TILBURG LAW SCHOOL

ENHANCEMENT OF PRIVATE PARTICIPATION IN INFRASTRUCTURE THROUGH PUBLIC-PRIVATE PARTNERSHIPS IN UGANDA

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ABSTRACT

Infrastructure development is one of the essential factors needed to spur economic growth and alleviate poverty in Sub-Saharan Africa. The region requires an infrastructure investment of approximately USD 100 billion to fill the Infrastructure gap. Uganda is among the least developed countries in the world and has a broader infrastructure gap compared to other countries in the Sub-Sahara like South Africa, Nigeria, Kenya, and Ghana. Uganda has a financing gap of approximately USD 0.4 million per annum and needs an investment of about USD 1.4 billion per year in the medium-term to fill the infrastructure gap. Due to budgetary and fiscal restraints caused by low revenues and low tax collections, the public sector is unable to fund all investments needed. One alternative source of funding that other African countries like South Africa and Nigeria have adopted is Public-Private Partnerships (PPPs).

PPPs are projects for which the public sector contracts the private sector to design, build, finance, and operate for a definite period after which, the infrastructure asset reverts to the public sector. PPPs are heavily dependent on the active involvement of the private sector to attract funding, expertise, quality output, and timely project delivery; which the public sector lacks. However, in Uganda, the private sector, especially institutional investors, have not been fully engaged in PPPs for fear of the risks involved in these projects.

The purpose of this study was to examine what mechanisms the government of Uganda could adopt to enhance private investment in infrastructure through PPPs. To address this issue, we canvassed existing literature to analyze what the preconditions of successful PPPs were. We compared the research with the institutional structure and economic environment in Uganda to find out whether they could support a robust PPP regime. We also surveyed Ugandan investors to discover what challenges they faced with infrastructure investment.

From the literature review and survey, we found that the most significant barriers to private investment in infrastructure in Uganda were: i) lack of transparency in procurement and bidding processes; ii) problems with land acquisition; iii) lack of coordination between departments in the public sector; iv) limited options of financing instruments; v) unattractive expected returns on investment; and vi) lack of government guarantee.

The findings suggest the need for public sector reforms in the governance structures, innovation with financing structures and risk mitigation strategies. These gaps can be addressed by adopting the following recommendations: a) an accessible platform for the disclosure of important information about PPP projects; b) government infrastructure bonds with a diaspora component to increase the financial products on the market and widen the investor base; c) establish co-investment platforms to expand the investment capacity of domestic investors; and d) create a guarantee fund to mitigate contingencies in PPP projects.

DEDICATION

This dissertation is dedicated to my father, Prof. John Christopher Oloa. and my mother, Ms. Hellen Amolo Eteru. Thank you for giving me the gift of education and always being there for me in every situation.

I also dedicate this scholarship to Nuffic Scholarship Committee that supported me all through my Masters Programme.

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ABBREVIATIONS

BOOT	Build Own Operate Transfer
BOT	Build Operate Transfer
BTO	Build Transfer Operate
CBR	Central Bank Rate
CIS	Collective Investment Scheme
CMA	Capital Markets Authority
DBFO	Design Build Finance Operate
DBJ	Development Bank of Japan
FDIs	Financial Development Institutions
FISMS	The Fixed Income Securities Segment
FY	Financial Year
GDP	Gross domestic Product
GPIF	Japan's Government Pension Investment Fund
GSIA	Global Strategic Investment Alliance
ICA	The Infrastructure Consortium for Africa
ICRC	The Infrastructure Concession Regulatory Commission
ICT	Information and Communications Technology
IFC	International Finance Corporation
IIGF	Indonesia Infrastructure Guarantee Fund
IMF	International Monetary Fund
JBIC	Japan Bank for International Cooperation
Kes	Kenya Shillings
MCPP	Managed Co-Lending Portfolio Program
MDAs	Ministries, Departments and Agencies
MDBs	Multi-lateral Development Banks
NDP	National Development Plan
NSE	Nairobi Stock Exchange
NSSF	National Social Security Fund
NUSAF II	Northern Uganda Social Action Fund 2
OECD	The Organization for Economic Co-operation and Development
OMERS	Ontario Municipal Employees Retirement System
PDs	Primary Dealers
PPI	Private Participation in Infrastructure
PPP	Public-Private Partnerships
PRG	Partial Risk Guarantee
PRI	Political Risk Insurance
PURSP	Privatization and Utility Sector Reform Project
PwC	PricewaterhouseCoopers
SEA	Strategic Environmental Assessment
SPV	Special Purpose Vehicle
UPPET	Universal Post Primary Education and Training
USAID	The United States Agency for International Development
USMID	Uganda Support to Municipal Infrastructure Development Program
WEF	World Economic Forums'

CHAPTER ONE: CONTEXT OF STUDY

1.1. Introduction

Recent studies have emphasized that infrastructure is one of the most important factors needed to spur economic growth and yet, there is still a big infrastructure gap which has affected many economies globally. Infrastructure is the primary physical systems of a business or nation which includes transportation, communication, sewage, water, and electric systems.[1] Provision of these systems is a government function, usually costly and requires substantial investments, which capacity most governments lack hence the increasing infrastructure gap.

In 2017, the OECD found that "global infrastructure investment needs of totaled USD 6.3 trillion per year over the period 2016-2030 to support growth and development, without considering further climate action."[2] Similarly, the Boston Consulting Group estimated the infrastructure gap in Sub-Saharan Africa to be USD 100 billion.[3] Sub-Saharan Africa, according to global rankings, has the worst performance in virtually all areas of infrastructure development scoring 2.91 out of 7 according to the World Economic Forums' (WEF) Global Competitiveness Report.[4] The region's infrastructure gap is evident in all sectors of the economy albeit with remarkable improvement in the telecommunication sector. The dire situation in the region means that countries therein, like Uganda are in a far worse state.

Uganda has an infrastructure financing gap estimated at USD 0.4 million per annum with overall investments growing at the average annual rate of only 4.3 percent within the five-year period up to FY 2015/16.[5] This gap, has, in turn, affected Uganda's rankings in the continent where it scored 3.68 on the Global Competitive Index.[6] According to the Uganda economic update, "the estimated level of investment required for Uganda to close the infrastructure gap amounts to almost USD 1.4 billion per year in the medium-term; about six percent of Uganda's GDP per year."[7] However,

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[1] https://www.investopedia.com/terms/i/infrastructure.asp#ixzz58r9Ad0XD accessed on 5 March 2018

[2] Mariana Mirabile, Virginie Marchal and Richard Baron, 'Technical Note on Estimates of Infrastructure Investment Needs' (*Oecd.org*, 2017), 1 https://www.oecd.org/env/cc/g20-climate/Technical-note-estimates-of-infrastructure-investment-needs.pdf accessed 22 August 2018

[3] 'Infrastructure Financing in Sub-Saharan Africa: Best Practices from Ten Years in the Field' (2017), 8 https://www.africafc.org/Publications/Publications-Documents/BCG-Report-Africa-May-2017-Electronic-v12-may.aspx accessed 24 July 2018.

[4] 'Africa's Pulse; An Analysis of Issues Shaping Africa's Economic Future' (*Openknowledge.worldbank.org*, 2014), 43 https://openknowledge.worldbank.org/handle/10986/26485 accessed 22 August 2018

[5] Rachel Sebudde, 'Uganda Economic Update: 9th Edition-Infrastructure Finance Deficit: Can Public-Private Partnerships Fill the Gap?' (*Documents.worldbank.org*, 2017) http://documents.worldbank.org/curated/en/261811498801726339 accessed 13 June 2018

[6] 'Africa Competitiveness Report 2017' (*The World Economic Forum*, 2017), 14 https://www.weforum.org/reports/africa-competitiveness-report-2017 accessed 22 August 2018

[7] Ibid (n 5)

the Ugandan government is unable to finance large-scale infrastructure projects due to budgetary constraints and fiscal deficits. Therefore, policymakers and implementers must devise creative measures for accessing finance to invest in infrastructure. Recent studies and experience from other countries like Brazil, Chile, and South Africa show that Public-Private Partnerships (PPPs), if well structured, can be a sustainable solution in filling this infrastructure gap.

Public-Private Partnerships are projects in which the private sector Project Company finances, operates and maintains public infrastructure while receiving payment for its use; and the asset concerned usually reverts to public sector control/ownership at the end of the contract term[8] (15-30 years). The concept of PPPs revolves around output specification, payment mechanisms, risk identification, risk allocation, and clear contractual terms. The success of PPPs is heavily dependent on active private sector participation since they are the investors in the projects. However, Private Participation in Infrastructure (PPI) has been declining especially in Sub-Saharan Africa, leaving the financial burden mostly to the African governments.

As of 2016, the sources of funding for Africa's infrastructure were Africa national governments, members of the Infrastructure Consortium for Africa (ICA), Arab Coordination Group, China, bilateral and multilateral financial institutions with the least being the private sector. Overall commitments to Africa's infrastructure fell by $16.4 billion to $62.5 billion from 2015 to 2016, which is the lowest level in five years.[9] This is due to a reduction of $14.5 billion of reported Chinese funding and a $4.9 billion reduction of private sector investment.[10] As a result, the ICA report states that African National governments were the primary funders of their transport infrastructure projects in 2016; contributing $14.6 billion (59.6%) of the $24.5 billion committed in the year.[11] However, the economic environment is such that national governments cannot meet the investment demands of a PPP project; which private investors (*especially institutional investors*) can fund but lack the incentive to do so.

Current trends show that investors have an increased risk appetite but lack the motivation to invest in projects that will not yield returns. Since risk is usually passed on to the investors, they are more willing to spend on stable, long-term, inflation-protected returns to match their portfolio allocations. Pension funds and insurance firms are still hesitant to participate in infrastructure financing of regional or national projects. With interest from the private sector even low, Uganda needs to be creative to tap into this underutilized option of infrastructure finance. Some of the

[8]E. R Yescombe, *Principles of Project Finance* (2nd edn, Academic Press 2014), 14
[9]The Infrastructure Consortium for Africa, 'Infrastructure Financing Trends in Africa' (2016), 14
[10] Ibid
[11] Ibid

barriers to active PPI include lack of bankable projects, political risks, limited opportunities for financing vehicles and inappropriate risk allocation. Institutional investors, given their long-term investment portfolio, are interested in bonds because of their long tenor and risks associated with PPPs can be mitigated by guarantees and insurance as will be explained in the later chapters.

Even with the low PPI in Africa, Uganda is not a priority destination for investments, ranking at number nine out of twenty countries in a private sector survey conducted by ICA.[12] It is prudent to note that there is vast literature about the infrastructure gap in Sub-Saharan Africa, the financing deficit therein, options for financing PPP projects but there is none that has explained in detail, how to create a robust PPP environment that would attract the private sector to invest in infrastructure in Uganda. Whereas this is the case, earlier studies have found that lack of bankable projects, high bank lending rates, political instability, limited financing options and inappropriate risk mitigation are some of the factors hindering PPI in Uganda.

1.2. Purpose of the study and research questions

The purpose of this thesis is to find out the determinants of and barriers to private sector participation in PPP projects. This study recognises the dynamic and yet predictable nature of the economic infrastructural environment, its demands and the traditional mechanisms that have been used to meet these demands. Therefore, the research question is **"How can the Government of Uganda enhance private investment in infrastructure through Public-Private Partnerships?"**

The following questions offer guidance in answering the research question above:

1. What are the preconditions necessary for a successful PPP regime?
2. What are the barriers to private sector partcipation in PPP projects in Uganda?
3. What are the possible mechanisms to overcome the barriers if any?

1.3. Methodology and Limitations

This thesis will canvass existing literature to provide a basis for our analysis of PPPs, and the survey of private investors will help us understand the factors affecting infrastructure development in Uganda. The survey is also a means to uncover some of the evidence needed to support or digress from claims in existing literature. The survey questions are designed considering existing research on Public Private Partnerships.

[12] Ibid 68

To answer the research questions, we take a more direct approach by conducting a survey of private investors regarding investment in infrastructure in Uganda. We ask how much knowledge the respondents have in infrastructure development and we have included a skip question mechanism to avoid taking into consideration responses from participants who do not know. We asked our respondents in which field they are working, to determine the relevance of their response based on their experience. Furthermore, we asked the respondents about the determining factors for private investment at the country level, project level and at the stage of financing the project. We then asked them the barriers to private investment at the project level and financing stage.

The purpose of conducting an in-depth analysis without making the survey too long and complicated for the respondents is to focus on the determining factors and barriers to PPI in Uganda; these questions do not require complex answers and can be included in ranking or multiple-choice questions.

Before conducting the survey, we circulated it among academics and people from other business fields to get their feedback and suggestions on the survey design and execution. Our study targeted investors, and we designed questions to understand how they perceive the economic environment in Uganda regarding infrastructure investment. We included inquiries to appreciate what their concerns were with infrastructure development at the country, project and financing level.

We developed our survey by considering questions that would provide insights into outstanding issues in research on private investment in PPP projects. We used Qualtrics to design an online version of the survey and distributed it through several delivery channels. We have attached the survey questions to this thesis as Appendix. I. Second, we sent out 50 invitations to participate in the online survey through social media (LinkedIn, Facebook and WhatsApp) and emails in May 2018. A top corporate lawyer and employees in the public sector provided us with contact details for other lawyers, employees, and clients working or with a background in infrastructure. We sent personal emails and messages to these contacts, inviting them to participate in the survey and we received 30 responses.

There are relevant limitations to the methodology implemented in this study. The number of investors with extensive knowledge in infrastructure is still small compared to the rest of the world, and this increases the likelihood of incorrect responses. Second, in a survey of the opinions of public officials and lawyers acting as agents, such as this one, we naturally face the risk that respondents answer in a strategic or untruthful fashion. To mitigate these concerns, we conducted the survey anonymously and did not require (or ask) respondents to reveal their names. We further assured participants that we would treat individual responses as confidential. Conversations with

several respondents also indicated that they would not spend time filling out the survey if they intended to answer dishonestly.

The rest of the paper is organized as follows: in Chapter II, we define PPPs while detailing the preconditions for a successful PPP and the general barriers to private investment therein. In Chapter III, we discuss an overview of Uganda's economic environment vis a viz the preconditions of a successful PPP regime. In Chapter IV we analyze and interpret results from the survey. In Chapter V, we recommend possible solutions to the barriers to PPI, and in Chapter VI we conclude the paper.

CHAPTER TWO. LITERATURE REVIEW

2.1. Introduction

In the modern era of Project finance, the public sector has embraced Public-Private Partnerships as a means of funding infrastructure projects because they are believed to be a more efficient and cost-effective procurement model. Traditionally, the public sector in developing countries oversaw financing significant infrastructure projects, with the government borrowing from transnational banks, Financial Development Institutions (FDIs) like the World Bank, or through export credits.[13] However, in the recent years, the public sector has sought other means of financing infrastructure projects so to fill the gap. Some of the alternatives include privatization and project finance through public-private partnerships both of which are heavily dependent on private sector participation.

The main driver of PPP projects is access to funding and consequently active private sector participation in infrastructure projects. Recent studies have shown that the portfolio allocations for private investors, especially institutional investors, are inclined towards investment bonds and projects which have a long tenor, similar to their investment preference.[14] Institutional investors who include pension funds, sovereign wealth funds, insurance companies, and mutual funds are increasingly an essential player in financial markets, holding over USD 70 trillion in assets by December 2011 in OECD countries alone.[15] It is because of their investment potential that the public sector should endeavor to address institutional investors' demands. We note that institutional investors identify the preconditions for long-term investment to include a profitable business and investment environment, stable macroeconomic conditions, reputable legal and regulatory frameworks, and sufficient cost-benefit analysis.

This Chapter seeks to analyze the circumstances under which PPPs, and not public sector procurement, should be used to finance infrastructure projects. We will also discuss the conditions and structures optimal for realizing the benefits of PPP financing if chosen. While addressing these questions, we will analyze whether the elements of a typical PPP structure are in tandem with private sector long-term investment demands, and thus play a key role in attracting private investment in infrastructure projects.

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[13]Yescombe, *Principles of Project Finance* (n 8) 1

[14]Della Croce, R., Yermo, J., "Institutional Investors and Infrastructure Financing" (2013) OECD Working Papers on Finance and Private Pensions, No.36, 9-10 http://www.oecd.org/pensions/privatepensions/G20reportLTFinancingForGrowthRussianPresidency2013.pdf accessed 30 May 2018

[15]Ibid 8

To assess the potential of PPPs filling the infrastructure gap in Uganda, it is imperative to understand the procurement models that have been used in the past, their strengths and limitations vis a viz the components of PPP, risks, benefits, and costs therein. PPPs being a recent development in Uganda, it is necessary to understand the different forms of procurement of infrastructure to appreciate how PPPs can solve some of the limitations other procurement models face.

In this chapter, Section 2.2 shall discuss public sector procurement of infrastructure and its limitations thereby justifying the PPP financing model. Section 2.3 distinguishes privatization from PPPs since they are both forms of Private Participation in Infrastructure. Section 2.4 describes the elements of the PPP financing model, the different structures, the benefits and costs, preconditions for a successful PPP regime, and we shall discuss the barriers to private participation in infrastructure projects in Section 2.5.

2.2. Public- Sector Procurement

In this subsection, we explore the benefits and limitations of traditional procurement of infrastructure. Public sector procurement involves the outsourcing of distinct elements of a particular project through an input based specification.[16] In a typical public-sector procurement (known as 'design-bid-build' or 'design-build-operate'-DBO), the Public Authority sets out the specs and design of the facility, calls for bids and pays for the construction of the facility by a private-sector contractor.[17] The private contractor takes no responsibility for the long-term performance of the facility after the relatively short construction warranty period has expired.[18] As has already been mentioned, public sector procurement is funded using public borrowing or tax revenues. Table 2.1 illustrates the difference between public sector procurement and PPPs.

[16]Ministry of Local Government, 'Public Private Partnerships Guidelines for Local Governments', 22-23
[17]E. R Yescombe, *Public-Private Partnerships: Principles of Policy and Finance (Elsevier Finance)* (1st edn, Elsevier Science 2007), 3-4
http://dx.doi.org/10.1016/B978-075068054-7.50025-3 accessed 23 August 2018
[18]Ibid

Table 2.1 Difference between Public-Sector Procurement and PPPs

Public-Sector Procurement	Public-Private Partnerships
The Government purchases an infrastructure asset	The Government purchases infrastructure services
Short-term design and construction contracts (2-4) years	One long-term contract integrating design, build, finance and maintenance (usually 30 years or more)
Input-based specifications	Output-based specifications
Th Government retains whole-of-life asset risk	Private sector retains whole-of-life asset risk
Initial costs are high since the public sector must pay for capital costs, with ongoing low prices.	Payments begin once the contractor commissions the asset. The payment profile is relatively even, reflecting the level of service provision over the longer term of the contract.
Government is typically liable for construction time and cost overruns	Private contractor is usually responsible for construction time and cost overruns
The Government runs the facility	Government may or may not operate the facility
Often no ongoing performance standards	Performance standards are in place. The government may abate payment if the private partner does not deliver the services to contractual requirements
Handover quality less defined	End of term handover quality defined

Source: *PPP Guidelines for Local Governments in Uganda, 22-23*
http://www.ug.undp.org/content/dam/uganda/img/Research%20and%20Publications/PPP%20Guidelines%20Final.pdf

2.2.1. Benefits and Limitations of Conventional Public-sector Procurement

The differences between public sector procurement and PPPs; and the benefits of conventional procurement justify why the public sector may choose to use traditional financing models in infrastructure projects. The benefits of public sector procurement are: lower costs of the project since financing from the public authority; long-term flexibility to make changes in the DBO contract because it is not bundled up with the funding; less complex structure since fewer parties are involved, and so should be quicker to complete and inherently reduce costs.[19]

However, the public procurement model has its limitations, and that is why the infrastructure gap now at $3.3 trillion per annum and $0.4 million per annum globally and in Uganda respectively; has only been increasing despite continuous investment in infrastructure projects. We discuss these limitations below.

[19]Ibid 312

Weak strategic planning in infrastructure in developing countries leads to poor project selection often chosen to satisfy short-term political objectives, resulting in white elephants (junk projects), over-engineering, cost underestimation and demand overestimation.[20] It also leads to poor choices for investors as not all investors have the relevant expertise to guarantee value for money and quick delivery of projects. Strategic planning involves screening not only the projects but also the possible investors especially the sponsors.

The poor institutional design is a significant problem for most developing countries which have a little institutional separation between the agencies in charge of strategic planning and policy design, and those involved in the execution of projects and enforcement of contracts.[21] Typically, this results in a conflict of interest between new projects and the implementation of agreements. The public sector may find new projects politically more attractive than implementing contracts because fewer firms are willing to participate in new projects. The poor institutional design is the reason why public infrastructure projects in developing countries may suffer delays, cost overruns, and low-quality output.

Laxity in the maintenance of already existing projects is another impediment to infrastructure development. Responsible departments usually abandon infrastructure projects until they deteriorate sufficiently that the public complains thereby drawing government reaction. The cost of a stop-and-go approach to maintenance is much higher than what would have been the cost of continuous maintenance, without including the social impact of lower service quality.[22] An example is the Kampala here the concerned authorities often install streetlights but within a few months they are not operational due to lack of maintenance, and then reinstallation costs a lot more.[23]

There is the danger of corruption in public agencies with poor checks-and-balances to curb the vice. Corruption is rampant where lowly paid government employees must oversee projects involving substantial investments, in the absence of institutional back up to monitor their work. This vice is particularly strife in the Local Governments of Uganda where out of 1,480 corruption cases reported and investigated by December 2016, 1,140 were from Local Governments concerning implementation of Government projects such as Northern Uganda Social Action Fund

[20]Eduardo Engel, Ronald Fischer and Alexander Galetovic, 'Public-Private Partnerships: When and How' (2008), 11 White elephants are projects with negative social value, that is; projects whose social costs exceed their social benefits.
[21]Ibid
[22]Ibid
[23]http://www.monitor.co.ug/News/National/Streetlights--Is-KCCA-repeating-mistakes-of-its-predecessor-/688334-2415832-trntds/index.html accessed 18 May 2018

2 (NUSAF II), Uganda Support to Municipal Infrastructure Development Program (USMID) and Universal Post Primary Education and Training (UPPET).[24]

When the construction lobbyists or politicians influence the public agency, the wrong are built at an excessive cost due to lack of competition. Similarly, when the government is in urgent need of infrastructure projects before an election, private firms have more bargaining power and can charge higher for their services.[25] An example is the huge Katosi road scandal, a project of approximately UGX 24.78 billion in Uganda, where there was a gross misappropriation of project funds and fraud.[26] This case sums up all the shortfalls of weak institutional design and political patronage.

