finance initiative in Kenya. Aspects of project such as cost, scope and size of the project and project technical feasibility & maintenance influences the financing to a very large extent.

The study further concludes that government attributes influences financing of private finance initiative in Kenya. Aspects of government attributes such as cost of the loan, tax policy, stable macroeconomic conditions, favorable legal framework, project development objectives (PDOs) and sound economic policy were found to influence financing of road projects to a very large extent

It can also be concluded that political environment influences financing of private finance initiatives in Kenya. Aspects such as the stability of the political environment, social support from the general public and good relationship between the project team influences financing of road projects to a very large extent

The study finally concludes that economic environment influences financing of road projects in Kenya. Aspects of economic environment such as the economic viability of the project, economic stability and economic internal rate of return (EIRR) were found to influence project financing to a very large extent.

5.4 Implications of the Study

The findings of this study contribute to the existing theories on private finance initiative. Theories such as public choice theory focusing on political decisions which are not in line with public interest may not fully explain the determinants of financing of private finance initiatives. This study found that other factors such as the project characteristics and economic environment influences financing of private finance initiatives.

The findings of the study also contribute to the formulation of borrowing policies. Government bodies such as the treasury can use the findings of the study to come up with policies regulating borrowing for private finance initiatives in Kenya. For example, the findings can be used to regulate over borrowing to finance road projects at the expense of other development areas

5.5 Recommendations

The following recommendations were made based on the study findings:

The government should put into consideration the aspects of the project such as cost, scope and size and its technical feasibility & maintenance before sourcing for funds. This will allow them to predict the probability of qualifying for the financing before looking for the financiers.

The study also recommends that the government should consider it tax policy and ensure that legal framework for the financing of private finance initiatives is favourable to the development of the country.

The study further recommends that the government should ensure stable political environment exists. This would attract more financiers as they will be assured that their investments and returns.

The study finally recommends that the government should consider the economic viability of the roads projects to be financed and at the same time consider the economic stability of the country before seeking for finances for private finance initiatives

5.6 Recommendations for further Research

This research provided just the determinants of financing for private fiancé initiatives. The researcher therefore recommends that another study be done on the challenges facing private finance initiative which was not the concern of this study.

Future studies are encouraged to look not just into road projects financed under private finance initiatives but on other infrastructural development initiatives. With this the researcher could derive the real scenario on how different factors influence financing of different development projects into the economy.

REFERENCES

Achieng', O.O (2015). Performance measurement approaches in public - Private partnership in Kenya. Published thesis, University of Nairobi

Asenova, D & Beck, M. (2010). Crucial silences: When accountability met PFI and finance capital. *"Critical Perspectives on Accounting"*, 21, 1–13.

Bosire, L.K (2015). Determinants of success of urban infrastructure projects financed by public private partnerships in Kenyan counties. Published thesis, University of Nairobi.

Boyne, G. A., Farrell, C., Law, M., Powell, M., & Walker, R. (2003). Evaluating public management reforms: priciples and practice . Buchingham, the UK: Open Universtiy Press.

Buchanan, J. & Gordon T. (1962). The Calculus of Consent: The Logical Foundations of Constitutional Democracy. University of Michigan Press.

Chiang, Y. & Cheng, E.W.L (2009). Perception of Financial Institutions toward Financing PFI Projects in Hong Kong. *"Journal of Construction Egineering and Management"*, 135, No. 9(September), 833–841.

Deloitte (2010). "Structuring effective public-private partnerships for infrastructure." http://www.deloitte.com. Available at: http://www.deloitte.com/assets/Dcom-Global/Local%20Assets/Documents/Public%20Sector/dtt_ps_partneringforvalue_090710.pdf. accessed August, 2017).

Diba, I.R.D (2012). Critical success factors for public private partnership projects in the Kenyan road sub-sector. Published Thesis, University of Nairobi.

El-Haram, M. A., & Agapiou, A. (2002). *The Role of the Facility Manager in New Procurement Routes*. Journal of Quality in Maintenance Engineering, 8(2), pp. 124–134.

Engel, E., Fischer, R. & Galetovic, A. (2010). The economics of infrastructure finance: Public-private partnerships versus public provision. *"European Investment Bank"*, 15(1), 40–70.

Engel, E., Fischer, R. & Galetovic, A. (2014). Finance and Public-Private Partnerships. In *"Financial Flows and Infrastructure Financing Conference"*, 20-21 March 2014, Sydney.

Fielding, D. (2003). "Investment, Employment, and Political Conflict in Northern Ireland." Oxford Economic Papers, 55 (2003): 512-535.

Fosu, A. K. (2004). "Mapping Economic Growth into Economic Development: Has Elite Political Instability Mattered in Sub-Saharan Africa?" American Journal of Economics and Sociology, 63 (5): 1173-1192.

Gupta, A., Gupta, M.C & Agrawal, R. (2013) Identification and ranking of critical success factors for BOT projects in India. *"Management Research Review"*, **36**(11), 1040–1060.

Hampl, N,, Florian, L.F, Christoph, F., Sebastian, O. & Valentin, A. (2011). *"The Myth of Bankability"*, Goetzpartners, Munich, Germany.

