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Public-Private Partnerships Development Finance Model in Zimbabwe Infrastructure Projects

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Abstract

The economic meltdown and infrastructure decay in Zimbabwe over the past two decades has been strongly attributed to the absence of public-private sector partnerships amid political decay. The rapid intervention by government in the last two years to undertake PPPs has been more pronounced in road network re-construction although not so many projects have been done to date. The financing model of these PPPs has taken centre stage hence the main objective of this research is to evaluate the effectiveness of the PPP development finance model on infrastructure projects in Zimbabwe. PPPs are an alternative source of funding on infrastructure projects and have proved to ease pressure on governments as far as funds for capital intensive projects are concerned. The paper recommends the adoption of different PPP models for each sector given the differential requirements in each sector. It was found that a blanket model for all sectors does not work properly as different sectors have their unique characteristics. In addition, the paper recommends a speedy finalisation of the already initiated policy and institutional framework process to govern PPPs, which would also include putting measures in place centred on risk analysis and management during the process, issues on financing and issues on the mobilisation and incentivising of the private sector to participate in the process.

Subject Areas

Economics

Keywords

Public-Private Partnerships, Infrastructure, Development

1. Introduction and Background

Public private partnerships (PPPs) are defined as the coming together of the public sector (government) and private companies to undertake a developmental project. Usually the public sector contributes, but not limited to, the legal ownership of factors such as lands while the private sector is usually required wholly or partly financing the project, providing expert skills and technology/machinery. These PPPs have been a model for development in both developed and developing countries hence their continued applause in fostering such. Private players use PPP projects to manage political risk on particular projects. A solo run on big projects exposes these private players to the risk involving the "long arm" of governments whereas having the government involved in the project diffuses any irrational political decisions on these projects. Fiscus inadequacies are the major factor forcing many governments to engage in PPPs hence these PPPs are a win-win undertaking for both parties.

The political environment in Zimbabwe since the late 1980s has deteriorated thereby making it unconducive for the private sector to prosper [1]. PPPs have thus been very scarce in the local market while infrastructure has also been dilapidating. The absence of these PPPs has thus resulted in the infrastructure not being maintained to the required levels since independence in 1980. While the deterioration of infrastructure has been a public outcry over the years, the government has failed to raise funding for upgrade) [2].

While national frameworks on PPPs are not consolidated, there are fragmented frameworks which look into PPPs under certain institutions. Zimbabwe Investment Authority (ZIA) has a marketing tool in which it encourages Built Own Operate & Transfer (BOOT) with foreign investors. The recently expired inclusive Government also adopted a PPP model for specific sectors [3]. However all these are fragmented and have not been passed into law.

Construction projects play a vital role in resuscitating infrastructure. Infrastructure development is key to economic growth and development. It was until 1998 that the government of Zimbabwe made some renewed and more focused stride to embrace the PPP model to development. The setting up of PPP guidelines in 2004 ushered in a new era in development. In the history of Zimbabwe, post-independence, the problem of a poor road network has been the major factor identified as a drawback of economic development [4].

While there has been comprehensive documentary review pertaining to the regulations on PPPs in Zimbabwe [5], there has not been much empirical investigation of these issues where the actual players in the construction industry are used as a source of information. It is critical to establish how relevant and practical the regulations put in place are. This research seeks to reconcile these regulations and practice. The low uptake of PPPs in Zimbabwe may not be a result of the assumed political decay only but an array of other factors could be at play. According to [6], the use of PPP models that conform to the environment and legislative structures is more critical as a driving force of PPPs than political situation. It is therefore of utmost importance to investigate the PPP models that exist in Zimbabwe and how they fit or not fit in the existing environment The sufficiency of the legal framework is also scrutinised in this research.