2.2.2. Summary

In this section, we established that the infrastructure procurement model is shifting slowly from heavy reliance on the public sector towards significant private sector involvement. The shift is because private sector involvement ensures efficiency, expertise and attracts funding all of which are necessary for timely project delivery. We explained what public sector procurement of infrastructure entails and distinguished it from PPPs; identifying the benefits and drawbacks of the traditional procurement model. The limitations of public sector procurement are not meant to undermine its role in infrastructure development, but rather emphasize the need for PPPs in some projects especially where weak institutional design, lack of accountability and conflict of interest are limitations to the public sector. These limitations often lead to delays, cost overruns, low quality of infrastructure projects and ultimately wastage of already limited government resources; a burden borne by the taxpayers. Because of these conditions, public authorities seek the involvement of the private investors, who are believed to be adept at quality assurance, accountability and ensuring value for money in infrastructure projects. PPI can be through Privatization or Public-Private Partnerships, and although the focus of this study is PPPs, it is essential to distinguish between the two procurement models. In the next section, we define privatization and differentiate it from PPPs since they are both heavily dependent on private sector participation.

[24]'Bi-Annual Inspectorate of Government Performance Report to Parliament' (The Inspectorate of Government, Uganda 2016), 7
[25]Eduardo Engel et al. 'Public-Private Partnerships: When and How' (n 20)
[26]http://www.monitor.co.ug/Magazines/PeoplePower/Katosi-road--The-fraud-that-lifted-lid-off-politics-of/689844-2600720-m2kc15z/index.html accessed 18 May 2018

2.3. Privatization

Privatization refers to the permanent transfer of government assets to a private entity, by either selling the asset or shares in the asset or through a management buy-out.[27] Privatization and PPPs are different in that, privatization involves the permanent transfer of a previously publicly owned asset to the private sector, whereas PPPs involve the temporary handover of public assets to the private partner assumes its role public sector "partner" throughout the transaction.[28]

When the government opts for privatization of infrastructure assets, there is a need for specific rules and guidelines to regulate that sector and to cater for social and policy concerns affecting the transaction.[29] Table 2.2 shows the difference between privatization and PPPs.

Table 2.2 Difference between Privatization and PPPs

Privatization	**Public-Private Partnerships**
Private investor directly accountable for the asset and services	The Public Authority remains directly responsible for the provision of services
Physical assets become permanently private-sector owned	Physical assets usually stay with or reverts to the public sector
Involves the introduction of competition to provide the service	Involves the provision of a monopoly service
The scope and cost of services is controlled, if at all, by some form of licensing or regulation which allows for regular cost changes, or left to the forces of market competition	The scope and cost of services is fixed by a specific contract between the private and public sectors

Source: *PPPs: Principles of Policy and Finance* http://dx.doi.org/10.1016/B978-075068054-7.50025-3

The other difference between privatization and PPPs is that asset ownership by the private firm involved is indefinite and complete for privatization whereas, in the case of PPPs, it is temporary and partial.[30] The preferred option, in this case, is PPPs; because partial control of the project assets and reversion to government ownership means that the government can use this power to solve coordination and planning problems, in contrast to privatization.[31]

[27]Ministry of Local Government (n 16) 23
[28]Edward Farquharson, Clemencia Torres de Mästle and E. R Yescombe, *How to Engage with the Private Sector in Public-Private Partnerships in Emerging Markets* (World Bank 2011), 9
[29]Ministry of Local Government (n 16) 23
[30]Eduardo Engel et al. (n 20), 3
[31]Ibid

2.4. Public-Private Partnerships

Public-Private Partnerships are projects in which the private Project Company finances, operates and maintains public infrastructure and is paid for its use; the asset concerned usually reverts to public sector control/possession at the end of the contract.[32] Describing the PPP financing structure, the OECD states that "lending is based solely on the revenue stream of the project; risks are shifted to project partners capable of managing them; liability is limited to the contributed equity capital, and lenders have no recourse or limited recourse to project sponsors."[33] Recourse to project sponsors determines the liability sponsors have towards the lenders of the project company.

In non-recourse PPP Projects, Lenders take compensation only from the Private Partner's proceeds, without appeal to the Equity Investors.[34] In limited recourse PPP Projects, lenders largely depend on incomes from the Special Purpose Vehicle (SPV) to repay their loans but have additionally limited appeal to the Equity Investors.[35]

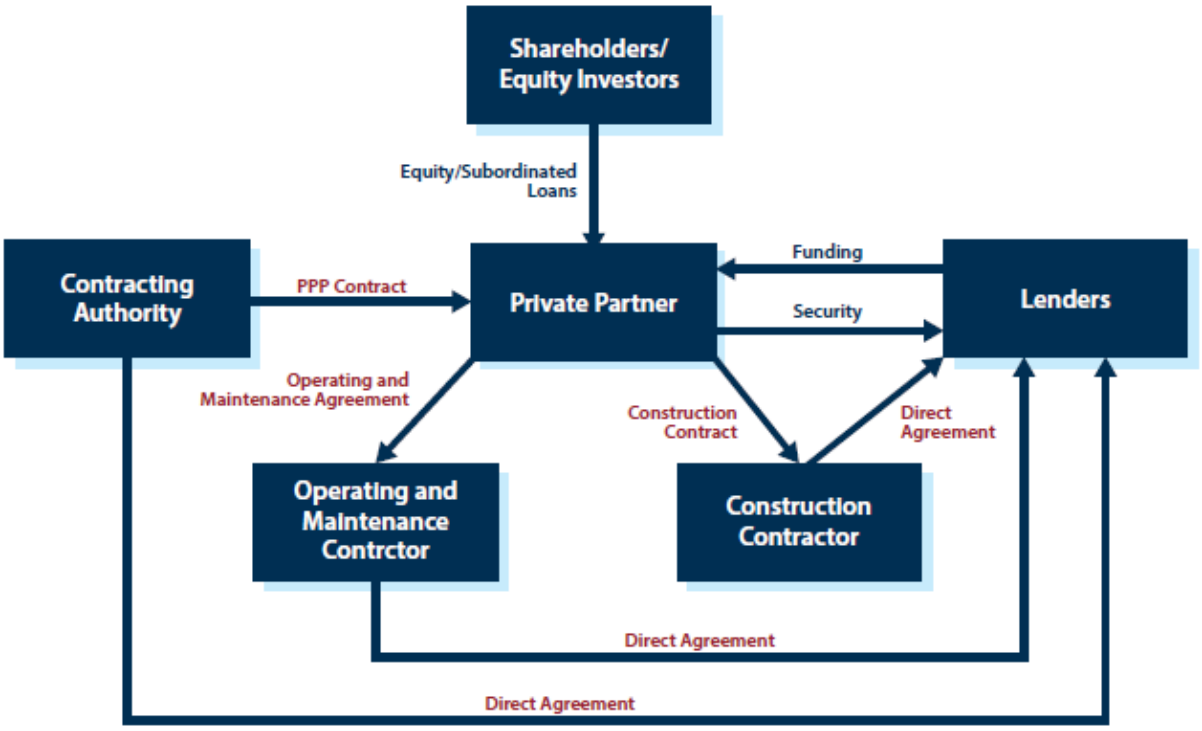
Prior literature shows that all PPPs share similar characteristics. These are: a long-term contract between the public and private sector; the design, construction, financing, and operation of public infrastructure by the private sector party; the public sector or general public pays for the use of the Facility over the lifetime of the PPP contract; and the Facility remains in public sector ownership, or reverts to public sector ownership at the end of the PPP contract.[36] We summarize these elements into two characteristics. One is that under PPPs, one private firm is responsible for financing, building and operating the project; also referred to as bundling. The second is that during the contract term, the private firm owns and has autonomy in managing the assets of the firm as they relate to the quantity and quality of inputs among others.

Figure 2.1 summarizes the structure of a typical PPP showing the principal parties and contracts involved in a typical PPP Project. The Contracting Authority engages the Private Partner through a PPP Contract and also enters into a separate "Direct Agreement" with the Lenders like banks.[37] The Lenders provide funding to the Private Partner and take security over the Private Partner's assets for the repayment of such financing.[38] The Lenders also sign Direct Contracts with the

[32]Yescombe, *Principles of Project Finance* (n 8) 16
[33]*Infrastructure Financing Instruments and Incentives* (OECD 2015), 16
[34]'Guidance on PPP Contractual Provisions 2017 edition, Public Private Partnerships', (*Ppp.worldbank.org, 2017*), 5 https://ppp.worldbank.org/public-private-partnership/library/guidance-on-ppp-contractual-provisions-2017-edition accessed 14 August 2013
[35]Ibid
[36]Yescombe, *Public-Private Partnerships* (n 17) 3
[37]Ibid (n 34)
[38]Ibid

Construction Contractor, and Operating and Maintenance (O&M) Contractor typically retained by the Private Partner to build, and operate the project as required under the PPP Contract.[39] The Shareholders/Equity Investors own the Private Partner, providing funding to it through equity and shareholder loans (the repayment of which is subordinate to the Lenders' funding).[40]

Figure 2.1 PPP Structure



Source: *Guidance on PPP Contractual Provisions*
https://ppp.worldbank.org/public-private-partnership/library/guidance-on-ppp-contractual-provisions-2017-edition

If a PPP Project suffers any losses, the equity holders in the SPV suffer loss first, and Lenders are only affected if the company loses its equity investment in the project. Therefore, PPPs expose Equity Investors to higher risk than debt providers which explains why they earn a higher return on their investment. Since equity is typically more expensive than debt, it is advisable to use a high a proportion of debt than equity to finance the PPP Project (usually 70 to 95 percent of total project cost), which would result in lower financing costs and service for the Contracting Authority.

Private investors seek higher returns and longer tenors to meet their investment targets and profit margins. To attract private investment in a PPP project; there must be a high likelihood of success and the profit margin high enough to mitigate the risks associated with such projects. On the contrary, the target of public sector engagement with private investors is to exploit their expertise

[39]Ibid
[40]Ibid

and to obtain supplemental financing which the government budget cannot afford due to budgetary and fiscal constraints. Many experts have argued that the best way to attract additional funding and tap into private sector expertise is through a PPP structure designed to satisfy both private and public sector needs.

Before discussing PPPs in detail, it is important to note that PPPs are not a solution to all infrastructure challenges and so should not be viewed as a replacement of public sector procurement but rather as an alternative where circumstances permit. The assumption is that PPPs provide relief for governments with a strained budget, but PPPs can turn out quite costly if not well planned and structured. An example is the Disneyland Paris project which experienced financial problems upon completion due to wrong timing (European recession), sizeable initial capital expenditures, and an overly aggressive capital structure dependent on real estate sales for debt service (project debt accounted for 75% of project value).[41] The World Bank advises that PPPs may not be a viable option where the contracting authority is unable to entirely specify the requirements of the project, due to unclear output specifications regarding quality; or where there is lack of third-party finance.[42] Further, where there is difficulty in specifying requirements because of constant technological change; or where there is difficulty substituting suppliers due to the need to integrate technologies, PPPs may not be considered.[43]

Once the contracting authority has identified and planned for the need for PPP procurement, the public sector needs to determine the extent of private sector involvement in the project, supported by the enabling legislation and policy frameworks. Subsection 2.4.1 explains the scope of private sector involvement as defined by different PPP structures.

2.4.1. Types of Public-Private Partnerships

PPPs involve various asset types (*which include both new and existing projects*); determine obligations of the parties involved and the payment method by the party concerned. We categorize PPP assets into "greenfield" and "brownfield" projects. A greenfield project consists of the construction of an entirely new project while a brownfield project involves the overhaul or restoration of an existing structure.[44]

[41]Esty C. Benjamin, *Chase's Strategy for Syndicating the Hong Kong Disneyland Loan (A)* (Havard Business School, 2003), 2
[42]Ministry of Local Government (n 16) 25
Where there is no third party finance, the private partner is forced to rely heavily on corporate borrowing by and may fail to exercise arm's length due diligence.
[43]Ibid
[44]John M Niehuss, *International Project Finance in a Nutshell* (West Academic Publishing 2015), 360

Parties to a PPP contract usually define their obligations and risks in a project, into an agreement which also describes the scope of engagement such as Build Operate Transfer (BOT), Build Transfer Operate (BTO), Design Build Finance Operate (DBFO), Build Own Operate Transfer (BOOT) (*see Table 2.3*). Defining the contractual scope is vital to the contracting authority for the assessment of the long-term residual value of the project.

Table 2.3 The Different PPP Structures

Contract name	**Description**	**Asset type**
Design-build-finance-operate-maintain (**DBFOM);** Design-build-finance-operate (**DBFO);** Design-construct-manage-finance **(DCMF)**	A private party designs, arranges, finances, constructs, operates and maintains a project under a concession for a specified period	Greenfield
Design-build-operate (**DBO**)	The private sector participant designs, builds and operates the project but is not responsible for raising finance.	Greenfield
Build-operate-own-transfer (**BOOT**)	The project facility is financed, built, owned, operated and maintained by the private investor who transfers it back to the government at the end of the concession.	Greenfield
Build-operate-transfer (**BOT**)	A private sector investor designs, finances, builds, operates (but does not own) and maintains the project facility and transfers it back to the government at the end of the concession period.	Greenfield
Rehabilitate-own-transfer (**ROT**)	A private party rehabilitates existing assets rather than building new ones and then operates, maintains, receives revenues and ultimately transfers the facility back to the government.	Brownfield
Operations and Maintenance (O&M**)**	O&M contracts for existing assets may come under the definition of PPP where these are performance-based, long-term, and involve significant private investment (sometimes also called performance-based maintenance contracts).	Brownfield

Source: *International Project Finance, in a Nutshell,* 360

The difference between the DBFOM structure and the other structures above is that DBFOM represents a pure PPP structure whereas the others are hybrid PPPs. Under DBFOM the private sector bears all the risks (technical, financial and contractual) in the project whereas, under the hybrid structure, risks are shared between the public and private sector usually between 10% and 90% respectively.[45] To incentivize the private partner to take on such high risks, investors need assurance that the revenue stream generated from the project upon completion will increase investment returns. Therefore, it is essential to define the payment mechanisms beforehand to incentivize and engage investors.

There are two types of payment used in PPPs namely; Concessions and Availability-based fees. Lenders need reassurance that the Project Company can pay the debt borrowed to carry out the PPP Project and that the company will not expose itself to risks which could negatively affect the expected revenue stream. Therefore, the Private Partner should ensure that it generates sufficient operating cash flows to cover debt service plus an acceptable margin to cover the risk of variation to the cash flows.[46]

Under the Availability-based model, the government agrees to make payments to the SPV for the public facility or service as long as the facility or service is available for public use.[47] Payment can be through fixed periodic fees contingent on the quality of the service standard being met under an availability contract, or by using shadow tolls where the government pays the private operator a fixed price for each user of the infrastructure.[48] However, because shadow tolls introduce demand risk which would increase the risk premium charged by the selected bidder, they should be used minimally.

Under User-Pays or Concession Agreements, construction or refurbishment of public infrastructures such as a road, bridge, tunnel, airport, port, and the railway is paid for with revenue derived from tolls, fares or similar payments made by the users (User Charges).[49] The disadvantage with this mechanism is that it also introduces demand risk and high levels of risk may discourage investors.

[45]Cornelius Ruiters and Maselaganye P Matji, 'Public–Private Partnership Conceptual Framework and Models for the Funding and Financing of Water Services Infrastructure in Municipalities from Selected Provinces in South Africa' (*http://www.wrc.org.za*), 5
http://dx.doi.org/10.4314/wsa.v42i2.13 accessed 14 August 2018
[46]http://pubdocs.worldbank.org/en/508161479239656383/For-Consultation-WBG-Final-Draft-Report-on-Recommended-PPP-Contractual-Provisions.pdf accessed 23 August 2018
[47]Niehuss (n 44) 360-361
[48]Eduardo Engel et al. (n 20) 21
[49]Yescombe, *Principles of Project Finance* (n 8) 16

The advantage user charges have over availability-based fees is that the public sector does not directly invest public resources into financing the project which would otherwise increase the costs of funding the project. Since both the availability-based fees and user fees payment mechanisms have the potential to introduce demand risk or white elephants, the optimal contract should specify a combination of user fees, and subsidies but the contracting authority should only use subsidies after exhausting once user fees.[50] The Public sector should encourage financing on commercial terms to avoid distorting markets or creating a dependence of the private sector on subsidies.[51] Blended finance should only apply when the public benefit of a project exceeds the proceeds to private investors; usually, because there are externalities, market failures, affordability limitations, or information asymmetry in the market which thwart the dynamic growth of the private sector.[52] Even when blended finance is desirable, the public sector should limit its use and minimize concessionality as much as possible to help boost viable financial markets.[53] Blended finance connotes a combination of public and private investment, which may or may not involve a form of subsidy.[54]

2.4.2. Advantages and disadvantages of PPPs

In this subsection, we discuss the advantages and disadvantages of PPPs, not only highlighting the justification for PPP as the preferred procurement model but also emphasizing its shortfalls which the public sector should consider when using PPPs.

Because PPPs spread out the capital cost of public infrastructure over an extended period, and do not charge the price immediately against the federal budget, it eases budgetary constraints on public infrastructure investment; usually caused by insufficient tax revenues and limits on public sector borrowing.

When the contracting authority merely defines the desired services and specific outputs, innovation is encouraged within the private sector which leads to improved value for money through well-designed assets and quality services.

The principle in PPPs is that risks transfer to the party best suited to handle them. Risk transfer involves identifying which Party can bear the likelihood that such threats will occur and can

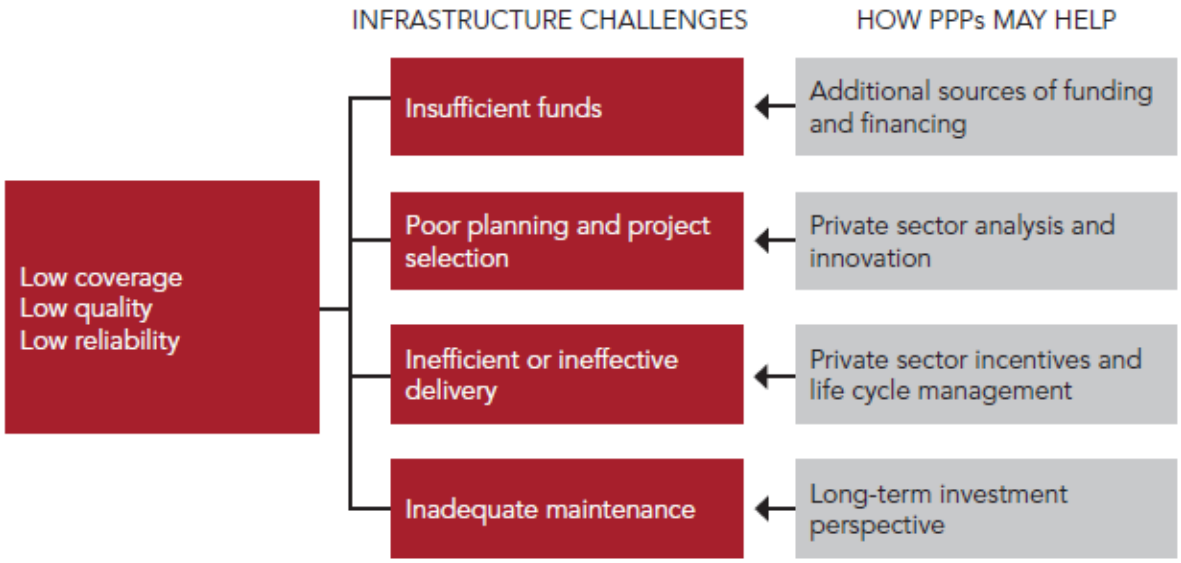
[50]Eduardo Engel et al. (n 20) 22
[51]https://www.ifc.org/wps/wcm/connect/363eeaab-77da-4a9e-ad1e-9ff089402bf1/EMCompass_Note_51-BlendedFinance_FIN+April+13.pdf?MOD=AJPERES accessed 5 June 2018
[52]Ibid
[53]Ibid
[54] http://documents.worldbank.org/curated/en/383411468197952433/pdf/106019-BRI-PUBLIC-EMCompass-3-EMCompass-Blending-Public-and-Private-Finance.pdf accessed 5 June 2018

manage the cost impact if they do happen.[55] Since the private sector can manage dangers like construction risks much better and at a lower cost than the public sector, it should retain those risks.[56]

The temporary nature of PPP contracts can sometimes be used to improve welfare substantially since it allows for state-contingent contract terms and therefore makes risk allocation possible.[57]

Where the initial capital in a PPP project falls outside the public budget, the public sector can make or accelerate investments in infrastructure which would not otherwise have been possible or would have been delayed until later.[58] Figure 2.2 summarizes the benefits of PPPs.

Figure 2.2 Infrastructure Challenges and How PPPs may help



Source: *PPP Reference Guide,* 19

Disadvantages

When the Public authority chooses the availability based (government pays) model, the service fees are a future annual cost, and thus do have an eventual impact on the public-sector budget in much the same way as borrowing[59]moreover expensively.