Hassard, J. J.T. (2007). China's State Enterprise Reform: From Marx to the market. Abingdon, Oxon: Routledge.

Hayes, L. Sourani, A & Sertyesilisik, B. (2015). An Investigation into the Improvement of Tendering Processes and the Level of Competition for PFI Construction Projects. Masters thesis, University of Plymouth, UK.

Hoffman, S.L (1998). *The law and business of international project finance: a resource for governments, sponsors, lenders, lawyers and project participants* Kluwer Law International.

International Comparative Legal Guide Series. (2008). "PFI/PPP Projects." ttp://www.iclg.co.uk. http://www.iclg.co.uk/index.php?area=4&country_results=1&kh_publications_id =28&chapters_id=1030. accessed September 2017.

Ismail, K. (2012). *"Value for Money (VFM) Assessment Framework for Public Private Partnership (PPP) Approach"*, PhD Thesis, Universiti Teknologi MARA, Shah Alam, Selangor.

Kahwajian, A., Baba, S., Amudi, O. & Wanos, M. (2014). Identification of Critical Success Factors (CSFs) for Public Private Partnership (PPP) Construction Projects in Syria. *Jordan Journal of Civil Engineering*, Volume 8, No. 4.

Li, B., Akintoye, A., Edwards, P.J. & Hardcastle, C. (2005). Perceptions of positive and negative factors influencing the attractiveness of PPP/PFI procurement for construction projects in the UK: Findings from a questionnaire survey. *Engineering, Construction and Architectural Management*, 12(2): 125–148.

Lop, N.S, Ismail, K., & Isa, H.M (2017). The Implementation of Key Performance Indicators in the Malaysian Private Finance Initiative Projects. *www.e-iph.co.uk. Accessed, September 2017.*

Macquarie, W. (1996). *Project finance - The guide to financing transport projects* Macquarie Corporate Finance Limited, Australia

Marco, A., De, Mangano, G. & Zou, X.Y (2012). Factors influencing the equity share of buildoperate-transfer projects. *"Built Environment Project and Asset Management"*, **2**(1), 70–85.

Minjire, E.K (2015) Factors affecting the performance of public-private partnerships in healthcare projects in Kenya. Strategic journal of business and change management. Vol. 2, No. 37.

NAO (2003). *The Operational Performance of PFI Prisons*, (June), 55.

Nguri J. (2009)."The Effectiveness of Private Public Partnership in Financing Municipal Capital Projects". Nairobi, Page 12. Available at: www.aibuma.org/proceedings/downloads/Nguri,%20Kenya.doc. accessed September 2017).

Niskanen, ,. W. (2004). Policy Analysis And Public Choice: Selected Papers By William A. Niskanen Edward Elgar Publishing House, 2004. Edward Elgar Publishing House

Niskanen, W.A. (1971). Bureaucracy and Representative Government, Chicago: Aldine.

Orodho, A. J. (2004). *Technologies of writing Research Proposals and Report in Education and Social Science*. Masola Publishers, Reata Printers Nairobi

Page, E. (2003). Farewell to the Weberian State? C*lassical Theory and Modern Bureaucracy*. ZSE 4⁄2003 485 Abhandlungen

Painter, D & Gallo, J (2012). *"The Advantages of Structured Financing for Sub-National Authorities"*, Public-Private Infrastructure Advisory Facility, Washington, USA.

Parker D, & Saal D.S. (2003) International Handbook on Privatisation, Edward Elgar, London, the UK, 2003

Republic of Kenya (2010) ; *The constitution of Kenya, 2010.* Government Printers, Nairobi.

Riding, A., Madill, J. & Haines, G. (2007) Incrementality of SME Loan Guarantees. *"Small Business Economics"*, 29(1-2), 47–61.

Rossi. M & Civitillo. C. (2014), Public Private Partnerships: a general overview in Italy, 2nd World Conference On Business, Economics And Management - WCBEM 2013. Procedia - *Social and Behavioral Sciences 109* (2014) 140 – 149.

Ruane, S. (2000). Acquiescence and opposition: the Private Finance Initiative in the NHS. Policy and Politics, 28 (3), pp. 411-424.

Savas, C. (2000). Privatisation and public private partnerships, Chatham house Publishers, New York and London, 2000

Schur, M., Klaudy, S. & Dellacha, G. (2006). The role of developing country firms in infrastructure. *"Public-Private Infrastructure Advisory Facility"*, Note No. 3, 1-4.

Shendy, R, Kaplan, Z & Mousley, P (2011). *"Towards Better Infrastructure, Conditions, Constraints, and Opportunities in Financing Public-Private Partnerships"*, The World Bank, Washington, USA.

Singh, L.B. & Kalidindi, S.N. (2009). Criteria influencing debt financing of Indian PPP road projects : a case study. *"Journal of Financial Management of Property and Construction"*, 14(1), 34–60.

Vickers, J. & Yarrow, G. (1988), Privatization: An Economic Analysis (London: The MIT Press).

Yescombe, E.R. (2007). *Public–Private Partnerships: Principles of Policy and Finance*, Butterworth-Heinemaan, Oxford.