Some authors argue that private sector finance for a PPP is more costly than public sector procurement through borrowed funds. Moreover, evidence reveals that the cost of capital for a PPP will typically be around 2-3% per annum higher than that of public sector funding.[60] In this case, public sector borrowing seems cheaper because lenders to the government do not take any

[55]Guidance on PPP Contractual Provision (n 34) 7
[56]Yescombe, *Public Private Partnerships* (n 17) 18
[57]Eduardo Engel (n 20) 4
[58]Niehuss (n 44) 17
[59]Yescombe, *Public-Private Partnerships* (n 56)
[60]Ibid 18

significant risk with their money, whereas lenders to a PPP assume a higher risk[61]since theirs is a non-recourse or limited recourse loan. However, when the Public-Sector Comparator (PSC) is adjusted to cover the risks involved in the project, traditional procurement may turn out to be costlier as in Table 2.4.

Table 2.4 PSC Calculation

	PSC	**PPP**
NPV (net present value) of cost of public-sector procurement (including capex and opex)	900	
NPV of Service Fees		1,000
NPV of risk adjustments	90	
NPV of additional tax	45	
Risk-adjusted NPV cost	**1,035**	**1,000**

Source: *Public-Private Partnerships, Principles of Policy and Finance*, 66

Because PPP projects are usually big, high cost and complex, local and smaller contractors usually cannot bid thereby reducing competition which may drive up costs of the whole project since the few contractors available may raise their bidding price. For instance, a PPP project in the transport sector in Uganda may cost approximately USD 800 million which local investors cannot afford.

The benefits of PPPs by far outweigh the limitations. PPPs are a source of additional funding, private sector expertise, incentives and innovation, lifecycle management and long-term investment perspective. The argument that PPPs are costly may not be correct especially when the PSC is adjusted to cover risks in a project.

The advantages of PPPs discussed above can only be maximized by fulfilling certain conditions. These include governance and operational maturity, legal and regulatory frameworks, good investment climate, financial facilities, appropriate risk analysis and allocation and clear contractual terms which we will discuss in the next subsection. We note that structuring the financial aspect of PPPs is not just a question of optimally allocating the different risks involved in an infrastructure project, but also a question of setting up the right governance structure to ensure the sustainability of the project.[62]

[61]Ibid

[62]Rabah Arezki and others, 'From Global Savings Glut to Financing Infrastructure: The Advent of Investment Platforms' (2016) 16 IMF Working Papers, 17

2.4.3. Preconditions for a successful PPP regime

In this subsection, we discuss factors that need to be in place for a PPP regime to be successful. A PPP project is successful when the private partner delivers the project on time, within the budget, the asset meets quality specifications, the contract defines the parties' obligations clearly, the business environment promotes private investment, the legal and regulatory framework is strong enough to support and sustain private investment. World Bank advises that "the host country needs numerous characteristics to achieve success namely: protection against regulatory failure, an established framework to manage the PPP process, operational maturity regarding building a track record of successful PPPs, a sound investment climate, and organized financial facilities."[63] Additionally, the successful implementation of PPPs requires a stable business environment, proficient sponsor, and political commitment.[64] To set up a sound PPPs regime, we do not consider only optimal risk allocation, but it is also necessary to have the right governance structures in place to ensure sustainability of the project.

2.4.3.1. PPP Governance and Operational maturity

We note that, when creating a PPP unit, staff must have the relevant commercial and legal skills needed to be a vital source of support for policymakers and public bodies which develop and sponsor projects.[65] Indeed, there should be strong fiscal institutions with sufficient control of the ministry of finance at each stage of the PPP process, including possible contract renegotiation; budgeting, accounting and reporting practices should be in line with best practices.[66]

An appropriate governance structure, which provides internal controls and incentives to reduce information problems, is likely to foster independent project selection and evaluation; separate contract design and award from contract monitoring; and subject renegotiations to independent review.[67] An essential building block in PPP programs is the creation of a specialized PPP unit with specialists from different areas; preferably with a mixture of experience in both the private and public sectors to centralize and retain expertise within the public sector.[68]

The different PPP units should have distinct roles. The group that writes and awards PPP contracts should not be in charge of project planning, selection and contract enforcement. There should be

[63] 'Chapter 4: Did Public-Private Partnerships Deliver' (www.Ieg.worldbankgroup.org, 2018), 10 http://ieg.worldbankgroup.org/sites/default/files/Data/reports/chapters/ppp_chap4_0.pdf accessed 23 May 2018.
[64] Ibid
[65] Edward Farquharson et al. (n 28) 27
[66] Ruben V Atoyan and others, 'Public Infrastructure in the Western Balkans; Opportunities and Challenges' (*Econpapers.repec.org*, 2018), 35 https://econpapers.repec.org/RePEc:imf:imfdep:18/02 accessed 21 May 2018
[67] Eduardo Engel et al. (n 20) 16
[68] Yescombe, *Public-Private Partnerships* (n 17) 28-29

a planning agency to design, evaluate and select projects; an external board to review the cost-benefit evaluations that support the chosen projects and PPP contracts written to implement them; and a PPP superintendence to ensure compliance with the agreement, performance, and quality standards are met and provide information to users and the public.[69]

The external review board, the superintendence and the panel of experts, should be financially and formally independent of the executive, and their acts should be subject to strict transparency requirements.[70] There should be a clear distinction of roles to avoid overlapping and conflict of interest which ultimately affects service delivery. Defining the functions by the legal and regulatory framework is necessary since it helps to streamline the parameters within which a project shall be procured and delivered as will be discussed in the next subsection.

2.4.3.2. Legal and regulatory framework

PPPs are long-term contracts, and their viability depends on the legal environment and the protection both of property rights of the private firm and powers of the public.[71] A legal and policy framework is critical to demonstrate political commitment to the project and to give certainty as to the parties' rights, duties, and benefits under the scheme. Without a sound framework, investors are not willing to invest in PPP projects given their risky nature. Establishing a stable governance structure involves introducing PPP-specific institutions, rules, and procedures to ensure PPP projects are subject to similar discipline as public investment projects.[72] The public sector may use contract standardization alongside framework legislation, and again this is beneficial in creating greater certainty for bidders and lenders and speeding up the procurement process.[73]

Therefore, it is vital that the public sector improves its legal environment especially the protection of property rights before introducing PPPs which are more sensitive to deficiencies in this area than the traditional procurement of infrastructure.[74] A stable legal and regulatory framework should be such that it creates a conducive investment atmosphere and shows political willingness and support.

[69]Eduardo Engel et al. (n 20) 17
[70]Ibid
[71]Ibid
[72]'Public-Private Partnerships Reference Guide - Version 3 - OECD' (*Oecd.org, 2018*), 57 http://www.oecd.org/gov/world-bank-public-private-partnerships-reference-guide-version-3.htm accessed 21 May 2018
[73]Yescombe, *Public-Private Partnerships* (n 17) 33
[74]Eduardo Engel et al. (n 20) 17

2.4.3.3. Investment climate

This subsection is intended to highlight the factors investors consider when assessing whether a country has a good investment climate or not. We argue that PPPs are more likely to be successful where there is a political consensus to maintain favorable frameworks and to be proactive with concession projects where appropriate, the likelihood of significant political delays is low, there is political stability and a sound business environment.[75] An economy should have a business environment that is (i) transparent; (ii) open to foreign investment; (iii) has full foreign currency convertibility; (iv) does not have restrictions on repatriation of capital; (v) has a favorable tax environment; and (vi) has a stable currency and exchange rate.[76] Additional indicators of a healthy business climate include access to innovative financing packages, availability of a clear exit process for investors, and the availability of government financial and political support.[77] Government financial support may show financial support by offering financial packages for projects and developing its financial facilities.

2.4.3.4. Financial facilities

There is a need to consider the elements that can enhance the provision of reliable financial facilities. We argue that it is essential for governments to have a good track record of adhering to their contractual obligations since PPPs are heavily dependent on debt financing reduced in writing to contractual terms. There should be a sound capital market for private infrastructure finance since most of the capital invested in PPP projects is through debt. There should be reliable long-term debt instruments for infrastructure financing, a developed insurance and pension market with useful products for infrastructure risk reduction and whether interest-rate or exchange-rate hedging instruments are available.[78] Governments should also provide subsidies that allow low-income users better access to electricity, water, and transport services[79]which are the most popular sectors for PPP projects otherwise the projects risk facing public resistance.

2.4.3.5. Risk analysis and allocation

PPPs can be summarized to mean the transfer of risks relating to the costs of design and construction of the Facility, and market demand for the Facility; or service provided by the Facility

[75]EIU (The Economist Intelligence Unit), 'The 2015 Infrascope: Evaluating the Environment for Public Private Partnerships In Africa' (Eiu.com, 2015), 55 https://www.eiu.com/public/topical_report.aspx?campaignid=AfricaInfrascope2015 accessed 24 May 2018
[76]'Public-Private Partnerships for Transportation in the APEC Region: An Analysis and Literature Review' (2017), 16 https://www.apec.org/publications?pub_id=1807 accessed 24 May 2018
[77]Ibid
[78]The 2015 Infrascope (n 75) 56
[79]Ibid 57

and the Facility's operation and maintenance costs, from the Public Authority to the Project Company.[80]

The responsibilities in the PPP contract may vary depending on the type of PPP model adopted, but the private partner is usually accountable for project administration and completion and exposed to most of the risks incidental. However, when the government assumes risk by owning and operating infrastructure, it incurs substantial, and unvalued, hidden cost.[81] By transferring some of the risks to a private party, which can better manage it, the public sector may reduce its overall expenditure in the project and minimize risk to the taxpayer.[82] Risk analysis is generally part of the feasibility studies and is designed to inform the project participants (including sponsors, lenders, construction companies) about the key risks that could potentially affect the success of the project.

Contracting parties usually insure themselves against demand risk, construction risk, maintenance risk and policy risks and firms ask for guarantees so they can unload demand risk.[83] In some markets and projects, the financiers may require extra assurance from the government because of the perceived risks, but such guarantees must be awarded with caution, as they reassign risk back to the public sector and may weaken the motivation of the lenders to ensure performance of the project (not to mention the potential fiscal liabilities these guarantees may create for the public sector).[84] By contrast, an appropriate contract that explicitly rules out the most likely risk factors and provides for an effective conflict resolution mechanism can help mitigate the risk of intentional government actions.[85]

We note that various factors influence risk allocation, including the sophistication of the market, the knowledge of the private sector and the level of competition between bidders.[86] Governments, Contracting Authorities and developing markets, may be able to transfer more risk to Private Partners once they establish successful track records in national or sectoral PPP markets, as these markets become increasingly attractive to Equity Investors and Lenders, and therefore more

[80]Yescombe, *Public Private Partnerships* (n 17) 4
[81]PPP Reference Guide (n 72) 18
[82]Ibid
[83]Eduardo Engel et al. (n 20) 18
Regarding policy risks, it is unrealistic to have government bear the risk associated with unintended consequences of its actions.
[84]'Attracting Investors to African Public-Private Partnerships: A Project Preparation Guide' (www.worldbank.org, 2009), 26
https://www.openknowledge.worldbank.org/handle/10986/2588 accessed 15 August 2018
[85]Eduardo Engel et al. (20) 20
[86]Guidance on PPP Contractual Provisions (n 34) 8

competitive.[87] It is best practice for risks to be specified and allocated in writing under contractual terms so that all partners are cognizant of the obligations and rights in the project.

2.4.3.6. Clear contractual terms

Parties in a PPP project need a robust contractual regime to protect them from moral hazard and adverse selection problems and to complement the system of governance. PPPs are useful when parties define the desired quality, specify the output of the project, identify payment mechanisms, and parties' obligations in a contract. Contracting allows a contracting agency to enter into a long-term contract for services to be delivered as and when required.[88] The typical PPP structure as summarized in Figure I is sophisticated and complex, involves many parties with service contracts to further the objectives of the main PPP contract and so require a lot of time to draft the contract. It is on this basis that some authors argue for a complete contract with standard provisions as to parties' rights and obligations and with limited options for amendments. In some states, the public sector has made efforts to develop complete standardized PPP contracts for different types of infrastructure projects, like roads, railways, ports or power generation.[89] However, there is no unanimously accepted language for such contracts on a universal basis.[90]

Parties do not prefer complete contracts because of the possible hold up problems and transaction costs that they involve. Hold-up problems arise because with a complete contract, ownership of the SPV, which is the project asset, shall be defined and the owner of an asset has the right to decide how the asset is used to the extent that its use is not contractually specified.[91] For example, a firm hold-up problem can be renegotiation induced by the concessionaire, or government-led hold-up problem arises when the government instigates renegotiations (to reduce tolls or increase taxes).[92] The high transaction costs occur when drafting, enforcing and renegotiating the contract.

We argue that because PPP contracts are long-term and usually complex, it may not be possible ex-ante to write a complete contingent claims contract. Indeed, an incomplete contract is one with gaps, missing provisions or ambiguities which may have to be dealt with either by renegotiation or through a court.[93] If an agreement is long and complex, it is more likely to be incomplete, and even

[87]Ibid
[88]PPP Reference Guide (n 72) 18
[89]Guidance on PPP Contractual Provisions), v
[90]Ibid
[91]Oliver Hart, *Incomplete Contracts and Control* (2017), 2 https://scholar.harvard.edu/files/hart/files/incomplete_contracts... accessed 24 June 2018
[92]Duc Anh Nguyen, *Improving Public-Private Partnership Contracts through Risk Characterization, Contract Mechanisms, and Flexibility* (2017), 51 https://vtechworks.lib.vt.edu/bitstream/handle/10919/78275/Nguyen_DA_D_2017.pdf?sequence=1 accessed 24 June 2018
[93]Yescombe, *Principles of Project Finance* (n 8) 203

more likely impossible for the Public Authority to transfer responsibility of managing the unforeseeable circumstances.[94] Flexibility, in this case, is a crucial factor because it makes little sense to make a small annual saving in payments while locking the Public Authority into a PPP contract which cannot be easily changed if its requirements may have changed substantially.[95] However, while PPP contracts cannot provide solutions for every possible situation, they should provide rules (templates or formulas) for the range of foreseeable scenarios, and a decision-making methodology for any other case.[96]

Incomplete contracts protect all parties in the project in that they each have residual control rights; this, even though some may have more residual rights than others. For instance, if firm A and firm B sign an arms-length (incomplete) contract, then the owner of firm A has residual control rights over the A assets and the owner of firm B has residual control rights over the B assets;[97] so all parties are held accountable to each other.

One of the benefits of contractual terms is that defining quality, outputs, and costs in a contract helps the PPP firm to focus on service delivery without having to deal with other limitations typical in the public sector.[98] In regulated markets, firms expect revenue streams that ensure reasonable profits, and when unable to earn these profits, they expect a change in contract terms.[99] The balance between revenue streams and profit margins is referred to as "financial equilibrium" by Eduardo Engel et al. Additionally since a firm is responsible for all investment and has the exclusive right to use the assets and exploit the project, any change in the plan must be agreed with the firm.[100]

Service standards should be at the center of the PPP contract, and the firm should bear the cost of meeting these standards; focusing on quality will ensure that the firm maintains the project asset in excellent condition. Conversely, if government changes service standards and additional investments are needed to meet them, the government should compensate the firm for the additional costs at market value. On the other hand, if the private sector fails to meet its performance conditions, service payments may be decreased.[101]

Eduardo Engel et al. further explain that ex-ante financial equilibrium should follow from a prudent bid, and not from ex-post renegotiation justified by costs which are higher than expected.

[94]Ibid 27
[95]Yescombe, *Public-Private Partnerships* (n 17) 226
[96]PPP Reference Guide (n 72) 144
[97]Oliver Hart (91) 3
[98]Ibid
[99]Eduardo Engel et al. (n 20) 16
[100]Ibid
[101]PPP Reference Guide (n 72) 18

Thus, the public sector should encourage competitive auctions and increased revenues for additional investments to ensure a reasonable return on further investments.[102]

Another advantage is that specifying outputs in a contract, rather than prescribing inputs, allows the private partner to be creative and innovative to achieve value for money. Competitive procurement of these contracts encourages the bidders to explore innovative solutions for meeting contract specifications.

For effective enforcement of the contract, parties need to decide whether to draft a complete contract ex-ante or enter an incomplete contract to allow for renegotiations ex-post if the need arises. The public sector should have the necessary skills and knowledge to provide for the foreseeable events and to renegotiate favorable terms into an incomplete contract, which boils down to governance and operational maturity. Investors want assurance that the operating framework within government can manage the PPP process and that policymakers and the parties implementing projects have a realistic understanding of the complexity of PPP projects.[103]

2.4.3.7. Summary

In this section, we defined PPPs explaining the different structures that can be used to finance an infrastructure project. Through the discussion, we established that because of their long-term nature and high yield return on investment, PPPs were an appropriate investment option for institutional investors who prefer long-term high yield investments for their investment portfolios. We distinguished between availability based, and user pays revenue model as the payment mechanisms in PPP contracts; highlighting the drawbacks of each. The biggest drawback is that they have the potential of encouraging junk projects and introducing demand risks respectively. We advised that the optimal contract would call for the use of user charges blended with government subsidy albeit with caution and after careful analysis. The advantages of well-planned PPPs to wit ensuring quality assurance, accountability and value for money were found to outweigh the argument that PPP projects are more expensive than public procurement. When subjected to risk-adjusted cost analysis, public procurement was found to be more expensive.

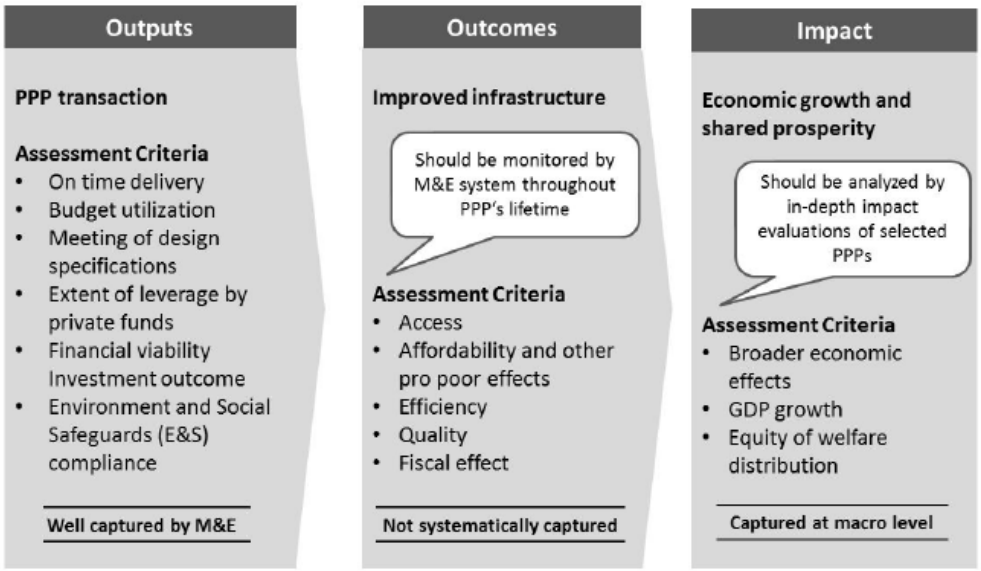
We also noted that the preconditions for investment set by institutional investors were in tandem with those necessary for the success of a PPP regime. These are; clear and specific contractual terms, good governance and operational maturity, proper legal and regulatory frameworks, proper investment climate, sound financial facilities and appropriate risk analysis and allocation among the parties best suited to handle the risks. Regarding PPP contracting, we argued that incomplete

[102]Eduardo Engel et al. (n 20) 16
[103]PPP Reference Guide (n 72) 16

contracts were preferable given the long-term nature and complexity of PPP projects; giving the public sector room to renegotiate terms to cover unforeseeable circumstances.

Once the public sector has met the preconditions of a successful PPP, the advantages as discussed earlier like quality assurance, delivery of services on time, accountability and infrastructural development are undeniable. Figure 2.3 gives a summary of the benefits of PPPs.

Figure 2.3: Elements of a PPP Monitoring and Evaluation System[104]



Source: IEG.
Note: E&S = environmental and social; GDP = gross domestic product; M&E = monitoring and evaluation.

Having discussed the success factors of PPPs and found that the interests of institutional investors align with the elements and preconditions of PPPs, it is still a concern that the private sector is hesitant to participate in PPPs in Uganda and Africa generally.

2.5. Barriers to Active Investor Participation in PPP Projects

This section discusses the barriers to private participation in PPP projects generally. We then compare the survey results in Chapter 4 to the obstacles mentioned below to find out whether they are cross-cutting no matter the jurisdiction and apply directly to the Ugandan situation.

In a private sector survey conducted by the Infrastructure Consortium for Africa, the respondents stated that the most significant challenges they faced in identifying projects suitable for their organizations centered around bankability of projects; institutional capacity; political risks and

[104]Chapter 4 (n 63) 10

interference; legal and regulatory frameworks; and lack of risk mitigation strategies citing too few instruments to fund small projects.

2.5.1. The scarcity of well-structured bankable infrastructure projects

Good schemes with an acceptable risk-return combination are rare, with the IMF citing lack of bankable projects as the most severe constraint to private investment in infrastructure.[105] The size of the project also matters as it affects transaction costs and rate of returns. The larger the pension fund or insurance company, the larger the project size required for investment. Therefore, while many African countries consider their infrastructure projects megaprojects, they may be too small for international institutional investors thereby creating a size mismatch.

The ability to create bankable projects is heavily dependent on strong institutions with the right commercial and human resource skills to be able to analyze and assess the viability of the infrastructure projects and appropriately allocate risks to parties prepared to mitigate them. For instance revenue collection in many sectors remains a challenge due to inefficiencies within the agencies tasked with this role. In 2008, the World Bank found that "Africa's power and water utilities show very high levels of incompetence regarding under collection of revenues and distribution losses; where services typically collect only 70 to 90 percent of billed revenues, and experience distribution losses that can easily be twice as high as technical best practice."[106]

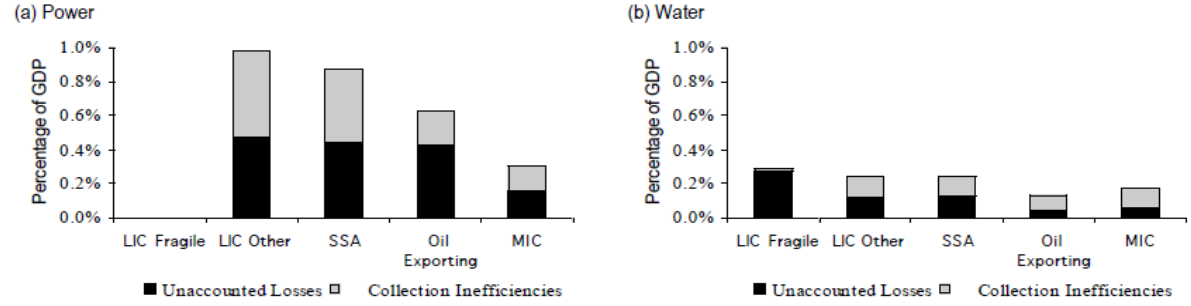
Existing literature estimates the inefficiencies in state-owned utilities and infrastructure providers in Sub-Saharan Africa to cost around $6 billion a year which increases costs of the project and reduces the benefits users get from the service.[107] Figure 2.4 shows the hidden value of utility inefficiency in the power and water sector.

[105]Klaus Maurer, *Mobilization of Long-term Savings for Infrastructure Financing in Africa* (2017), 11
The preparation and structuring of complex infrastructure PPPs takes a long time and the cost and quality of project preparation is often underestimated.

[106] Vivien Foster, *Overhauling the Engine Of Growth: Infrastructure in Africa* (The World Bank 2008), 12 http://siteresources.worldbank.org/EXTPRAL/Resources/africa_country_diagnostic.pdf accessed 15 August 2018
"Many countries are struggling with the collection of fuel levies that are due to their Road Funds for the financing of road maintenance. In some cases, tax evasion is a major issue. In others, revenues are collected by one set of authorities but never duly transferred to the roads sector. It is estimated that as much as 50 percent of fuel levies fail to be captured by the road sector."

[107]PPP Refence Guide (n 72) 26

Figure 2.4 Hidden cost of utility inefficiency



Source: *World Bank Africa Diagnostic,* 2013

2.5.2. Political risks

Political stability is essential since instability of any kind can disrupt a project and lead to excessive losses to the private partner either through expropriation or cost overruns. Political risk can be through the arbitrary exercise of political power by having longer permitting or licensing procedures in the development phase; cancellation of permits and contract renegotiation at the construction phase; change in tariff and tax regulation; currency convertibility; shift in contract duration or even asset transfer. [108]

There is also a general lack of good governance and leadership with most countries experiencing high levels of corruption in the public sector which in turn makes the cost of doing business quite high for investors. In 2017, experts and business people observed that Sub-Saharan Africa was the most corrupt region globally, scoring 32 out of 100.[109] This can be a deterrence to investors most of whom have limited knowledge about the African economy save for publicly available data.

2.5.3. Legal and regulatory frameworks

With the ever-changing rules related to project finance, there is need for comprehensive and stable laws that encourage but not hinder private investment. The Basel III requires banks to maintain high capital allocation for long-term loans to infrastructure providers, and the high cost of matching long-term assets with liabilities with a similar duration has dis-incentivized the banking sector from participating in infrastructure projects.[110] Solvency II regulatory framework on the pension funds and insurance companies in the European Union penalizes long-term investments of insurers and pension funds, including infrastructure assets.[111] Similarly, the rule that the rating agencies' sovereign ceiling does not allow an individual project rating to exceed that of the country where it is located has a significant impact on emerging markets.[112] The majority of developing

[108]OECD 2015 (n 33) 48
[109]https://www.transparency.org/news/feature/corruption_perceptions_index_2017 accessed on 14/04/2018
[110]Klaus Maurer (n 105) 13
[111]Ibid
[112]Ibid

countries in Africa have low credit ratings or do not have any rating at all meaning their projects however good, may miss the investment grade and investors.

Additionally, the lack of standardization of underlying infrastructure projects is a significant impediment to the scaling up of investment into infrastructure-based assets.[113] The lack of objective high-quality data on infrastructure and a clear and agreed benchmark makes it difficult for investors to assess the risk in these investments and to understand correlations with investment returns of other assets; which make investors reluctant to invest.[114]

2.5.4. Lack of risk mitigation strategies

2.5.4.1. Lack of appropriate financing vehicles

Investment vehicles are products such as bonds, mutual funds, and exchange-traded funds that can be chosen by investors based on their preferred return on investment.[115] Many large institutional investors are too far away from infrastructure projects and have great difficulties understanding the asset class and its underlying risks[116]hence the need for infrastructure vehicles. They lack the in-house expertise needed to assess and manage the risks associated with PPPs or how to design contracts with revenue profiles which match their need for reliable long-term returns. Attracting institutional investors on a large scale requires appropriate intermediary structures between large institutional investors and projects on the ground for more indirect investment opportunities like infrastructure funds or projects.

Traditionally, institutional investors invested in infrastructure through listed companies and fixed income investments which are still their primary source of exposure.[117] Bond finance in new projects is low due to the financial crisis save for less risky projects-otherwise project bonds are not attractive to investors. One way to raise the attractiveness of project bonds has been to obtain insurance from specialist insurers known as monolines.[118] However, the disappearance of monolines in the capital market has negatively impacted the infrastructure market.

As discussed in Chapter One, there is a lot of liquidity in the world economy, and the cost of debt is also low, yet many developing countries struggle to attract long-term financing for infrastructure projects. In addition, development banks which have the resources, expertise and experience to compensate for limited private sector financing and few market options, cannot exceed their

[113]Rabah Arezki and others (n 62) 37
[114]Della Croce et al (n 14) 28
[115]https://www.investopedia.com/terms/i/investmentvehicle.asp accessed 16 July 2018
[116]Klaus Maurer (n 105) 21
[117]Della Croce et al (n 14) 24
[118]Della Croce et al (n 14) 20

maximum lending capacity.[119] Similarly, most sovereign wealth funds target developed, and not developing countries for infrastructure investment because there are too few large-scale projects in developing economies to attract sovereign wealth funds.[120]

To balance the limited lending capacity of development banks and the limited number of projects for sovereign wealth funds, there is need to coordinate and cooperate across the various platforms in existence to create a global infrastructure investment platform to help developing countries structure bankable projects; part of the coordination should also lead to risks being assumed by those best placed to hold them.[121]

2.5.4.2. Lack of sufficient risk mitigating and financing instruments

Risk-mitigating instruments are financial instruments that transfer defined risks from project financiers (lenders and equity investors) to creditworthy third parties (guarantors and insurers) that have a better capacity to accept such risks.[122]If host countries design long-term infrastructure projects without providing for guarantees to address construction, demand, exchange rate risks or without the securitization of underlying assets by financial intermediaries, those projects will not be funded, thus leaving everyone worse off.[123] To access infrastructure projects, institutional investors need instruments such as bonds since they are the primary asset in portfolio allocations of insurers and pension funds across OECD countries.

The barriers enumerated and explained above need to be addressed comprehensively by countries in Sub-Saharan Africa, to attract private sector investment in infrastructure projects.

2.6. Summary

In this Chapter we sought to answer four questions: i) why should PPPs be used to procure infrastructure investment and not traditional public sector procurement; ii) when should PPPs be used; iii) what are the conditions necessary to achieve a successful PPP regime; and iv) what are the barriers to active private sector participation in PPP projects. To answer these questions, we distinguished public sector procurement of infrastructure from Public-Private Partnerships. We established that weak institutional design, lack of strategic planning, institutional incapacity, and financial constraints were the significant limitations of the conventional procurement model in filling infrastructure gap. We argued that in some instances where conditions for a successful PPP

[119]http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=270 accessed 16 July 2018
[120]Ibid
[121]Ibid
[122]Matsukawa Tomoko and Habeck Odo, *Review of Risk Mitigation Instruments for Infrastructure Financing and Recent Trends and Developments* (The World Bank 2007), xi
[123]Rabah Arezki and others (n 62) 38

were in place, the private sector was better placed to help fill the infrastructure gap through PPP since they possess expertise in the projects; ensuring quality output and timely delivery.

We also distinguished Public-Private Partnerships from Privatization; where privatization entails the permanent transfer of a public asset to the private sector whereas under PPPs transfer is only temporary. The primary advantage of PPPs over privatization was that using partial control and reversion of ownership of a public asset; the government could use this power to solve coordination and planning problems, in contrast to privatization.

We noted that PPPs are not a solution for all infrastructural challenges and advised that they may not be used where the contracting authority cannot specify the requirements of the project, where there was lack of third party finance, where there was rapid technological change in the sector thereby creating uncertainty and where it was challenging to substitute suppliers.

We discussed the preconditions necessary to ensure a successful PPP regime which included clear contractual terms. We distinguished complete from incomplete contracts and argued in favor of incomplete agreements given the long-term nature of PPP projects and their complexity. We found that incomplete agreements give room for renegotiation where unforeseeable events arise. The other preconditions were good governance and operational maturity, sound legal and regulatory framework, a good investment environment, strong financial facilities and appropriate risk analysis and allocation.

We found that lack of bankable projects, political risks, lack of mitigation strategies and underdeveloped regulatory frameworks were the major barriers to active private participation in infrastructure financing. In Chapter 3 we shall discuss the investment barriers in the Ugandan context to identify specifically what private investors in Uganda consider as the main barriers in PPP projects.

CHAPTER 3. PUBLIC PRIVATE PARTNERSHIPS IN UGANDA

3.1. Introduction

In Chapter Two, we established that due to limitations in traditional public sector procurement of infrastructure, alternative procurement models were required to fill the infrastructure gap. Because of their long-term nature and ability to attract private sector expertise and financing, we found PPPs to be a suitable option especially where the public sector suffered institutional incapacity and budgetary constraints. The preconditions for a successful PPP regime were discussed; emphasizing that absence of these conditions would largely affect the success of an otherwise good project. We also established that despite their high yield and long-term nature in line with institutional investors' portfolio allocations, the private sector was hesitant to invest in PPP projects worldwide. In Uganda alone, the total value of private investments declined from UGX 16,983 billion to UGX 8,525 billion by the end of December 2016.[124] We found the possible reasons for the reduction of private investment in PPPs to be; lack of bankable projects, political risks, poor regulatory framework and insufficient risk mitigation strategies. It remains to be seen in this chapter whether these reasons are relevant to the Ugandan situation.

In this Chapter we intend to find out whether Uganda fulfills the preconditions necessary to sustain a successful PPP regime by analyzing the status of PPPs and the macroeconomic environment in Uganda to date.

3.2. Public-Private Partnerships in Uganda

In this subsection we discuss the PPP environment in Uganda generally and the underlying issues that need redress while using examples from the transport sector. The PPP regime is relatively new in Uganda with most of infrastructure projects focused on the energy sector and being implemented through concession model; before the enactment of the Public-Private Partnerships Act, 2015. The priority PPP projects as outlined then are listed in the table below.

[124]Uganda Economic Update (n 5) 4

Table 3.1 Priority Public-Private Partnership Projects

Project	Sponsoring Agency	Model	Cost	Implementation schedule	Status
Kampala-Jinja Express Highway	Uganda National Roads Authority	PPP-DBFO	USD 800 million	2012/13	Project procurement launched on May 2018[125]
Ayago Hydro power station	Ministry of Energy and Mineral Development	PPP-DBFO	USD 1.3 billion	2012/13	A prefeasibility study carried out
Oil Refinery	Ministry of Energy and Mineral Development	PPP-DBFO	USD 2 billion	2012/13	Ministry in the process of procuring transaction advisors
Kigo Prison	Uganda Prison Services/Ministry of Internal Affairs	PPP	Not yet determined	2012/13	Procurement of transaction advisor has commenced
Office accommodation-Ministry of Lands, Housing and Urban Development	Ministry of Lands, Housing and Urban Development	PPP	USD 15 million	2012/13	Procurement of transaction advisor has commenced
Upgrade of Entebbe Airport	Civil Aviation Authority, Ministry of Works and Transport	PPP	USD 130 million	2012/13	Feasibility study. Preparation for the procurement of a transaction advisor
Malaba-Kampala Standard Gauge Railway	Ministry of Works and Transport	PPP	Yet to be determined	2012/13	Feasibility study to determine the viability of the project is underway
Mulago Maternal and Neonatal Hospital	Ministry of Health	PPP	USD 34 million	2012/13	Still at concept stage
Isimba Hydro Power Station	Ministry of Energy and Mineral Development	PPP	USD 350 million	2012/13	Feasibility study still being carried out
Mini-Hydro Power Plants	Ministry of Energy and Mineral Dev't	PPP	Yet to be determined	None	Ministry of Energy and Mineral Dev't

Source: *PPP Project Pipeline* (www.perds.go.ug)

According to Table 1, the Ministry of Energy has majority of the projects planned for PPP. This can only point to the laxity in the transport sector to develop projects that are bankable for

[125] https://www.unra.go.ug/en/kampala-jinja-expressway/status-may2018 accessed 12 June 2018

consideration by the National Planning Authority, Ministry of Finance and ultimately the PPP Unit. As can be seen from the table, most of the projects have not yet been implemented, with no visible sponsor or private investor to-date and this points to gaps in the system that have otherwise been an impediment to the commencement and delivery of PPP projects.

That being the case, does Uganda satisfy the preconditions of a successful PPP regime as discussed in Chapter 2? Secondly are the conditions in Uganda sufficient to attract extensive private investment into PPP projects? We discuss these preconditions of a successful PPP regime vis a viz the current environment in Uganda.

To ensure that a project is successfully completed, there is need for strong PPP governance and operational maturity. The transport sector in Uganda is characterized by premature failures, high construction costs, poor safety of road users, and lack of or poor environmental and social safeguards among others.[126] The above-mentioned issues can be ascribed to weaknesses in: (a) Planning and Design; (b) Procurement and; (c) Project implementation/delivery.[127] These factors can be viewed as resulting from various deeper-lying inadequacies affecting the transport sector, such as: (a) weak legal, policy and institutional frameworks; (b) inadequate human resource capacities and; (c) weak local construction industry.[128] Inasmuch as these issues have been mentioned in the transport sector, they are cross-cutting to almost all sectors.

Institutional capacity remains limited as reflected by weaknesses related to public financial management and shortcomings in the budget planning and implementation.[129] This includes under-execution of the development budget due to challenges in project implementation and frequent use of supplementary budgets, which pose challenges in scaling-up public infrastructure investment and managing the rise in debt burden incurred to finance it.[130]

Transport sector capacity is generally considered weak, underlined recently by major cases of misappropriation of public funds and violation of environmental and social standards in major road construction projects.[131] There is need for capacity building in the sector to improve overall performance and to safeguard private investments and donor funding against misappropriation.

Additionally, the local construction industry which includes student and professional members, as well as private consulting and contracting engineering firms, are still perceived as insufficiently

[126]The European Commission*, 'Action Document for Institutional Capacity Building for the Transport Sector in Uganda'* (2016), 6 https://ec.europa.eu/.../devco/files/decision-aap-uganda-2016_en.pdf accessed 21 June 2018
[127]Ibid
[128]ibid
[129]'Moody's Affirms Uganda's B2 Ratings, Maintains Stable Outlook' (*Moodys.com,* 2018), 2
[130]Ibid
[131]The European Commission (n 126) 3

skilled to participate in large infrastructure projects.[132] Civil society is not yet strongly involved in the sector, neither in an advocacy role for infrastructure users nor as a watchdog monitoring sector accountability and social and environmental impacts of large infrastructure investments.[133]

Further, the PPP Unit in Uganda comprises the Acting Director, a consultant and 3 temporary staff who were not competitively recruited as per section 3 of the PPP Act but rather seconded from Privatization and Utility Sector Reform Project (PURSP).[134] This means the PPP unit is not adequately equipped to handle complexities involved in PPP projects. The need for an updated centralized PPP unit composed of skilled personnel is important to encourage coordination of projects among different ministries, agencies and departments.

As discussed in Chapter 2, PPPs are long lived contracts and their viability depends on a clear and detailed legal and regulatory framework. Private investors' interests can be protected either through legislation, policy frameworks like investment plans or contractual terms. Edward Farquharson et al. advise that "when assessing a PPP market, the private sector expects to see a PPP policy that sets out i) the public policy rationale for using PPPs; ii) the guidelines that the public sector will use to select, prepare, and procure PPP projects in a consistent way; iii) the determination of who approves what and when, throughout the process of project selection, preparation, and procurement; iv) the process of resolving disputes (often set out in legislation or in sector regulations, but often in more detail in the contract itself) and v) the arrangements for monitoring the contract after it has been signed."[135] Investors are likely to be discouraged to participate in projects of the host country if these expectations are not met.

Regarding the regulatory framework in Uganda, substantial sector policies are still very rudimentary, and there is at present no master plan that would allow for a more comprehensive planning approach, based on traffic and freight demand; an assessment of existing asset value; gender analysis; and a Strategic Environmental Assessment (SEA) on a multimodal transport network.[136] The lack of standard appraisal requirements is also a hindrance to Uganda's program of large infrastructure projects.

We found contract standardization, together with good laws, to be helpful in ensuring transparency thereby creating certainty among investors on requirements needed for a successful bid. Given the complex nature of PPP projects, there is need for expertise both for the public and private sector

[132]Ibid 5
[133]Ibid
[134]Office of the Auditor general, 'Report of the Auditor General on the Financial Statements of Ministry of Finance, Planning and Economic Development for the Financial Year Ended 30th June 2017' (2017), 6
[135]Eduard Farquharson et al. (n 28) 16
[136]The European Commission (n 126) 3

to be able to draft and enforce the contract, implement and monitor the projects up to successful completion of the same. The PPP contract should put in place contract management tools to address unexpected circumstances and should embody the legitimate expectations of the parties and help ensure that they are met.[137] In assessing government's capability and commitment, the PPP procurement benchmark measures aspects such as monitoring and evaluation mechanisms for PPPs, alterations to the structure of the private partner, renegotiation of the contractual terms, alternatives for dispute resolution, and contract features such as lenders' step-in rights, contract termination and its consequences.[138]

According to the PPP Benchmark, Uganda scored 68 out of 100 for contract management because Uganda does not have inter alia (a) a PPP implementation manual; (b) specific provisions in the PPP Act for (i) risk mitigation mechanisms, (ii) publication of PPP contract performance information; and (c) the PPP Act provides for arbitration as the only dispute resolution mechanism without other alternatives.[139] The Act provides for change in SPV structure, lenders' step in rights, contract renegotiation but without giving specific conditions for applying the same.[140] If the law is ambiguous as is the case in Uganda, the contracts will also be ambiguous since they derive their legality and clarity of purpose from guiding laws; an uncomfortable situation for investors.

Wherever possible, an infrastructure plan or priority list is a good way for government to present its investment plans to the private sector and to demonstrate top-level political commitment.[141] Also, wherever the opportunity arises, it makes sense to develop programs, that is, a series of PPP projects in specific sectors, as the benefits of replicability for both the costs and the quality of the PPP process can be significant for both the public and the private sectors.[142] Well-prepared investment plans like project pipelines also help the private sector to understand the general environment for individual projects.[143]

In Uganda, a number of PPPs are operational in various Ministries, Departments and Agencies (MDAs) but are not maintained in the Unit inventory as prospective PPP projects and neither are they recognized as PPPs.[144] Management of Ministry of Finance, Planning and Economic

[137]'Benchmarking PPP Procurement 2017 | Public Private Partnership' (*Ppp.worldbank.org,* 2017), 45 https://ppp.worldbank.org/public-private-partnership/library/benchmarking-ppp-procurement-2017 accessed 19 June 2018.
[138]Ibid
[139]Benchmarking PPP Procurement 2017 In Uganda (2017) https://www.procurementinet.org/wp-content/uploads/2017/02/Uganda.pdf accessed 19 June 2018.
[140]Ibid
[141]Eduard Farquharson et al. (n 28) 21
[142]Ibid 22
[143]Ibid
[144]Office of the Auditor General (n 134) 10

Development explained that the process of PPP Project Screening aimed at development of the PPP Project pipeline was still on-going and the PPP Project pipeline would be in place by 2018 but to date there is nothing.[145] The PPP project pipeline in existence is one which was prepared in 2012 pursuant to the National Development Plan for the period 2010/11-2014/15. A second National Development Plan was issued but still there is no project pipeline reflecting projects to be procured as PPPs. This does not inspire confidence in the private sector since they do not know which projects are of top priority to the country, which shows lack of political commitment.

Publishing the top priority projects can also be an indication of government commitment to investment hence high likelihood of investor protection. A recent IMF Technical Assistance Report for Uganda advise the government to carry out annual reviews and prepare project pipelines to ensure uniformity with the medium-term budgetary scheme for management endorsement.[146] The report further stated that, "There is need for phased development of an integrated project database to track all completed and planned projects, containing information on appraisal, financing, monitoring and evaluation of project outcomes."[147] This would help ensure that the projects in the pipeline are in tandem with the National Development Plan and the country's priority infrastructural needs.

Investors can only make investment decisions if they have access to relevant information regarding cost of the project and risk allocation. Therefore, the information obtained from feasibility studies has to be made available to the intended investors. A feasibility study illustrates affordability of the PPP project and reflects how value for money will be achieved from appropriate risk allocation. However for major investment projects in Uganda, while feasibility studies are commonly carried out, for donor funded projects, these are not published.[148] Donors just like other investors and lenders, play a big role in Uganda's infrastructure development and could be instrumental in attracting funds either through direct investment (grants, concessional loans or equity) or by providing risk mitigating instruments to a project only if they have the right information.

In the PPP Guidelines for Local Governments in Uganda, it was noted that partners lacked access to relevant information concerning PPP projects.[149] It is pertinent to know whether investors are interested in brownfield or greenfield projects, mega or smaller projects, specific transport

[145]Ibid
[146]'2017 Article IV Consultation and Eighth Review under the Policy Support Instrument-Press Release; Staff Report; and Statement by the Executive Director for Uganda' (2017), 21 http://www.imf.org/~/media/Files/Publications/CR/2017/cr17206.ashx accessed 21 June 2018
[147]Ibid
[148]Suzanne Flynn and others, 'Uganda Fiscal Transparency Evaluation' (2017), 32 http://www.imf.org/~/media/Files/Publications/CR/2017/cr17130.ashx accessed 21 June 2018
[149]Ministry of Local Government (n 16) 21

subsector or multi-modal transport investment to design projects that not only suit their interests but also address Uganda's development needs. This would require engaging stakeholders early in the design of PPP projects so that they are not met with public resistance or investor disinterest. These stakeholders include the contracting authorities, lenders, investors, donors, engineering fraternity, civil society and the community.