Yuan, J., Wang, C., Skibniewski, M. J., & Li, Q. (2012). Developing key performance indicators for public-private partnership projects: questionnaire survey and analysis. *Journal of Management in Engineering*, *28*(3), 252-264.

APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

September 2017

Dear Sir/Madam,

<u>REF: REQUEST FOR RESEARCH DATA</u>

I am a Master of Science (MSc. Finance) student at the University of Nairobi. I am required to submit as part of my course work assessment a research project report on "**DETERMINANTS OF PRIVATE FINANCE INITIATIVE PROJECT FINANCING; A STUDY OF ROAD CONSTRUCTION PROJECTS IN KENYA**". Your have been selected to participate in the study. I would appreciate your cooperation and time to help me fill the attached questionnaire. Please be assured that all your responses shall be kept strictly anonymous and confidential and shall only be used for academic purposes.

Thank you in advance.

Patrick Mbithi

Student (Researcher)

University of Nairobi

APPENDIX II: QUESTIONNAIRES

SECTION A: BACKGOUND INFORMATION OF THE RESPONDENT

1. Gender Male [ ] Female [ ]

2. Age 19 – 25 years [ ] 26– 35 years [ ] 36 – 45 years [ ]

46-55 years [ ] Above 55 Years [ ]

3. Level of education: “O” Level [ ] Diploma [ ] Undergraduate [ ]

Masters [ ] PhD [ ]

Any other (specify)____

4. Duration of service in the organization Less than 2 Years [ ] 2-5 Years [ ]

6-10 Years [ ] 11-15 Years [ ] 16-20 Years [ ] More than 20 Years [ ]

5. Position in the organization:

____

SECTION B: DETERMINANTS OF PROJECT FINANCING FOR PRIVATE FINANCE INITIATIVE PROJECTS

PROJECT CHARACTERISTICS

6. The following are some statements on the influence of project characteristics on financing of road project. Please indicate the extent to which each statement influences the decision by your organization to finance road projects in Kenya: **Key: 1-No extent at**

all 2-Small extent 3-Neutral 4-Large extent

5-Very large extent

Project attributes	**1**	**2**	**3**	**4**	**5**
Level of design, planning and complexity					
Location of the PFI project					
Repayment period					
Cost, scope and size of the project					
Construction and concession period					
Insurance coverage					
Level of technological advancement					
Competitive tender procedure					
Standard PPP contract with enough flexibility					
General public/social support					
Stable and favorable political environment					
Commitment and responsibility between public and private sector					
Project technical feasibility, constructability, and maintainability					
Appropriate risk allocation, sharing and transfer					

7. What are other project characteristics influencing the financing of road construction projects?

____

____

____

____

____

GOVERNMENT ATTRIBUTES

8. The following are some statements on the influence of government attributes on financing of road project. Please indicate the extent to which each statement influences the decision by your organization to finance road projects in Kenya: **Key: 1-No extent at all 2-Small extent 3-Neutral 4-Large extent 5-Very large extent**

Government attributes	**1**	**2**	**3**	**4**	**5**
Government involvement by providing a guarantee					
Government permit and approval					
Government control on charges					
Favourable legal framework					
Government's knowledge of PPP					
Tax exemptions or reductions					
Stable macroeconomic conditions					
Sound economic policy					
Multi-benefit objectives					

9. What are other government attributes influencing the financing of road construction projects?

____

____

____

____

____

POLITICAL ENVIRONMENT

10. The following are some statements on the influence of political environment on financing of road project. Please indicate the extent to which each statement influences the decision by your organization to finance road projects in Kenya: **Key: 1-No extent at all 2-Small extent 3-Neutral 4-Large extent 5-Very large extent**

Political environment	**1**	**2**	**3**	**4**	**5**
Stable and favourable political environment					
Commitment and responsibility between public and private sector					
General public and social support					
Good relationship with project team					
Political and economic stability					

11. What are other political environment attributes influencing the financing of road construction projects?

____

____

____

____

____

ECONOMIC ENVIRONMENT

12. The following are some statements on the influence of economic environment on financing of road project. Please indicate the extent to which each statement influences the decision by your organization to finance road projects in Kenya: **Key: 1-No extent at all 2-Small extent 3-Neutral 4-Large extent 5-Very large extent**

Economic environment	**1**	**2**	**3**	**4**	**5**
GDP of a Country					
Economic viability of the project					
Economic stability					
Any other (Specify)……………………………. ………………………………………………. ……………………………………………….					

PROJECT FINANCE INITIATIVES

13. The following are some of the indicators of successful project finance initiative projects. Please indicate the extent to which each of the indicators reflects on the success of to the FFI in relation to their access and implementation by receiving governments:

Key: 1-No extent at all 2-Small extent 3-Neutral 4-Large extent 5-Very large extent

Project Finance Initiatives	**1**	**2**	**3**	**4**	**5**
Amount of finance allocated to a particular project					
Number of projects supported by the organization					
Successful completion of the previous projects					
Any other (Specify)…………………………… ……………………………………………… ………………………………………………					

14. What would you recommend to be done by government to increase the chances of financing of their road construction projects?

____

____

____

____

____