In Chapter 2 we noted that PPPs are successful in jurisdictions where there is political stability and a sound business environment. Investors and lenders into the country where the project is situated are likely to be concerned about political stability if the project is located in a developing country that is politically unstable or has a lower credit rating.[150] For a strong business environment, rating agencies only acknowledge sovereign bonds which are classified as investment grade (Baa3) or higher in their system, because such ratings reflect the level of political risk connected to the host country among other factors.[151] Unfortunately, Uganda is rated B_2 by Moody's,[152] below investment grade.

Secondly, Uganda's vulnerability to event risk remains elevated, in particular to the risks posed by the domestic political environment, which is dominated by uncertainty related to the lack of a succession plan, an increasingly fragmented political landscape and popular discontent, especially among young people.[153] Uganda is also exposed to the geopolitical risk emanating from unstable political conditions in neighboring countries, particularly South Sudan, that has caused mass migration in recent years.[154] Therefore in order to attract private investments, there appropriate risk allocation and sufficient risk mitigating instruments to protect private sector investments from eminent effects of political unrest.

Regarding the presence of financial facilities to promote PPPs, it is important for governments to have a good track record of honoring their contractual obligations since PPPs are heavily dependent on debt financing, repayment of which is reduced to contractual terms. According to Moody's report on Uganda, no default events (on bonds or loans) have been recorded since 1983.[155] No new guarantees were issued in FY 2017/18. The total exposure of Uganda as at December 2017 amounts to US$ 110,233,558 including a Partial Risk Guarantee to a PPP.[156] With the exception of the Phoenix Logistics Project for which government was called to honor its

[150]Ibid (n 8) 301
[151]https://www.investopedia.com/terms/s/sovereign-credit-rating.asp accessed 15 May 2018
[152]Moody's Report (n 129)
[153]Ibid
[154]Ibid
[155]Ibid 3
[156]Ministry of Finance Planning and Economic Development, 'Report on Public Debt Guarantees and other Financial Liabilities and Grants for Financial Year 2017/18' (2018), 32

obligations to JBIC in FY 2012/13, all projects for which government guarantees were issued are performing well.[157] In this aspect, Uganda is still performing well. However, the fact that no new guarantees were issued in FY 2017/18 or any other alternative risk mitigating instruments adopted, there is a gap in risk mitigation of infrastructure projects.

When it comes to interest rates, the Bank of Uganda lowered the Central Bank Rate (CBR) significantly at several points throughout FY 2016/17 from 17 percent in 2016 to 10.0 percent in June 2017.[158] The intention behind these rates was to boost private investment by reducing the cost of credit to the investors. However commercial banks reduced their lending rates by only a very limited degree from 23.5 percent in June 2016 to 20.5 percent in April 2017[159] which means the cost of credit is still high and not all private investors are willing to incur those costs.

Additionally, government liquidity risk remains elevated, given the absence of a diversified funding structure and the government's increasing reliance on domestic debt, whose structure carries higher refinancing risk compared with the external debt, due to its shorter-term nature.[160] The high reliance on the banking system, which holds more than 40% of government securities in 2017, and uncertainty surrounding the financing strategy created by the use of supplementary budgets also weighs on Moody's assessment of the liquidity risk.[161]

In a bid to promote investment, the government of Uganda introduced new tax exemptions for private investors. However, Staff of International Monetary Fund (IMF) noted that "General tax exemptions do not necessarily boost investment and that accelerated depreciation allowances are a better alternative; for example, a direct subsidy to the Bujagali power station, instead of tax exemption, would have been a more transparent measure to reduce cost of electricity and would facilitate an informed discussion of budget priorities."[162]

3.3. Summary

Public Private Partnerships are still new in Uganda with an official PPP Act published in 2015. Most projects in the current PPP pipeline have not yet been implemented and still lack sponsors

[157]Ministry of Finance Planning and Economic Development, 'Report on Public Debt (Domestic and External Loans), Guarantees and Other Financial Liabilities and Grants for Financial Year 2015/16' (2016), 28
[158]Uganda Economic Update (n 5) 7
[159]Ibid
"The limited financial depth means that the policy actions have had only a limited impact on economic activity, with the proportion of the private sector having access to commercial loans remaining low. The loans denominated in foreign currency also create a significant exchange rate risk for borrowers, whose earnings are shilling-denominated (page 9)."
[160]Moody's Report (n 129)
[161]Ibid
[162]2017 Article IV (n 146) 17

to date. The project pipeline is also based on an outdated National Development Plan (NDP) drafted in 2012. There has since been a second NDP but there is no project pipeline reflecting the priority infrastructure projects of the public sector.

We found that Uganda does not satisfy the preconditions of a successful PPP regime in the transport sector which are; good governance and operational maturity, good legal and regulatory framework, safe investment climate, mature financial facilities, appropriate risk allocation and contract standardization. This can be attributed to the lack of institutional capacity in the transport and public sector which is reflected in the failure to design bankable projects and under execution of budgets within the transport sector.

We also found that the PPP Unit is not fully constituted according to the PPP Act and therefore unable to carry out its functions as required. The legal and regulatory framework was found to be weak with the PPP Act lacking specific provisions on contract management and alternative dispute resolution mechanisms.

Failure to publish feasibility studies and other relevant information was found to create information asymmetry and concern among the public sector, private investors and donors. Uganda is still perceived to be politically unstable due to strikes, lack of a succession plan and conflicts affecting the neighboring countries are believed may spill over. With Uganda being ranked below investment grade, there is need for strong financial facilities, but the country lacks diversified funding structures and instruments to cater for investors' needs.

In the next chapter, we shall investigate whether the limitations cited in Chapter 3 are indeed a barrier to private investment in infrastructure. We will do so by analyzing and interpreting the survey responses from private investors in Uganda. The results will inform us on which limitations are considered more pressing by investors and ultimately need immediate redress.

CHAPTER FOUR. SURVEY ANALYSIS AND INTERPRETATION

4.1. Introduction

As has been emphasized in the previous chapters, there is high demand for infrastructure investment with the growth of some sectors like telecommunications proving that citizens have the ability and willingness to pay for better-quality infrastructure.[163] However there are factors affecting the supply side of PPP projects both at country and project level which are an impediment to mobilization of private sector resources in Uganda. These factors will be discussed by analyzing and interpreting the survey results below.

In the survey, we seek to know directly from the investors what the barriers to private investment in infrastructure in Uganda are. This chapter contributes to prior literature in that we seek to determine directly from the investors, through a survey, what they consider before investing in infrastructure and so directly address these concerns if any; while comparing their responses with existing theories and literature.

We survey private investors to better understand their role in the development of infrastructure in Uganda. Consistent with several theories, we document the factors investors consider when making investment decisions and the barriers to active private sector participation in PPP projects. We look at determining factors and barriers to investment both at country and project level. We find that institutional investors are less involved in the development of infrastructure and investment by other players in the private sector is hampered by poor project selection, political instability, unattractive rate of returns from projects, insufficient financial instruments among others.

Theoretical and empirical research on Public Participation in Infrastructure makes assumptions and draws inferences regarding the role of private investors especially institutional investors in filling the infrastructure gap in many economies. However, we have little direct knowledge regarding what private investors consider when making investment decisions in Uganda because many of these decisions are made on a case by case basis.

Recent studies show that because institutional investors are predominantly looking for steady, inflation-adjusted income streams, they will be primarily interested in mature, operating assets that

[163]'Uganda Economic Outlook' (PwC, 2018), 4
https://www.pwc.com/ug/en/publications/economic-outlook.html accessed 14 June 2018
"The main drivers of growth in the services sector were Information & Communication (2.9%), Financial services & Insurance (2.6%), Public Administration (1.4%), Education (3.3%) and Health (0.5%)."

already generate cash flow and that are in stable regulatory and macroeconomic environments.[164] Secondly, the Preqin report highlights that 72% of projects completed were either existing or secondary stage infrastructure assets (59% secondary stage and 13% brownfield); while new products accounted for only 28% of deals concluded since 2008.[165] However in the past, problems with cash flows and long-term profitability were clearly among the most important reasons that brownfield concessions became so unpopular so quickly.[166] The PPI Project Database confirms that brownfield concessions are far more likely to experience contractual distress than other forms of long-term PPI.[167] In 1990–98 the share of brownfield concessions that were canceled or became distressed was 41 percent higher than that for greenfield projects.[168] As business transactions, many brownfield concessions turned out to be far less profitable than expected; with the assets often in a much poorer condition than expected and requiring more basic rehabilitation and investment before they could start generating higher revenue.[169] Subsequently, in 2017, new undeveloped projects accounted for almost four-fifths of all PPI deals.[170] Against these conflicting statistics, we seek to understand from investors in Uganda whether they prefer greenfield to brownfield projects and vice versa.

Studies have also found that the larger the pension fund or insurance company, the larger the minimum project size.[171] The PPI Annual Report states that "Globally, the average project size increased by 26 percent from US$244 million in 2016 to US$307 million in 2017 and the median project size only increased by eight percent (up from US$95 million to US$103 million), which indicates that mega projects had a significant impact in 2017."[172] Regarding the project sector, the Preqin special report found that the energy, transport, utilities and telecommunications sectors remained the most substantial sectors in terms of deal flow. The report further states that in 2014, the energy sector was the most desirable sector, ranking at 3.9, followed by transport and utilities at 3.6 and 3.4 respectively, while social infrastructure and telecom were the least at 3.2 and 3.0

[164]Georg Inderst and Fiona Stewart, 'Institutional Investment in Infrastructure in Emerging Markets and Developing Economies' (*Library.pppknowledgelab.org,* 2014), 7 https://library.pppknowledgelab.org/PPIAF/documents/1918 accessed 18 June 2018.
[165]Preqin Special Report: *Infrastructure Transaction Activity* (2014), 4 http://docs.preqin.com/reports/Preqin_Special_Report_Infrastructure_Deals_February_2014.pdf accessed 18 June 2018.
[166]James Leigland, 'The Rise and Fall of Brownfield Concessions but Some Signs of Recovery after a Decade of Decline' (*Citeseerx.ist.psu.edu, 2018*), ix http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.642.1751 accessed 18 June 2018.
[167]Ibid
[168]Ibid
[169]Ibid
[170]'2017 Private Participation in Infrastructure (PPI) Annual Report' (*Ppi.worldbank.org*, 2017), 6 http://ppi.worldbank.org/~/media/GIAWB/PPI/Documents/Global-Notes/PPI_2017_AnnualReport.pdf accessed 20 June 2018
[171]Klaus Maurer (n 105)
[172]PPI Annual Report (n 170) 2 & 5

respectively.[173] In 2017, the World Bank reported that "Private investment commitments in energy, transport, ICT backbone and water infrastructure in low- and middle-income countries totaled US$93.3 billion across 304 projects."[174] These findings suggest that project size and project sector matter to private investors and we seek to determine whether these play a role in the investment decision of the private sector in Uganda.

Regarding infrastructure financing which totaled US$61.6 billion, contributions were as follows: public sector accounted for 25 percent (US$14.9 billion) of the total infrastructure financing, private sector contributed 45 percent (US$28.1 billion), and the remaining 30 percent (US$18.7 billion) were from development banks.[175] We see that globally, the private sector is actively investing in infrastructure. However, the ICA reports that the value of projects with private sector participation reaching financial close in 2016 was $3.6bn, a significant decrease on private capital recorded in recent years; that is $7.4bn in 2015 and $5.1bn in 2014.[176] The global trend shows willingness of the private sector to invest in infrastructure but the trend in Africa is that there is declining interest in infrastructure investment by the private sector. The survey will highlight the cause of this disinterest by answering what the barriers to PPI in Uganda are.

The 30 respondents to our survey, mostly lawyers and employees in the public sector, indicate that Uganda is still heavily dependent on traditional public procurement of infrastructure as discussed in the previous chapters. The presence of lawyers however will be informative in the next sections since they offer legal advice to their clients and participate in drafting of contracts which is the principle component of PPPs. Their responses are representative of their clients' views on PPI.

Nevertheless, the absence of institutional investors also indicates that they face impediments to their activism, with the most important hurdles being scarcity of well-structured bankable infrastructure projects, political risks, poor legal and regulatory frameworks and lack of risk mitigation strategies. Our results show that the investors suffer lack of transparency in procurement and bidding process (56.67%), lack of coordination between departments in the public sector (50%), problems with land acquisition (46.67%) and unclear legal and regulatory framework (36.67%) as the biggest challenges at project level in Uganda. Challenges with financing include unattractive expected returns on investment (40%), limited options of financing instruments (30%), lack of government guarantee (23.33%) as the biggest obstacles to investment.

[173]Preqin Report (2014) (n 165) 6
[174]PPI Annual Report (n 170)1
[175]Ibid 14
[176]Infrastructure Consortium for Africa (n 9) 12

We contribute to the literature by providing direct evidence of private investors' preferences and challenges in PPI. The few related studies also using direct evidence have examined engagement of the private sector globally or in Africa as a continent. However, given that each of these studies focuses on a general spectrum and not Uganda particularly, the extent to which this evidence can be generalized is unclear. Although this evidence is important, different jurisdictions are operating under different circumstances in that data applied to one country may not be relevant to another. Thus, our evidence is important in providing a more specific view of investor activities in Uganda. The response from our participants highlights the importance of our survey approach and suggests that there are deeper underlying issues that investors consider than would be inferred from observational and generalized data only.

Section A describes the survey. Section B presents results on general preference in infrastructure investment. Section C studies the determining factors for private investment at country level. Section D presents results on determining factors for and barriers to private investment at project level, Section E reports factors investors consider and challenges they face when financing a project and Section F concludes.

Section A. Survey Response

Respondent Characteristics

Table 4.I shows the occupation of the respondents and given their positions, we expect our respondents to be very knowledgeable about their clients' (government and private sector) preferences and actions regarding infrastructure investment. The largest numbers of respondents are lawyers (33.33%) and civil servants (30%). The rest of the respondents are 6.67% from the university, 3.3% from the bank, insurance company and private equity firm each. 20% were in the "Others" category (farming company, Project Support Company, civil society/donor, law and governance, International Development Agency and Private Limited Company). Participants from government included Uganda National Roads Authority, Uganda Revenue Authority, Inspectorate of Government, Ministry of Finance, Planning and Economic Development, Ministry of Works and Transport, National Planning Authority and other semi-autonomous agencies that were not specified. The respondents were chosen based on their involvement in infrastructure development as experts or advisors in the field and so information from the survey should be reliable.

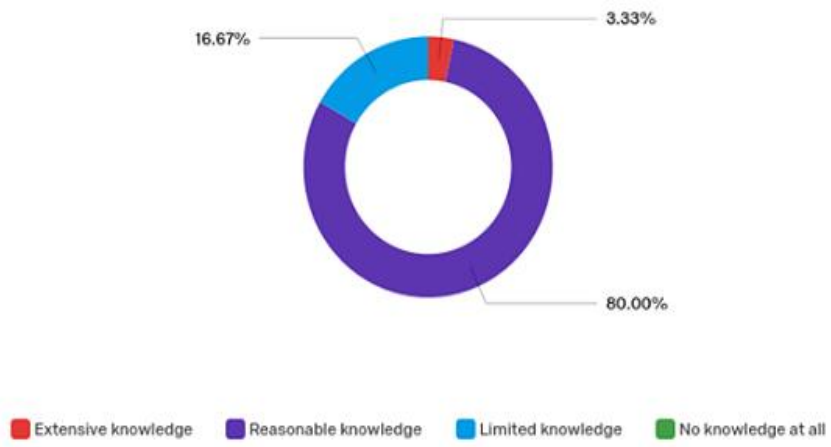
When tested on their knowledge of Private Participation in Infrastructure development, 80% said they had reasonable knowledge on the subject, 3.33% had extensive knowledge whilst 16.67% had limited knowledge (*Figure 4.1*).

The glaring absence of pension funds and the limited participation of insurance companies and banks in the survey is an indication that financial institutions and institutional investors are still hesitant or lack the knowledge to even discuss the topic of infrastructure financing, hence their lackluster performance on the market.

Table 4.1. Respondents' employers

#	Field	%	Count
1	Bank	3.33%	1
2	Insurance Company	3.33%	1
3	Government (please specify)	30.00%	9
4	University	6.67%	2
5	Pension Fund	0.00%	0
6	Law firm	33.33%	10
7	Financial services firm	0.00%	0
8	Private equity firm	3.33%	1
9	Mutual Fund Management Company	0.00%	0
10	Other (please specify)	20.00%	6
	Total	100%	30

Figure 4.1. Knowledge of PPI



Investor optimism over infrastructure projects

A survey by PwC revealed that respondents in East and West Africa are counting more on a mix of private sector and government funding or private sector debt and equity.[177] Nearly half of the respondents (49%) indicated that the traditional procurement model, where the owner finances and operates a project, will be used more frequently, while almost as many (45%) indicated that

[177]Trends, Challenges and Future: *Capital Projects and Infrastructure in East Africa, Southern Africa and West Africa* (PwC Africa 2014), 11
http://www.pwc.co.za/infrastructure accessed 20 July 2018.

PPPs, where the external parties participate in the funding, building and operating of the asset, will increase in number.[178] Therefore we expect our respondents to be optimistic with a bit of hesitancy since PPP projects are fairly new.

Indeed, when asked, most of our respondents were somewhat optimistic (53.33%), strongly optimistic (30%), neutral (13.33%) and pessimistic (3.33%) about investing in infrastructure projects in Uganda.

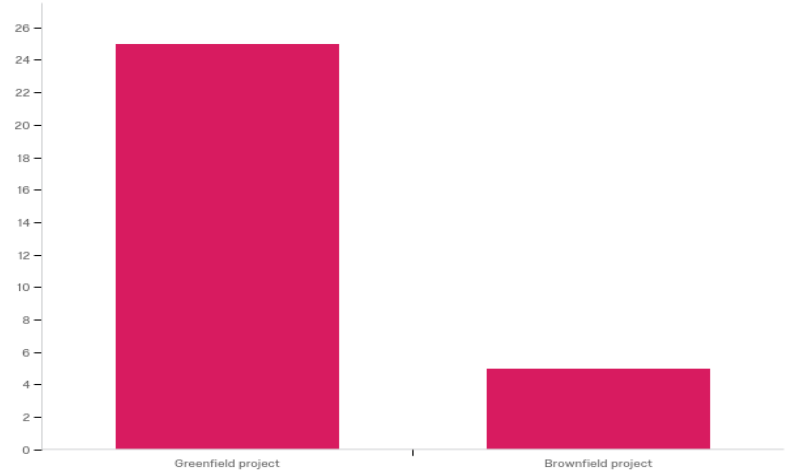
Section B. General Preference in Infrastructure Investment

Greenfield vs Brownfield projects

PPPs have two types of assets namely greenfield and brownfield projects.[179] A survey by PwC Africa found that investors are typically more interested in projects that are fully operational and shy away from greenfield projects and their construction risks.[180] On the contrary, we expect our respondents to opt for greenfield projects. This is so because Uganda is a developing country with a wide infrastructure gap and a limited number of already existing infrastructure for refurbishment whereby, to close the gap, there is need for new infrastructure projects. Secondly the brownfield infrastructure in Uganda may be in a much worse condition hence less profitable yet investors are most interested in returns on their investment.

When asked which asset type they preferred, 83.33% (25 out of 30) of our respondents chose greenfield projects compared to only 16.67% for brownfield projects (*Figure 4.2*)

Figure 4.2. Greenfield vs Brownfield projects



[178]Ibid

[179] Greenfield projects are simply new infrastructure whereas brownfield projects involve refurbishment and renovation of already existing infrastructure.

[180]Trends, challenges and Future (n 177) 9

The survey results are consistent with the trends in 2017 which indicate that greenfield projects were a preferred choice compared to brownfield projects. Investors in Uganda and globally are still weary of latent project risks that make brownfield projects unprofitable. We believe that it is for these reasons that private investors in Uganda prefer greenfield to brownfield projects.

Mega vs smaller projects

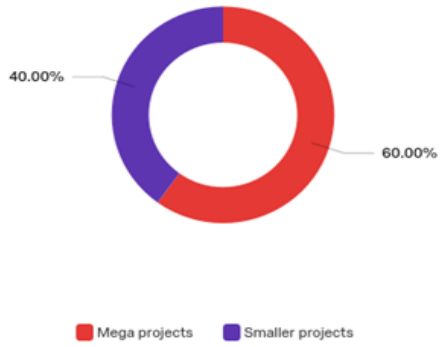
As discussed in Chapter 2, the size of the project is a major issue for large institutional investors as it determines transaction costs. The theory advanced is that the larger the pension fund or insurance company, the larger the minimum project size.[181] To illustrate this with an example: Allianz with Assets under Management of US$2.2 trillion will likely look at minimum deals of US$300 to 500 million (0.02% of total assets) as the participation of Allianz in IFC's MCPP has shown.[182] The financing trend in East Africa in 2016 was such that East Africa received $13.1bn for infrastructure.[183] A large majority of these commitments to the region was directed to transport ($5.3bn) and energy ($5.2bn), with the remaining finance destined for water ($2.5bn), ICT ($102m) and multi-sector projects ($90m).[184]

If we compare the amount of money involved in these commitments with the theory and illustration above, it is safe to conclude that donors and the private sector are interested in mega projects. Indeed, we expect our respondents to opt for mega projects because of their high returns on profit but also because mega projects enhance investors' profiles among peers in the industry.

When asked, 60% of our respondents preferred mega projects with 40% opting for smaller projects (*Figure 4.3*). In this case, mega projects were defined as those which focus on countrywide and regional investment needs. Mega projects usually have higher transaction costs as compared to smaller projects which were defined to mean those with a focus on local challenges and/or tied to business projects. However, the small 10% gap in preference also shows that investors are not so averse to smaller projects so long as they are well structured.

[181]Klaus Maurer (n 105) 11
[182]Ibid
[183]Infrastructure Consortium for Africa (n 9) 93
[184]Ibid

Figure 4.3. Mega vs Smaller projects



Results from our survey are in line with the findings that private investors will normally opt for mega projects to match their portfolio allocations. This is because mega projects have high investment returns albeit higher risk profiles. However small, especially domestic investors would prefer smaller projects since it is what they can afford. Therefore, size mismatches on either side call for intermediation by either pooling (smaller) projects for a large investor or pooling (smaller) investors for a large infrastructure project.[185]

Section C. Determining factors for private sector investment decision at country level

The Preqin report emphasized that most European infrastructure assets had the highest number of deals finalized per year than assets in other regions because of the steady political and commercial environment coupled with the good governance in Europe.[186] In a survey conducted by the Infrastructure Consortium for Africa, the respondents while choosing South Africa as the top destination for private investment based their rankings largely on political and economic security as well as a clear and positive regulatory framework.[187]

Based on the ICA survey and Preqin report we conjecture that our respondents will rank political stability, government policy in investor protection and regulatory framework as the determinants for investment at country level.

When asked what three factors private investors considered most important when making investment decisions at country level, the survey results show that respondents consider political stability (70%), government policy in investor protection (70%) and track record of the central government in honoring its obligation to investors (63.33%); as being most important. Respondents also considered clear legal and regulatory framework (50%); corruption level

[185]Klaus Maurer (n 105) 11
[186]Preqin Report (2014) (n 165) 3
[187]Infrastructure Consortium for Africa (n 9) 68

(23.33%); good performance on the ease of doing business index (6.67%); country credit rating (6.67%) and technical expertise of public sector employees in the project (3.33%) (*Table 4.2*).

Table 4.2. Determining factors for private sector investment at country level

#Field	Extremely	Very	Moderately	Slightly	Not at all	Total
a. Track record of the central or local government in honoring its obligation to investors/lenders	63.33% **19**	26.67% **8**	10% **3**	0%	0%	30
b. Government policy in investor/lender protection	56.67% **17**	40% **12**	3.33% **1**	0%	0%	30
c. Clear legal and regulatory framework to support private investment	46.67% **14**	36.67 **11**	10% **3**	6.67% **2**	0%	30
d. Country credit rating	20% **6**	26.67% **8**	33.33% **10**	16.67% **2**	0%	30
e. Political stability	70% **21**	26.67% **8**	3.33% **1**	0%	0%	30
f. Corruption level	36.67% **11**	33.33% **16**	23.33% **7**	6.67% **2**	0%	30
g. Good performance on the Ease of Doing Business Index	23.33% **7**	53.33% **16**	16.67% **5**	6.67% **2**	0%	30
h. Technical expertise of public sector employees in the project	6.67% **2**	36.67% **11**	30% **9**	26.67% **8**	0%	30

Table 4.2.1. Three most relevant determining factors at country level

Field	% out of 30	Count out of 30
a. Track record of the central or local government in honoring its obligation to investors/lenders	63.33%	19
b. Government policy in investor/lender protection	70%	21
c. Political stability	70%	21

The results confirm existing theories that institutional investors consider the investment climate, macroeconomic conditions, legal and regulatory frameworks of a country before making any investment decision. In this case government policy in investor protection should be considered critically. This is more so the case where Uganda stands at 106 in the ranking of 190 economies

based on the strength of minority investor protection index.[188] As has already been discussed, the projects in Uganda have been marred by corruption scandals, lack of transparency in projects hence underperformance.

Section D. Determining factors for private sector investment decision at project level

The Preqin special report states that core infrastructure industries such as energy (including renewable energy), transportation, utilities and telecommunications remain the most significant sectors in terms of deal flow. In Chapter 2 we established that the prerequisites of a successful PPP regime include institutional capacity to design and implement bankable projects, appropriate allocation of risks; sound financial facilities like capital market maturity for long term debt instruments and a good investment climate.

We asked our respondents what factors they consider most important before choosing a project to invest in. The respondents considered the following as the most important determining factors for investment decision at project level with the least ranking being of little importance: project sector (86.67%), financing structure and instruments (66.67%), project size (56.67%), geographical location (40%) and transparency in project and bidding process (43.33%).

Table 4.3. Determining factors for private sector investment at project level

#	Field	Extremely important	Very important	Moderately important	Slightly important	Not important	Total
A	Project sector (transport, energy, telecommunication)	60.00% **18**	33.33% **10**	6.67% **2**	0.00%	0.00%	30
B	Geographical location of the project	33.33% **10**	23.33% **7**	36.67% **11**	3.33% **1**	3.33% **1**	30
C	Project size in terms of investment needs	36.67% **11**	53.33% **16**	3.33% **1**	3.33% **1**	3.33% **1**	30
D	Transparency in Project and bidding process	33.33% **10**	33.33% **10**	30.00% **9**	0.00%	3.33% **1**	30
E	Financing structure and instruments	60.00% **18**	36.67% **11**	0.00%	0.00%	3.33% **1**	30

[188] 'Doing Business 2017: Equal Opportunity for All - Uganda' (*Documents.worldbank.org*, 2017), 68 and 70 http://www.worldbank.org accessed 24 July 2018.
The index focused on six indicators relating to disclosure, director liability, shareholder suits, shareholder rights, ownership and control and corporate transparency in a standard case study.

Table 4.3.1. Three most relevant determining factors at project level

#	Field	% out of 30	Out of 30
a.	Project sector (transport, energy, telecommunication)	86.67%	26
b.	Project size in terms of investment needs	56.67%	17
c.	Financing structure and instruments	66.67%	20

Our findings correlate with the statics above in that the project sector matters because it is what investors consider lucrative seeing as the energy and transport sectors usually have mega projects and as such higher return on investment. The project sector and project size therefore go hand in hand. It is no wonder why social infrastructure receives low investment ratios since the yields therefrom are low. This also explains why in the top priority projects in Uganda's PPP project pipeline, the energy and transport sectors are dominant. The private sector is willing to heavily invest in infrastructure so long as the financing structure of the project is appropriate and there is a variety of financing instruments to cover their interests and protect their investments from risk. This explains why the project sector, size and financing instruments were considered the top three most important determining factors for private sector investment at project level.

Investment barriers at project level

A report by the Boston Consulting Group revealed that investors in Africa found their biggest challenges to be limited public sector capabilities, insufficient political will, policy uncertainty weak regulatory environments and a shortage of available people who possess needed technical skills.as their biggest challenges.[189] Uganda stands at 116 out of 190 economies on the ease of registering property.[190] This is so because registering property in Uganda requires 10.0 procedures, takes 42.0 days and costs 2.6% of the property value;[191] which conditions are not conducive for private investors. Additionally, the Global Index Competitiveness report ranks Uganda as follows: transparency in government policy making (68 out of 137), favoritism in decisions of government officials (100/137) and property rights (86/137).[192] With these statistics, we expect that investors in Uganda face challenges regarding land acquisition and transfer, poor regulatory framework and institutional incapacity.

[189] 'Infrastructure Financing in Sub-Saharan Africa: Best Practices from Ten Years in the Field' (2017), 19 https://www.africafc.org/Publications/Publications-Documents/BCG-Report-Africa-May-2017-Electronic-v12-may.aspx accessed 24 July 2018

[190] Doing Business 2017 (n 188) 49

[191] Ibid (50

[192] 'The Global Competitiveness Report 2017-2018' (*World Economic Forum,* 2017), 295 https://www.weforum.org/reports/the-global-competitiveness-report-2017-2018 accessed 24 July 2018

When our respondents were asked what major barriers they faced at project level, they ranked lack of transparency in procurement and bidding process (56.67%) as the biggest obstacle; followed by lack of coordination between departments in the public sector (50%), problems with land acquisition (46.67%), unclear legal and regulatory framework for infrastructure investment (36.67%), lack of skills and knowledge of private sector to implement infrastructure projects (30%), complicated structure of PPI projects compared to traditional public procurement (16.67%) and public sector resistance to private involvement (13.33%).

Table 4.4. Investment barriers at project level

	PROJECT SELECTION						
#Field	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
a. The structure of Projects that involve private sector participation is more complicated compared to traditional public procurement	20% **6**	26.67% **8**	20% **6**	3.33% **1**	13.33% **4**	16.67% **5**	0
b. Unclear legal and regulatory framework for infrastructure investment	16.67% **5**	33.33% **10**	6.67% **2**	10% **3**	10% **3**	20% **6**	3.33% **1**
c. The Public sector is resistant to private involvement	13.33% **4**	13.33% **4**	3.33% **1**	20% **6**	23.33% **7**	23.33% **7**	3.33% **1**
	PROCUREMENT AND BIDDING PROCESS						
d. Lack of skills and knowledge of private sector to implement infrastructure projects	16.67% **5**	30% **9**	13.33% **4**	3.33% **1**	10% **3**	23.33% **7**	3.33% **1**
e. Lack of transparency in procurement and bidding process	56.67% **17**	20% **6**	10% **3**	10% **3**	3.33% **1**	0%	0%
f. Inappropriate risk sharing between public and private partners	20% **6**	36.67% **11**	13.33% **11**	16.67% **5**	6.67% **2**	6.67% **2**	0%
	IMPLEMENTATION PROCESS						
g. Land acquisition remains a major obstacle in completing projects on time	46.67% **14**	26.67% **8**	16.67% **5**	0%	3.33% **1**	6.67% **2**	0%
h. Lack of coordination between departments in the public sector	50% **15**	30% **9**	16.67% **5**	0%	3.33% **1**	0%	0%

Table 4.4.1. Three most important barriers

#Field	% out of 30	Count out of 30
a. Lack of transparency in procurement and bidding process	56.67%	17
b. Land acquisition remains a major obstacle in completing projects on time	46.67%	14
c. Lack of coordination between departments in the public sector	50%	15

Section E. Infrastructure Financing

As evidence of political commitment to projects, investors require government support, and this can be either direct or indirect support. The increase in investment levels in 2017 corresponds positively with the rise in government support to projects and shows the the importance of government policy in boosting PPI.[193] Challenges faced by investors in Africa include financing complexities attributable to narrow financial markets, higher actual and provisional risks, longer project durations, significant cost overruns, and currency mismatches.[194] Access to financing was found to be the third most problematic factor for doing business in Uganda. [195]

Based on these facts, we predict that investors will choose availability of government guarantees, risk allocation and expected rate of return as the most important determining factors for financing infrastructure projects; and consequently, barriers too.

We asked participants what factors they considered extremely important when deciding to finance a project. They chose attractive return on investment (83.33%), availability of government guarantee (53.33%), risk allocation (50%), creditworthiness of the sponsor 50%), financing instruments (46.67%), project monitoring mechanism (30%) and involvement of Development Financial Institutions (30%).

Similarly, when asked what barriers private investors faced when financing projects in Uganda, the results revealed that unattractive expected returns on investment (40%), limited options of financing instruments (30%), lack of government guarantee (23.33%), low credit rating of sponsors (13.33%) and inflexible investment timing (10%) were major barriers.

[193]PPI Annual Report (n 170) 18
According to the PPI report, "Direct government support includes government liabilities that directly cover project costs like capital subsidies, revenue subsidies, and land. Indirect government support is given either in the form of contingent liabilities or government policies that support investment namely; guarantees such as the exchange rate, payment, revenue, debt, and tax breaks or benefits extended by the government."
[194]Infrastructure Financing in Sub-Saharan Africa (n 189) 19
[195]The Global Competitiveness Report (n 192) 294

Table 4.5. Determinants of Infrastructure Financing

#	Field	Extremely	Very	Moderately	Slightly	Not at all	Total
a.	The availability of Government Guarantee	53.33% **16**	36.67% **11**	10% **3**	0%	%	30
b.	Expected return on investment	83.33% **25**	13.33% **4**	3.33% **1**	0%	0%	30
c.	Project Monitoring Mechanism (the flexibility given to financiers to monitor the project)	30% **9**	53.33% **16**	16.67% **5**	0%	0%	30
d.	Financing instruments	46.67% **14**	43.33% **13**	10% **3**	0%	0%	30
e.	Risk Allocation	50% **15**	46.67% **14**	3.33% **1**	0%	0%	30
f.	Involvement of Development Financial Institutions (MDBs, bilateral development banks) on the project	30% **9**	33.33% **10**	36.67% **11**	0%	0%	30
g.	Creditworthiness of the sponsor	50% **15**	43.33% **13**	6.67% **2**	0%	0%	30

Table 4.5.1. Barriers to Infrastructure Financing

#	Field	Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
a.	Limited options of financing instruments	**30%** 9	30% 9	23.33% 7	3.33% 1	3.33% 1	10% 3	0%
b.	Unattractive expected returns on investment	**40%** 12	16.67% 5	23.33% 7	13.33% 4	0%	6.67% 2	0%
c.	Lack of government guarantee	**23.33%** 7	33.33% 10	16.67% 5	16.67% 5	3.33% 1	6.67% 2	0%

Section F. Summary

Most of our respondents were from the law firms and the public sector with private sector visibly unresponsive. However, this did not reduce the quality of the survey because the presence of the public sector gave us an understanding of the information they receive during their interactions with private investors. Infrastructure projects are heavily reliant on legal advice for and on behalf of investors and so the presence of lawyers was also quite informative as they were deemed to be agents of their clients.

We found that investors prefer mega to smaller projects and greenfield to brownfield projects due to their profitability. We also found that greenfield projects being new, were less susceptible to misrepresentation of already poor infrastructure conditions, which is a challenge with brownfield projects. The major determinants for private investment at country level were found to be political stability, government policy in investor protection and track record of the central government honoring its obligations to investors. At project level these factors were project sector and size and the availability of financing structures and instruments.

The major barriers to private investment at project level were found to be lack of transparency in procurement and bidding processes, problems with land acquisition and lack of coordination between departments in the public sector. Regarding infrastructure financing, the determining factors were availability of government guarantee and financing instruments, expected return on investment, appropriate risk allocation and creditworthiness of the project sponsor. Similarly, the major barriers in financing were limited options of financing instruments, unattractive expected returns on investment and lack of government guarantee.

The data obtained from the survey reflects the status of Uganda's PPP environment as was highlighted in Subsection 3.2. Despite the results, respondents expressed optimism in increased private investment in infrastructure projects.

Chapter 4 will discuss how to improve the current conditions in Uganda so as to boost investor confidence and encourage investment.

CHAPTER FIVE. RECOMMENDATIONS

5.1. Introduction

In Chapter One, we found that Uganda had an infrastructure financing gap estimated at US $0.4 million per annum and that the estimated level of investment required for Uganda to close the infrastructure gaps amounted to almost US$ 1.4 billion per year in the medium-term. We also established that overall commitments to Africa's infrastructure fell by $16.4 billion to $62.5 billion from 2015 to 2016 due to a reduction of $14.5 billion of reported Chinese funding and a $4.9 billion reduction of private sector investment. We noted that Public-Private Partnerships could be an alternative to the traditional public procurement of infrastructure and could go a long way in filling the infrastructure gap. However institutional investors like pension funds and insurance firms, who are significant players in the PPP market, are still reluctant to invest in PPP projects because of the actual and perceived risks involved inter alia.

In Chapter Two, we found that the portfolio allocations for private investors, especially institutional investors, are inclined towards investment bonds and an investment horizon tied to the often long term nature of their liabilities.[196] Therefore, we advised host countries to ensure that reliable long-term debt instruments for infrastructure financing, a developed insurance and pension market with useful products for infrastructure risk reduction and interest-rate or exchange-rate hedging instruments are available to boost investor participation in infrastructure financing.[197] One of the considerations for institutional investor portfolio allocation is a sound business and investment environment, which includes transparency, a favorable tax environment and a stable currency and exchange rate.[198] We found that investors are usually concerned about demand risk, construction risk, maintenance risk and policy risks and that they usually ask for guarantees to cover these risks.

In Chapters Three and Four, we found that the major barriers to private investment in infrastructure in Uganda, at project level were lack of transparency in procurement and bidding processes, problems with land acquisition, and lack of coordination between departments in the public sector. Similarly, the major barriers in financing were the limited options of financing instruments, unattractive expected returns on investment, and lack of government guarantee.

In this chapter, we give recommendations on how to overcome some of these challenges. The recommendations in this chapter aim to address the lack of transparency in procurement

[196]Della Croce et al. (n 14) 9-10
[197]The Economist Intelligence Unit (n 75) 56
[198]PPPs for Transportation in the Apec Region (n 76) 16

processes, limited financing options and lack of government guarantee. The decision to address these barriers is hinged on the fact that governance and financing structures are intertwined and need to be dealt with concurrently to enhance efficiency in the local market and boost investor confidence. Legal and regulatory barriers are essential but addressing the same is a long-term solution since any action must go through the parliamentary due process to have comprehensive and effective legislation; which takes a longer time.

Concerning challenges with land acquisition, a Commission of Inquiry was constituted in 2016 to investigate and advise on the gaps in the land laws and policies, particularly, land acquisition, management and registration in Uganda. We expect that the process will yield recommendations to deal with the problems concerning land acquisition.

5.2. Recommendations

We shall discuss the recommendations as follows: (i) governance which deals with the issue of transparency; (ii) financing vehicles and instruments namely government infrastructure bonds and co-investment platforms; and (iii) risk mitigation through guarantees and guarantee fund.

5.2.1. Governance

To deal with the lack of transparency in procurement and bidding processes in PPP transactions, the government needs to create a conducive institutional environment to mitigate risks associated with PPP projects. Creating a conducive environment entails:

i) a stable long-term plan for infrastructure development: enhanced certainty and social acceptance regarding novel approaches to infrastructure development especially PPPs; improved accuracy of the infrastructure pipeline; reliability of feasibility studies; credible commitments to provide the necessary authorizations; guidance on environmental reviews;

ii) certainty of rules about public procurement, permits, expropriation, taxation, litigation, tariff definition among others; and

iii) bilateral investment treaties and protection agreements that provide international law protection from non-commercial risks associated with cross-border direct investment.[199]

The financial regulatory framework including valuation rules, any risk-based capital requirements and other prudential measures for institutional investors should reflect the particular risk characteristics of long-term assets appropriately; consider the investment horizon and typical holding period of these investors; while promoting their soundness and solvency as well as broader

[199]OECD 2015 (n 33) 49

financial stability and consumer protection.[200] The tax environment and policies should remain stable, predictable, subject to regular monitoring to prevent abuse regarding international competition and regulatory arbitrage; exemptions should be avoided and if necessary applied in a uniform and transparent manner.[201]

Sufficient information sharing should be encouraged with PPP projects published on an accessible forum so as to create awareness to both the investors and end users. Information asymmetry impedes the functioning and liquidity of markets. **Sections 21 and 22** of the PPP Act provide for cost-benefit analysis at project inception and feasibility studies respectively, but both sections are silent on sharing this information with investors. The law should be clear on the publication of this information and define the parameters of information sharing succinctly. The contracting authority together with other stakeholders should carry out awareness campaigns for PPP projects before construction and give periodic public updates on the progress of the projects. Nigeria has immensely improved its disclosure and transparency requirements for PPP projects and this has played a great role in attracting investment and rallying public support since it fosters accountability (see Box 5.1).

[200] G20/OECD: *High Level Principles of Long-Term Investment Financing by Institutional Investors* (OECD 2013), 8 http://www.oecd.org/daf/fin/private-pensions/G20-OECD-Principles-LTI-Financing.pdf accessed 27 July 2018.

[201] Ibid

"Tax neutrality towards different forms and structures of financing should be promoted. Investment frameworks should be made consistent across countries to facilitate the cross-border flow of long term financing."

Box 5.1. Nigeria's PPP Disclosure Framework

The Infrastructure Concession Regulatory Commission (ICRC) is the central repository of information on Federal PPP projects in Nigeria. ICRC regularly publishes news and general information on its website, on PPP activities, workshops, events, and basic information on legacy, ongoing, and under-consideration PPPs. However, the information provided was limited to the project title and type, the government agency responsible, the name of the private concessionaire (where selected), and duration of the concession for the projects. In recognition of this limitation, the Commission Partnered with the World Bank to ensure adequate disclosure of PPP contract information. The Commission in collaboration with the World Bank consulted with MDAs, Concessionaires, Financiers, Civil Society Organizations and relevant stakeholders towards the actualization of this exercise.

The World Bank and the ICRC developed a dedicated web portal for the disclosure of all the PPP contracts information. The portal will ensure timely disclosure of contract information from project initiation through to the implementation and hand-back phase of PPP projects to the Government. The portal can disclose projects by stage in the project lifecycle, Sector, and State (location of Project). The three project stages are Development stage, Procurement Stage, and Implementation stage. The portal based on the framework clearly shows the various elements for disclosure depending on the stage the project is in. These elements are; basic project information, project milestones, procurement documents, parties, contract information, performance information and gallery

The method of Disclosure is:(i) www:icrc.gov.ng - The Commission's website (ii) www: Public entity's website for disclosure of performance (iii) Hard copy: made available on request at the Commission's office (iv) www.ppp.icrc.gov.ng - The PPP Disclosure Web Portal (v) Limitations: The Commission and MDAs are to ensure confidential information is redacted.

Source:http://www.icrc.gov.ng/assets/uploads/2017/11/Improving-transparency-and-accountability-in-PPPs.-Nov-2017.pdf accessed on 11 August 2018

5.2.2. Financing vehicles and instruments

There is a need for sound regulatory and policy framework to support pooled investment vehicles and securities to enhance financing for long term investment in a sustainable, transparent and well-structured manner. In markets with limited participation by institutional investors, governments, national development banks and multilateral development agencies should consider the need for establishing and promoting pooled vehicles for long-term investment and supporting other instruments for long-term investment such as government infrastructure bond, co-investment platforms assets and risk mitigation policies.[202] In subsection 5.2.2.1 we discuss in detail how to implement the government infrastructure bonds, co-investment platforms in subsection 5.2.2.2 and section 5.2.3 will discuss risk mitigation tools such as guarantees and guarantee funds.

[202]Ibid 9

5.2.2.1. Government Infrastructure bonds

We recommend the issuance of government infrastructure bonds with a component of diaspora bond embedded therein. Infrastructure bonds are borrowings to be invested in government-funded infrastructure projects within a country; and are issued by governments or government authorized infrastructure companies or Non- Banking Financial Companies.[203] They are usually subject to concession contracts with the public sector (PPP), financing is through Project Finance and usually involve the issuance of federal guarantees.[204]

Project bonds are standardized securities that finance individual stand-alone infrastructure projects and can be issued in public markets or as private placements.[205] Existing literature advises that project bonds are more viable for brownfield projects with long term debt. In this regard project bonds can be used to finance the operational phase of greenfield projects since institutional investors are wary of the high risks involved in the construction phase of infrastructure projects.[206] The OECD notes that bonds are a viable option where the project size is big (exceeding USD 100 million), and where the debt is long term.

Project bonds are issued by a project company (SPV), formed as a distinct legal entity, as part of the project finance procurement process, and sold to either banks or other bond investors.[207] However, the regulatory framework in Uganda does not support the listing of shares by a newly formed SPV. Rule 36 (1) (8) of the Listing Rules[208] provides that;

> "For a company or any other body corporate to issue securities other than government bonds on the FISMS,[209]the issuer shall have published audited financial statements for **three years**…not less than six months before the proposed date of offer; and should have made profits in at least **two of the last three years preceding the issue**, in absence of which the issuer should obtain a guarantee."

These conditions are not favorable for a project bond because the SPV is formed for the stand-alone project and will neither have been in existence nor made profits before the project. Nevertheless, some characteristics of a project bond can be incorporated in a Government bond to make it a Government Infrastructure Bond. Government bonds, sometimes referred to as

[203] https://www.kotaksecurities.com/ksweb/Our-Offerings/Value-Added-Features/tax-saving-infrastructure-bonds accessed 21 August 2018
[204] http://siteresources.worldbank.org/INTCAPITALMARKETS/Resources/HeinzRudolph.pdf accessed 21 August 2018
[205]OECD 2015 (n 33) 24
[206]Interaction with NSSF, the leading pension fund in Uganda, revealed that the fund has an appetite for investing in brownfield projects.
[207]OECD 2015 (n 33) 25
[208]Uganda Securities Exchange, Listing Rules 2003
[209]The Fixed Income Securities Segment

general obligations are usually not regarded as infrastructure finance especially when backed by the tax authority. However, government **"revenue bonds"** are project bonds whose payments are directly linked to an infrastructure project and do not contribute to public deficits.[210] These bonds are sold directly to investors through fixed income markets, generally have long term maturities, and are rated by the major rating agencies.[211]

Some of the challenges of infrastructure bond issuance in Uganda are low institutional investor base, outdated project pipeline and lack of investor confidence in Uganda's infrastructure environment. Other constraints to public sector issuance of securities include the heavy reliance on concessional loans, financial management and reporting challenges in public sector agencies and local governments.[212] Additionally, in addressing long-term financing, policymakers tend to focus on creating local stock exchanges rather than on deepening and broadening local markets to finance capital investment more generally.[213] Instead of exploring alternative funding channels like infrastructure bonds and private placements which may sometimes be less costly and appropriate, the options are limited to stock exchange. Therefore, there is need for innovation and expansion of the local capital markets to cater for other funding mechanisms. Successful bond issuance and project performance would boost investor confidence as the government works on transforming its regulatory and policy framework in the meantime.

For a country like Uganda whose credit rating is below investment grade, there is a need for credit enhancement of the bonds to attract private investors. Insurance companies can be brought on board to insure the issuer against repayment risks (timely payment of interest and/or principal amount) that way investors are guaranteed that no matter the performance of the project, they will earn their money back. Other credit enhancement vehicles include Multi-lateral Development Banks (MDBs) which can offer first loss or pari passu guarantees, limited recourse, political risk guarantees, issue mezzanine debt[214]or act as a lead originator and investor in senior issues.

Guarantee vehicles are another source of credit enhancement. The private placement bond for an InfraCo infrastructure project in Uganda recently received a rating of A+ from an international

[210]OECD 2015 (n 33) 20
[211]Ibid
[212] https://cmauganda.co.ug/files/downloads/Capital%20Markets%20Developemnt%20Master%20Plan.pdf accessed 21 August 2018
[213] https://cmauganda.co.ug/files/downloads/Capital%20Markets%20Developemnt%20Master%20Plan.pdf accessed 21 August 2018
Stock market exchange is essentially the raising of capital through public offers of securities.
[214]Yescombe, *Principles of Project Finance* at page 75 defines mezzanine debt as debt whose repayment ranks after repayment to bank lenders or senior bondholders but before payment of profits to investors. Mezzanine debt is useful in projects where issuance of higher quality debt is limited or where equity holders attempt to limit dilution.

rating agency, which is above the sovereign ceiling, because of credit enhancement from GuarantCo (established under Private Infrastructure Development Group) and USAID.[215]

Government infrastructure bonds are usually successful in a stable macro-economy with favorable local interest rates and a capital market with an established investor base and transparent bond market institutions.[216] Governments and contracting authorities or issuers need to aim for stability in interest rates and inflation since high inflation inevitably leads to high interest rates which act as a significant deterrent for investors to buy long-dated assets.[217] Uganda is making progress in this direction with the latest figures from Uganda's central bank indicating that the Central Bank Rate (CBR) has fallen by 500 basis points from 15% in July 2016 to 10% in July 2017.[218] The Central Bank has also reigned in on inflation to its medium term target of 5% by cautiously easing its monetary policy.

The government has the option of issuing project-specific bonds or general infrastructure bonds for projects in particular sectors as was the case with Kenya. Since Uganda's diaspora market is not yet well developed, it can issue the infrastructure bond with the flexibility to accommodate both local and diaspora investors. Recent studies found that it might not be feasible to issue diaspora bonds in the short term given the lack of critical mass of solvent diaspora members because members of the Ugandan Diaspora community are not registered and cannot easily be reached.[219] Therefore an infrastructure bond with a component for diaspora investors will help create awareness with the Ugandan nationals in the diaspora and pave the way for bigger project bond issues in the future. In this case, the author draws inspiration from the Kenya Infrastructure Bond issue.

However, the government should take care and ensure that the National Treasury and the Central Bank are on the same page regarding regulatory and policy considerations otherwise there will be confusion and miscommunication on the market. An example is with Kenya where its debt

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[215]Cedric Achille, Mbeng Mezui and Bim Hundal, 'Structured Finance: Conditions for Infrastructure Project Bonds in African Markets' (*African Financial Markets Initiative,* 2013), 57 https://www.africanbondmarkets.org/en/publications/publication/structured-finance-conditions-for-infrastructure-project-bonds-in-african-markets-5185/ accessed 6 August 2018.

[216]Ibid 79

[217]Ibid 113

"Governments need to take steps to ensure liquidity and transparency in their own debt; for example- they can focus issuance around building liquid tranches at key maturities beyond 15 years. At the same time, Governments must be careful not to crowd out the private-sector or compromise fiscal sustainability."

[218]Isaac Sekitoleko, 'Leveraging Regional Capital Markets to Finance Uganda's Infrastructure Projects' (2018), 4 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3182243 accessed 8 August 2018

[219]Joseph Mawejje and Ezra Munyambonera, *Financing Infrastructure Development in Uganda* (Economic Policy Research Centre 2017), 19 http://www.eprcug.org accessed 6 August 2018. Furthermore, the Central Bank has yet to establish the financial instruments for investing in diaspora bonds.

structuring was broken by involving the National Treasury only towards the end of the process. This created a disconnect within the market in that while infrastructure bonds were trading on the secondary market at around 11 percent, authorities set the coupon at 12 percent.[220] The effect of this contradiction is that it sends a signal to the market that the issuer is in desperate need of money and is willing to pay very generously for it; ultimately this increases financing costs of the project. The National Treasury especially the debt department needs to be fully constituted with enough qualified technocrats to be able to plan and structure the debt before issue.

Box 5.2. Infrastructure Bond with Kenyan Diaspora Component

The budget for Financial Year (FY) 2011/12 specified that the Government would raise Kes 119.5bn through domestic borrowing out of which Kes 35.85bn was raised through the issuance of Infrastructure Bonds to fund specific new and ongoing projects. The sectors of the economy highlighted in the Budget were; Roads: Kes. 7.36bn, Energy: Kes.18.78bn and Water: Kes.9.71bn.

The Republic of Kenya ("the Issuer") offered a Kes 20bn in an Infrastructure Bond Issue ("the Issue"), as a first tranche to the total borrowing of the Kes. 35.85bn due in 2023 according to the provisions of the Internal Loans Act Cap 420 and also the Capital Markets Act Cap 485A. The Bond was made open to all investors but placed particular emphasis on getting participation from Kenyan citizens in the Diaspora who could participate as individuals or through their incorporated companies and other institutions with 100% Kenyan shareholding.

This Bond issue was denominated in Kenya Shillings ("Kes"). The offer price, aggregate principal amount, maturity and interest payable in respect of the Bond, were determined by the Issuer and the Agent, at the time of issue, following the prevailing market conditions and as set out in the Financial Year 2011/12 Infrastructure Bond Prospectus.

To incentivize investors, bonds issued benefited from withholding tax exemption on interest income. Further, to ease redemption pressure on the Issuer associated with bullet maturities and avail an early exit window to investors; redemption of the principal outstanding amount was on an amortization basis at the end of the fourth, eighth and a final redemption at the end of the twelfth year, in proportions specified in the Prospectus. The bonds were tradable on the Nairobi Stock Exchange ("NSE") after obtaining approval for listing by the Capital Markets Authority (CMA) of Kenya. There was a possibility of rediscounting the bonds by the Central Bank of Kenya as a last resort at 3% above the prevailing market yield or coupon whichever was higher, upon written confirmation to do so from NSE.

The interest payment was semi-annual, based on the original principal amount (or in case of amortization, on outstanding principal amounts, and NOT the original principal amount).

Source: Infrastructure Bond with Kenyan Diaspora Component: General Information Supplement https://www.nse.co.ke/media-center/press-release.html?download=920%3Ageneral-information-supplement&start=300

[220] https://www.standardmedia.co.ke/business/article/2001268684/this-is-what-an-overpriced-t-bond-costs-government accessed on 6 August 2018

The success strategies employed by Kenya were: aggressive marketing by the Central Bank and Ministry of Finance; identification of projects in the prospectus to provide transparency like the Nairobi-Thika Highway; reopening, underwriting and syndicated reopening were all strategies to ensure full subscription; timing of issue at a period of relative inactivity in the equities markets and there was a flight to safety at a time of global financial strife; lowering of the threshold for Treasury Bond bids enabled retail participation; redemption strategy to crowd-in as many investors as possible.[221]

Uganda can use these strategies now at a time where projects are soon to be published in a PPP project pipeline, the equities market is inactive, the Central Bank has reduced its lending rates and approved the direct access of all licensed commercial banks to the primary market for Government security operations[222] thereby widening the investor base. In the past, the Central Bank had restricted the government securities primary market to six Primary Dealers (PDs) who were licensed to participate and later sell the securities to other banks and investors in the secondary market.[223] This move will widen the investor base since banks will now be able to participate, link small and big investors to open accounts and begin investing.

The proceeds of the bond issuance can then be used to finance only specific PPP projects in the transportation and energy sectors among others. This would require the different sectoral line ministries and departments to prepare PPP projects beforehand and submit to the Ministry of Finance under which the National Planning Authority and PPP Unit derive their mandate.

5.2.2.2. Co-investment platforms

In order to bypass the large fees associated with investing through unlisted equity funds, pension funds have looked at pooling their financial and internal resources to invest jointly in infrastructure projects; or partnering with other funds with more expertise on a deal-by-deal basis.[224] This could be the case in Uganda where the pension schemes are limited and the government is reluctant to liberalize private sector pensions for fear of competition from foreign firms.

Uganda has only four existing pension schemes so far to wit; National Social Security Fund (NSSF Act), Occupational Pensions Scheme (Uganda Insurance Act), Public Service Pensions Scheme (Pensions Act) and Armed Forces Pension Scheme (Armed Forces Pensions Act)[225] with NSSF

[221]Cedric Achille et al. (n 215) 159
[222]https://www.bou.or.ug/bou/media/statements/Investing-in-Government-Securities.html accessed 8 August 2018
[223]https://allafrica.com/stories/201704060315.html accessed 8 August 2018
[224]OECD 2015 (n 33) 37
[225]http://siteresources.worldbank.org/INTPENSIONS/Resources/395443-1279057176326/Uganda.pdf accessed 8 August 2018

being the largest with UGX 6,586 trillion in Assets under Management by 2016.[226] These pension funds can be used to substitute the high cost of external borrowing to finance infrastructure investments.

Pooling finances together would help raise more funds and by pass the regulatory restriction on investments placed upon pension funds. Section 68 of the Retirement Benefits Act[227] provides that funds of a retirement benefits scheme shall not be lent to any person except through securities sold on the open market and shall not be invested outside of East Africa. Further, the Investments of Scheme Funds Regulations[228] sets the assets and percentage of investment by pension funds in the East African market at eighty percent. However, this is not practical since these pension funds have diversified investment portfolios and cannot limit their investments to only infrastructure projects which expose them to high risk.

On the contrary, if the pension funds in East Africa combined resources for investment in infrastructure, the funds collected would greatly contribute to regional infrastructure development considering that there is already the East African Standard Gauge Railway that has hit a snag for lack of funds. Combined, Uganda, Kenya, Rwanda, and Tanzania have USD 14.25 billion of Assets under Management.[229] These funds are sufficient to fund a huge portion of Uganda's infrastructure projects under the second National Development Plan.

Rather than invest separately, pooled investment would expose the pension funds to better alignment of interests with each other, like-minded investment horizon, lower fees, better control of the characteristics of the investment, larger commitments, local knowledge, wider risk spread, network effects and expertise, higher returns, better access to deal flow and diversification.[230]

The potential challenge for this collaboration is that the pension funds may have different priorities, regulatory restrictions and investment strategies which may be hard to realign but the governments can help create a supportive environment for collaboration. Authorities can modify the Global Strategic Investment Alliance Strategy to suit the East African infrastructure needs and investment environment.

[226]Isaac Sekitoleko (n 218) 8
[227]The Uganda Retirement Benefits Regulatory Authority Act, 2011
[228]The Uganda Retirement Benefits Authority (Investments of Scheme Funds) Regulations, Statutory Instrument No.44 of 2014, Section 9 & Schedule 2
[229]Isaac Sekitoleko (n 218) 9
[230]OECD 2015 (n 33) 37

While streamlining regional regulatory framework to support the co-investment platform, the Government of Uganda could apply the same idea to the four domestic retirement benefit schemes under a collective investment scheme. A Collective Investment Scheme (CIS) is defined as

> "An arrangement with respect to property of any description, the purpose of which is to enable persons taking part in the arrangement, whether by becoming owners of the property or any part of it or otherwise, to participate in or receive profits or income arising from the acquisition, holding, management or disposal of the property or sums paid out of such profits or income."[231]

However, the CIS industry is not vibrant in Uganda and there are three major bottlenecks that have affected its development; i) a poor culture of savings and investments[232], ii) a lack of an extensive and comprehensive marketing strategy and distribution network for CIS products iii) an underdeveloped capital market with a few investment opportunities for the CIS industry.[233] These issues should be addressed before implementing the co-investment platform otherwise it risks failure at inception.

Box 5.3. Co-investment platform by OMERS

The Global Strategic Investment Alliance (GSIA) is a global co-investment alliance platform launched in 2012 by the Ontario Municipal Employees Retirement System (OMERS). The GSIA was designed to gather sophisticated like-minded investors (mainly pension funds) to directly invest in infrastructure assets. Through the GSIA, participating alliance members will invest in core infrastructure assets with an enterprise value of more than USD 2 billion in sectors such as airports, railways, ports, power generation & distribution, and gas pipelines mainly in North America and Europe.

The GSIA aims to raise USD 20 billion with OMERS providing USD 5 billion. In April 2012 Mitsubishi Corporation (MC) entered into binding commitments to jointly invest up to USD 2.5 billion in quality infrastructure assets, together with leading Japanese pension funds and financial institutions, namely Pension Fund Association, Japan Bank for International Cooperation, and Mizuho Corporate Bank. In March 2014 OMERS entered into a co-investment agreement with Japan's Government Pension Investment Fund (GPIF), the world's largest pension fund, and the Development Bank of Japan (DBJ). The participation by GPIF and DBJ brings the total capital committed to the GSIA to USD 11.25 billion.

Source: Infrastructure Financing Instruments and Incentives (OECD 2015), 37 or http://www.oecd.org/daf/fin/private-pensions/OECD-Pooling-Institutional-Investors-Capital-Unlisted-Equity-Infrastructure.pdf

[231]The Collective Investment Schemes Act (Uganda), 2003, Section 3

[232]The informal sector covers more than 50% percent Ugandan economy, with majority of the population not registered under a formally recognized savings scheme. This source of income therefore remains untapped.

[233]https://cmauganda.co.ug/files/downloads/THE%20DEVELOPMENT%20OF%20COLLECTIVE%20INVESTMENT%20SCHEMES%20IN%20UGANDA.pdf accessed 21 August 2018

5.2.3. Risk mitigation

Risk mitigation instruments are financial instruments that transfer certain defined risks from project financier (lenders and equity investors) to creditworthy third parties (guarantors and insurers) that have a better capacity to accept such risks.[234] These instruments are useful for Uganda since it is not sufficiently creditworthy as a country; ranked B_2-below investment grade. The magnitude of a risk varies depending on the country (and its underlying investment climate), sector (and its institutional maturity) and project (and its complexity).[235] The objectives of risk mitigants and incentives are to correct certain market failures or inefficiencies in the procurement of infrastructure investment and delivery of infrastructure assets by private entities, or in the financing of infrastructure investment.[236] Below is the summary of risks involved in infrastructure investments.

Table 5.1. Classification of Risk Linked to Infrastructure Assets

<table>
<tr><th>Risk Categories</th><th>Development Phase</th><th>Construction Phase</th><th>Operation Phase</th><th>Termination Phase</th></tr>
<tr><td rowspan="8">Political and regulatory</td><td>Environmental review</td><td>Cancellation of permits</td><td rowspan="2">Change in tariff regulation</td><td>Contract duration</td></tr>
<tr><td rowspan="2">Rise in pre-construction costs (longer permitting process)</td><td rowspan="2">Contract renegotiation</td><td>Decommission</td></tr>
<tr><td>Asset transfer</td></tr>
<tr><td colspan="3">Currency convertibility</td></tr>
<tr><td colspan="4">Change in taxation</td></tr>
<tr><td colspan="4">Social acceptance</td></tr>
<tr><td colspan="4">Change in regulatory or legal environment</td></tr>
<tr><td colspan="4">Enforceability of contracts, collateral and security</td></tr>
<tr><td rowspan="5">Macroeconomic and business</td><td>Prefunding</td><td colspan="3">Default of counterparty</td></tr>
<tr><td colspan="2" rowspan="3">Financing availability</td><td colspan="2">Refinancing risk</td></tr>
<tr><td colspan="2">Liquidity</td></tr>
<tr><td colspan="2">Volatility of demand/market risk</td></tr>
<tr><td colspan="4">Inflation</td></tr>
<tr><td colspan="4">Real interest rates</td></tr>
<tr><td colspan="4">Exchange rate fluctuation</td></tr>
<tr><td rowspan="6">Technical</td><td colspan="3">Governance and management of the project</td><td rowspan="5">Termination value different from expected</td></tr>
<tr><td colspan="3">Environmental</td></tr>
<tr><td>Project feasibility</td><td rowspan="2">Construction delays and cost overruns</td><td rowspan="2">Qualitative deficit of the physical structure/ service</td></tr>
<tr><td>Archaeological</td></tr>
<tr><td colspan="3">Technology and obsolescence</td></tr>
<tr><td colspan="4">Force majeure</td></tr>
</table>

Note: (See Annex for full description of the risks in Table 2)

Source: *OECD Risk Mitigation and Incentives*

[234] http://siteresources.worldbank.org/INTTRANSPORT/Resources/336291-1227561426235/5611053-1229359963828/TP-32-Road_Asset_Mgmt.pdf accessed 23 August 2018
"Risk is defined as the measurable probability that the actual outcome will deviate from the expected or most likely outcome."
[235] OECD 2015 (n 33) 47
[236] Ibid 48

To engage investors, the government should consider risk mitigation instruments and incentives specifically focused on the investors such as guarantees, coverage of political and regulatory risks, credit enhancements, and more diversified insurance offerings, while ensuring their efficacy as well as taking due account of the impact on public finances.[237] For routine transport and energy infrastructure, the construction risk is limited, but demand and regulatory risks may not be.[238] Toll revenues in developing countries are not well accepted by users, which reinforces the risk of hold-up and expropriation by the Government.[239]

Therefore, in countries with a nascent regulatory framework and a regulatory agency without a track record such as the case in Uganda, the government can provide regulatory certainty through clear contractual terms and/or risk mitigating structures so as to attract investors. When these regulations are defined in a contract, the regulatory risk may be mitigated using a Partial Risk Guarantee (PRG) to cover the government's contractual obligations, or by breach of contract policy under Political Risk Insurance (PRI).[240] PRGs cover commercial lenders in private projects[241] whereas PRI can insure equity investors or lenders.[242] One of the ways to ensure that there is sufficient money for guarantees is through a guarantee fund as will be further discussed below.

Guarantees and guarantee funds

The World Bank defines guarantee funds to mean a mechanism which involves the creation of a fund of liquid assets that can be rapidly mobilized in the event that a contingent liability is realized. The fund would have its own balance sheet, be removed from the annual budget cycle, and benefit from independent governance.[243]

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[237]G20/OECD, *Guidance Note on Diversification of Financial Instruments for Infrastructure and SMEs* (OECD 2016), 7 http://www.oecd.org/g20/topics/financing-for-investment/G20-OECD-Guidance-Note-Diversification-Financial-Instruments.pdf accessed 27 July 2018

[238]Rabah Arezki et al. (n 62) 19

[239]Ibid

"In addition, toll revenues are subject to currency risk and the lack of long term currency hedging mechanisms is a major concern for investors. Guarantees are rarely available and therefore seldom sought by investors (non-recourse debt remains the norm)."

[240]Matsukawa Tomoko et al. (n 122) 6

[241]Ibid 4

PRGs also called Political Risk Guarantees cover the full repayment, as well as accrued interest (when the guarantee is callable upon the acceleration of the underlying debt) or full interest payments (when the guarantee is non-accelerable).

[242]PRI or investment insurance can cover the default by a sovereign corporate entity but only if the reason for a loss is due to political risks. Coverage is generally limited to less than 100% of the investment or loan and includes currency inconvertibility and transfer restriction, expropriation and war and civil disturbance.

[243] https://ppp.worldbank.org/public-private-partnership/financing/government-risk-management#fund accessed 30 July 2018

According to the World Bank, the fund could be used to: ring fence budget allocations intended for government support of PPP projects; reduce the likelihood of diversion of such funds for inefficient use; limit liabilities for government support provided to PPP projects to the value of its capitalization of the fund; reassure the public that government liabilities in the face of PPP projects are less likely to have catastrophic consequences; improving the credit enhancement function of government support; and help the government in their risk management of contingent liabilities (increasing efficiency and targeting of guarantees and ring-fencing government contingent liabilities).

The Bank further proposes that the guarantee fund be established as a separate legal entity from the government with its own capital and limited liability so as to promote independent decision making and transparency and to avoid conflict of interest. This has successfully been implemented in Indonesia, Brazil, Peru and Colombia among others.

In order for the fund to be efficient, its staff must have the relevant skills and expertise to evaluate proposed projects, identify, allocate and monitor the implementation of balanced government support especially during the period between project selection and financial close. To ensure that the due diligence yields correct results, there is the need for information sharing between the contracting agencies, government and the guarantee fund.

The possible challenges faced by the guarantee fund would be in relation to cost and conflict of interest. Regarding conflict of interest, one may ask, how will the fund which is also an arm of government, be able to monitor and implement its mandate independently? How will the fund ensure transparency without the influence of or interference from the central government or the other government agencies? Copying from Indonesian innovation (see Box 5.4), the guarantee fund will be registered as a company with separate legal status and regulated by the requirements of company law. This means that any transaction with the government or government contracting authorities will be contractual, explicitly laying down parties' rights, obligations and liabilities.

Being subject to company law means the fund will be required to fulfill its obligations under the Companies Act which include filing annual returns, the company's composition and mandate through Articles and Memorandum of Association among others. This information is available to the public and investors through the records in the Uganda Registration Services Bureau. This exposure will act as a control mechanism on the fund's activities.

Another challenge is the costs, especially the initial capital and transaction costs. The Bank fears that assets or cash reserved in such a fund are not available for other purposes and must be managed in a very conservative manner in order to retain the value of the fund.[244]

Being a company, shareholders must be able to invest in equity and this will be the initial capital. Government should be a shareholder so as to have access to information on the activities of the fund. Other shareholders can be members of the private sector who will bring funding, expertise and network effects to the fund. Members of the civil society may be involved too as shareholders, that way they have access to information to disseminate to the public and rally public support for infrastructure projects and act as a watchdog of the fund.

Secondly, the fund can raise money by charging the contacting authority guarantee fees which include upfront charges and periodic payments; usually a percentage of the amount of guarantee needed. Charging fees can help discourage unnecessary applications and sieve out the projects in actual need of guarantee. Care should be taken not to set the guarantee fees too low as this will encourage indiscriminate applications or even white elephants, nor too high as this will discourage implementation of genuine projects.

Alternatively, governments can also obtain contingent, stand-by facilities (for example from trusted lenders with good credit ratings to provide confidence to the market and those potential purchasers of such guarantees) to offset some of the need to set aside assets.[245] For instance, the fund could solicit support from GuarantCo which entered a contingent debt facility with FMO to manage liquidity risk.[246] These facilities, if well structured, would inspire confidence among the recipients of guarantees that sufficient money will be available without delay to address any liabilities the fund may incur, in particular for calls on guarantees, off-setting some of the capital requirements of the fund.[247]

To ensure sustainability and ability to meet operational costs, the relationship between the fund and contracting agency should be contractual, with rights, obligations and liabilities well defined in the guarantee agreement. There should be a provision which requires the contracting agency to indemnify the fund in case there is a call on the guarantee. The advantage of this is that beneficiary

[244] http://ppp.worldbank.org/public-private-partnership/financing/government-risk-management "The government incurs this cost even if the assets or funds are not in fact needed to compensate fund liabilities. Where the PPP programme in question is large or high value, the amount of assets that would need to be set aside in the fund may be prohibitive."

[245] https://ppp.worldbank.org/public-private-partnership/financing/government-risk-management accessed 30 July 2018

[246] 'Infrastructure Transforming Economies Changing Lives-PIDG Annual Report' (Pidg.org, 2016), 18 http://www.pidg.org/resource-library/annual-reports/pidg-annual-report-2016.pdf accessed 21 August 2018

[247] https://ppp.worldbank.org/public-private-partnership/financing/government-risk-management#fund accessed 30 July 2018

agencies will be encouraged to meet their obligations in the PPP project and discourage unnecessary breach of contract.

Box 5.4. Case study of Indonesia Infrastructure Guarantee Fund

In 2009, the Guarantee Fund was formally established as a State-Owned Enterprise called Indonesia Infrastructure Guarantee Fund (IIGF) with dual mandate as a separate entity providing a financial guarantee to private investors and as a fiscal risk manager. As a guarantor, the IIGF guarantees the financial obligations of government contracting authorities in PPP contracts with private investors. In case of default, the IIGF, as guarantor, will pay a certain amount of compensation to the private counterparty.

In its role as the **risk manager**, IIGF operates as the only gate through which guarantee proposals from contracting agencies can be assessed and structured. It is also the site where claims from the investor to IIGF and/or the government are directed and processed. This means that the guarantee proposals are directed to and evaluated by IIGF and not the government. Upon assessment, IIGF will either issue a guarantee itself or if its capital is insufficient, request the government to guarantee certain risks it cannot cover.

IIGF issues financial guarantees in the form of a negotiated contract signed by both IIGF and the investor and also the government if it guarantees the project with IIGF.

The relationship between guarantee fund and the government contracting agencies is contractual under a recourse mechanism. That is, IIGF by law can claim back a compensation payment already paid to the private investor from the government-contracting agency, which is defaulted under a PPP contract.

Source: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.689.1901&rep=rep1&type=pdf accessed 11 August 2018

The guarantee fund could work to reduce risk perceptions, increase the security of investment and further enhance the effectiveness of the project. Multilateral and bilateral agencies can support the fund by providing contingent credit or seed capital to the government. Such official donor financial support may be structured on a first loss basis for the private financial institution managing the guarantee program and to leverage donor support by using its own balance sheet on a second loss basis.[248]

Summary

We established that the major barriers to PPI in Uganda were among others lack of transparency in procurement and bidding processes, limited options of financing instruments and lack of government guarantees. We noted that although problems with the land acquisition were a major

[248]Ibid (122) 13

barrier, there is a Commission of Inquiry that was constituted in 206 to deal with land regulatory and management deficiencies.

To deal with transparency issues, we recommended that government develop a platform to publish results of both project cost-benefit analysis and feasibility studies. We advised that authorities concerned use the Nigerian disclosure and transparency model as a template since it has greatly contributed private sector participation in PPP projects.

In order to increase the options of financing instruments, we advised government to issue out the government infrastructure bonds with a component of diaspora bond embedded therein. This would go a long way in increasing the investor base while creating awareness among the diaspora community about infrastructure as an asset class. Co-investment platforms were found to be a solution to the restrictive regulatory policy on pension funds and the limited number of pension schemes in Uganda. Co-investment schemes would increase the resource base and ultimately the funds invested in infrastructure projects; since they encourage pooling of resources among domestic and regional pension funds.

PPPs are long term and risky in nature and so investors are reluctant to allocate resources to such projects. To boost investor confidence, we advised the government to establish a guarantee fund where finances would be easily mobilized in the event of a contingent liability arising. This way, investors are confident that irrespective of hiccups in the project, return on investment is guaranteed. We believe that these recommendations would go a long way in improving the PPP investment environment in Uganda.

CHAPTER SIX. CONCLUSION

Scholars have emphasized the need for infrastructure development because it directly translates to economic growth. Infrastructure includes roads, railways, ports, power plants, telecommunication, water and sewage among others. Further studies estimated that the world needed infrastructure investment worth USD 6.3 trillion per year over the period 2016-2030 to spur economic growth and development. In Sub-Saharan Africa, the infrastructure gap was estimated at USD 100 billion, and of this amount, Uganda needs USD 1.4 billion per year in the medium-term. The infrastructure financing gap is at USD 0.4 million per annum with overall investments growing at the average annual rate of only 4.3 percent within the five-year period up to FY 2015/16.

We established that since low income and fiscal deficits constrained most governments, they needed support from the private sector. Additionally, we found that weak institutional design, lack of accountability and conflict of interest limit public sector efficiency. These issues often lead to project delays, cost overruns, low quality of infrastructure projects and ultimately wastage of already limited government resources However, we discovered that the private sector, especially institutional investors, were unwilling to include infrastructure projects in their portfolio allocations because of the high risks involved. Appreciating the growing infrastructure gap, and the fact that the infrastructure procurement model was shifting slowly from heavy reliance on the public sector towards significant private sector involvement, scholars advised that host countries needed to explore innovative financing mechanisms to attract investment. Private sector involvement ensures efficiency, expertise and attracts funding all of which are necessary for timely project delivery. Because of the increasing popularity Public-Private Partnerships, scholars advised that it would be an alternative mechanism to stimulate private investment. PPPs are projects in which the private sector Project Company finances, operates and maintains public infrastructure while receiving payment for its use; and the asset concerned usually reverts to public sector control/possession at the end of the contract[249] (15-30 years).

Based on the circumstances, we asked the question, "**How can the Government of Uganda enhance private investment in infrastructure through Public-Private Partnerships?"** To answer this question, first, we sought to analyze circumstances under which PPPs would be used to finance infrastructure projects up to completion successfully. While addressing the preconditions for a successful PPP regime, we also discussed whether the elements of a typical PPP structure were in tandem with the long-term investment profile which institutional investors were interested in. Because of their long-term nature and high yield return on investment, PPPs

[249]E. R Yescombe, *Principles of Project Finance* (2nd edn, Academic Press 2014), 14

are an appropriate investment option for institutional investors whose allocation portfolio is inclined towards long-term high yield investments. We also noted that the preconditions for investment set by institutional investors were in tandem with those necessary for the success of a PPP regime. These were; clear and specific contractual terms, good governance and operational maturity, proper legal and regulatory frameworks, stable investment climate, sound financial facilities and appropriate risk analysis and allocation among parties best suited to handle the risks. Regarding PPP contracting, we argued that incomplete contracts were preferable given the long-term nature and complexity of PPP projects; giving the public sector room to renegotiate terms to cover unforeseeable circumstances.

Once the host country meets all the preconditions of a successful PPP, the public sector and community enjoy benefits like quality assurance, accountability and value for money. Despite the advantages of PPPs, we noted that PPPs are not a solution for all infrastructural challenges. We advised that PPPs may not be used where the contracting authority could not specify the requirements of the project, where there was lack of third party finance, where there was rapid technological change in the sector thereby creating uncertainty and where it was difficult to substitute suppliers. Otherwise, the project would fail due to lack of funding, contract renegotiations to cover the ever-changing circumstances surrounding the project.

Despite the possibility of high yield investment returns, private investment in infrastructure in Uganda was found to be low. We sought to find out directly from investors and practitioners, through a survey, what challenges they faced in Uganda. We discovered that most projects in the current PPP pipeline had not yet been implemented and still lacked sponsors to date. Further, that the project pipeline was based on an outdated National Development Plan (NDP) drafted in 2012 and that there had since been a second NDP, but there was no project pipeline reflecting the priority infrastructure projects of the public sector.

While analyzing the PPP environment in Uganda, we took examples from the transport sector. We found that Uganda did not satisfy the preconditions of a successful PPP regime and we attributed this to the lack of institutional capacity in the transport and public sector which was reflected in the failure to design bankable projects and under execution of budgets within the transport sector.

We also found that the PPP Unit was not fully constituted according to the PPP Act and therefore was unable to carry out its functions as required. The legal and regulatory framework was found to be weak with the PPP Act lacking specific provisions on contract management and alternative dispute resolution mechanisms. Failure to publish feasibility studies and other relevant information

was found to create information asymmetry and concern among the public sector, private investors, and donors. Uganda is still perceived to be politically unstable due to strikes, lack of a succession plan and investors fear that conflicts affecting the neighboring countries may spill over. Since Uganda is ranked below investment grade, we found that there is a need for robust financial facilities, but the nation lacks diversified funding structures and instruments to cater for investors' needs.

Analysis and interpretation of the survey results revealed that the significant barriers to private investment at project level were lack of transparency in procurement and bidding processes, problems with land acquisition and lack of coordination between departments in the public sector. Regarding infrastructure financing, the significant challenges were limited alternatives for financing instruments, unattractive expected returns on investment and lack of government guarantee. However, despite the results, respondents expressed optimism about increased private investment in infrastructure projects.

Based on the feedback from the survey, we suggested some measures for the public sector to consider while addressing the barriers to PPI. To deal with transparency issues, we recommended that government develop a platform to publish results of both project cost-benefit analysis and feasibility studies. We advised that authorities concerned use the Nigerian disclosure and transparency model as a template since it has contributed significantly to private sector participation in PPP projects in Nigeria.

To increase the options of financing instruments, we advised the government to issue out government infrastructure bonds with a component of diaspora bond embedded therein. This would widen the investor base while creating awareness among the diaspora community about infrastructure as an asset class. Co-investment platforms were found to be a solution to the restrictive regulatory policy on pension funds and the limited number of pension schemes in Uganda. Co-investment schemes would increase the resource base and ultimately the funds invested in infrastructure projects; since they encourage pooling of resources among domestic and regional pension funds.

To boost investor confidence in PPP projects which involve high risks, we advised the government to establish a guarantee fund which would make mobilization of finances easy, in the event of a contingent liability arising. A guarantee fund would be a reassurance to investors that irrespective of setbacks in the project, return on investment would be certain. We believe that these recommendations would greatly improve the PPP investment environment in Uganda, thereby attracting private investment to infrastructure.

APPENDIX I.

Start of Block: INTRODUCTION

Dear Prospective Survey Participant,

My name is Elizabeth Elong, a student at Tilburg University, pursuing an LLM in International Business Law. I am conducting a survey as part of my research project which aims to improve our understanding of Private Participation in Infrastructure projects in Uganda. This survey should take approximately 10 minutes. This research is conducted to study the **determining factors and investment barriers to private sector participation in infrastructure projects in Uganda.** All data obtained from participants will be kept anonymous. We will not share your responses with anyone, nor will individual firms or respondents be identified. Only aggregate data will be made public. Moreover, we will not link the survey responses to any other data. If you have any questions regarding this survey, you may contact Elizabeth Elong or the supervisor Prof. Joe McCahery.

Thank you very much for participating in this survey.

I have read the statements above and I agree to participate in this survey.

☐ Yes (1)

End of Block: INTRODUCTION

Start of Block: SECTION A –Respondent Information

Q1. The institution where I work can be best described as:

- ○ Bank (1)
- ○ Insurance Company (2)
- ○ Government (please specify) (3) _____
- ○ University (4)
- ○ Pension Fund (5)
- ○ Law firm (6)
- ○ Financial services firm (7)
- ○ Private equity firm (8)
- ○ Mutual Fund Management Company (9)
- ○ Other (please specify) (10) _____

Q2. How do you rate your knowledge of Infrastructure Development - in particular with regard to private sector participation in Infrastructure Projects in Uganda?

- ○ Extensive knowledge (1)
- ○ Reasonable knowledge (2)
- ○ Limited knowledge (3)
- ○ No knowledge at all (4)

Skip To: End of Survey If How do you rate your knowledge of Infrastructure Development - in particular with regard to priva... = No knowledge at all

End of Block: SECTION A –Respondent Information

Start of Block: SECTION B – General Preference in Infrastructure Investment

Q3. How optimistic are you about private sector investment in infrastructure projects?

- ○ Strongly optimistic (1)
- ○ Somewhat optimistic (2)
- ○ Neutral (3)
- ○ Pessimistic (4)
- ○ Strongly pessimistic (5)

Q4. What type of infrastructure assets are most attractive to investors?

A green field project is one where a completely new project is constructed while a brownfield project is one in which an existing project is renovated or rehabilitated.

- ○ Greenfield project (1)
- ○ Brownfield project (2)

Q5. In your opinion, which projects are more effective in securing private sector investment in infrastructure?

Smaller projects are those that have their focus on local challenges and/or are tied to business projects whereas mega projects are those which focus on countrywide and regional investment needs.

- ○ Mega projects (1)
- ○ Smaller projects (2)

End of Block: SECTION B – General Preference in Infrastructure Investment

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Start of Block: SECTION C – DETERMINING FACTORS AT COUNTRY LEVEL

In this section, we are interested in your views on **the determining factors at *Country Level*** that influence the decision of financiers (investors/lenders) to invest in or finance Infrastructure projects in Uganda.

Q6. In your opinion, how important are these factors to the private sector in determining the investment/financing decision for infrastructure projects?

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
a. Track record of the central or local government in honoring its obligation to investors/lenders (1)	○	○	○	○	○
b. Government Policy in Investor/Lender protection (2)	○	○	○	○	○
c. Clear legal and regulatory framework to support private investment (3)	○	○	○	○	○
d. Country credit rating (4)	○	○	○	○	○
e. Political stability (5)	○	○	○	○	○
f. Corruption level (6)	○	○	○	○	○
g. Good performance on the Ease of Doing Business Index (7)	○	○	○	○	○
h. Technical expertise of public sector employees in the project (8)	○	○	○	○	○

Q7. Among the determining factors listed in question 6 above, which ones do you think are the **TOP 3 MOST RELEVANT** for Uganda?

_____

End of Block: SECTION C – DETERMINING FACTORS AT COUNTRY LEVEL

Start of Block: SECTION D – ISSUES AT PROJECT LEVEL

In this section, we ask about your views on **the** determining factors and **investment barriers at the *Project level*** that influence the decision of financiers (investors/lenders) to invest/finance Infrastructure project in Uganda.

DETERMINING FACTORS

Q8. In your opinion, how important are these factors to the private sector in determining the investment/financing decision for infrastructure projects?

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
a. Project sector (transport, energy, telecommunication) (1)	○	○	○	○	○
b. Geographical location of the project (2)	○	○	○	○	○
c. Project size in terms of investment needs (3)	○	○	○	○	○
d. Transparency in Project and bidding process (4)	○	○	○	○	○
e. Financing structure and instruments (5)	○	○	○	○	○

Q9. Among the determining factors listed above, which ones do you think are the **TOP 3 MOST RELEVANT** for Uganda?

_____

INVESTMENT BARRIERS

Q10. According to you, the following are the major barriers to private sector participation in infrastructure projects in Uganda.

PROJECT SELECTION

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
a. The structure of Projects that involve private sector participation is more complicated compared to traditional public procurement (1)	○	○	○	○	○	○	○
b. Unclear legal and regulatory framework for infrastructure investment (2)	○	○	○	○	○	○	○
c. The Public sector is resistant to private involvement (3)	○	○	○	○	○	○	○

PROCUREMENT AND BIDDING PROCESS

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
d. Lack of skills and knowledge of private sector to implement infrastructure projects (1)	○	○	○	○	○	○	○
e. Lack of transparency in procurement and bidding process (2)	○	○	○	○	○	○	○
f. Inappropriate risk sharing between public and private partners (3)	○	○	○	○	○	○	○

IMPLEMENTATION PROCESS

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
g. Land acquisition remains a major obstacle in completing projects on time (1)	○	○	○	○	○	○	○
h. Lack of coordination between departments in the public sector (2)	○	○	○	○	○	○	○

Q11. Among the investment barriers provided in question 10, which ones do you think are the **TOP 3 MOST RELEVANT** in Uganda?

_____

End of Block: SECTION D – ISSUES AT PROJECT LEVEL

Start of Block: SECTION E – Issues in Structuring the Financing

In this section, we ask about your views on **the barriers and determining factors when selecting Infrastructure Projects in relation with financing structure.**

DETERMINING FACTORS

Q12. In your opinion, how important are these factors to the private sector when selecting *Infrastructure Projects to be financed?*

	Extremely important (1)	Very important (2)	Moderately important (3)	Slightly important (4)	Not at all important (5)
a. The availability of Government Guarantee (1)	○	○	○	○	○
b. Expected return on investment (2)	○	○	○	○	○
c. Project Monitoring Mechanism (the flexibility given to financiers to monitor the project) (3)	○	○	○	○	○
d. Financing instruments (4)	○	○	○	○	○
e. Risk Allocation (5)	○	○	○	○	○
f. Involvement of Development Financial Institutions (MDBs, bilateral development banks) on the project (6)	○	○	○	○	○
g. Creditworthiness of the sponsor (7)	○	○	○	○	○

INVESTMENT BARRIERS

Q13. According to you, the following are major barriers to private sector participation in Infrastructure projects in Uganda.

	Strongly agree (1)	Agree (2)	Somewhat agree (3)	Neither agree nor disagree (4)	Somewhat disagree (5)	Disagree (6)	Strongly disagree (7)
a. Limited options of financing instruments (1)	○	○	○	○	○	○	○
b.Inflexible investment timing (2)	○	○	○	○	○	○	○
c.Unattractive expected returns on investment (3)	○	○	○	○	○	○	○
d. Lack of government guarantee (4)	○	○	○	○	○	○	○
e. Low credit rating of the sponsors (5)	○	○	○	○	○	○	○

End of Block: SECTION E – Issues in Structuring the Financing

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