2. Literature Review

2.1. Sectors Considered for PPPs in Zimbabwe

While all sectors in general have been considered for PPPs, the government in Zimbabwe has been advocating for the prioritisation of the most affected areas. These include mainly the road infrastructure, rail infrastructure, water provision including dam construction, health, education as well as power generation. According to [7], the challenge with PPPs in most developing countries is the lack of profitability. The private sector is seeking to generate positive returns from these profits while government is seeking to optimise availability and affordability to the people. These concerns are also echoed by [8] and [9] who argue that the pricing of the final product in PPPs is affected by political aspirations hence the private sector prefers to stay away from these. In Zimbabwe, it was only until recently that PPPs have ventured into road infrastructure development. The motivation emanating from the introduction of toll gate fees for the first time in Zimbabwe. Prior to the introduction, road usage was partly viewed as a free product or there was no clear intent to charge users of roads a fee. This is common in several other developing countries.

Water is also another product viewed as basic in most developing countries hence PPPs in these are generally not profitable [10]. In Zimbabwe, most projects involving water reticulation have remained white elephants. The Gwayi-Shangani pipeline and the Kunzwi dam project are examples of those that have failed to attract private companies to partner government mainly because of pricing problems. The health sector has remained fairly uncontrolled but affordability of health services by the population has dampened the desire by private companies to venture into this. In most developing countries health projects end up being wholly funded by the governments or donors [11]. Power generation projects while they are very profitable, they are prone to intervention by the government. Firstly, pricing in this sector is therefore very sensitive; secondly, the sector depends on levels of industrialisation. Lack of or deteriorating levels of industrialisation remains a negative factor in power generation projects. The education sector has not been explored much in terms of PPP arrangements in Zimbabwe. Ideally, PPPs in the education sector involve public education infrastructure being managed by private companies with ownership remaining in the hands of the government or public. The education sector has remained fairly unexplored for two reasons. Firstly, the pricing in this sector is highly controlled by the government since the long term objectives, from independence have been to provide education to all. Secondly, the sector is already characterised by a significant level of private ownership through "very" private ownership and private ownership through the religious organisations. Church run schools (Mission schools) dominate the education sector in Zimbabwe thereby undermining the scope of PPPs.

Overally, therefore, private sector players have a dilemma in terms of choosing sectors for PPPs in Zimbabwe. These problems are however seemingly entrenched in the regulations and frameworks in place. Development in Sub-Saharan Africa has been limited by the frameworks and regulations which are not attractive to private investors [12].

Governments in most developing countries face the challenge to meet the growing demand for new and better infrastructure services. As available funding from the traditional sources and capacity in the public sector to implement many projects at one time remain limited, governments have found that partnership with the private sector is an attractive alternative to increase and improve the supply of infrastructure services.

According to [13], PPPs offer both strategic and operational choices to Government. Strategically, the use of PPP fosters economic growth by developing new commercial opportunities and increasing competition in the provision of public services and attracting private and foreign Direct Investment inflows, thus encouraging crowding-in of private and foreign investment. At the same time, it allows Government to set Public Private Partnership Policy Statement and strategy, and where appropriate, to regulate economic activities, while leaving service delivery to the private sector. Operationally, PPPs provide opportunities for efficiency gains (better quality and more cost-effective delivery of services), better asset utilization, clearer customer focus (since payments are typically linked to performance rather than service inputs), and accelerated delivery of projects.

2.2. Common PPP Models

[14] notes that there are a couple of PPPs schemes that can be adopted, depending on the nature of the infrastructural project in question. [15] concurs with this view when they note that PPPs for transportation projects take a wide variety of forms. The type of contract used depends upon the type of project, as well as the level of risk and ownership the public agency will accept. The common types of contract for new projects are discussed below.

2.2.1. Design-Build (DB)

On a design-build (DB) contract, the design and construction phases are combined into one contract and are implemented by the private partner for a fixed fee. This contrasts the more typical “design-bid-build” contract model wherein potential contractors give proposals of varying prices. The public partner maintains responsibility for financing, operating and maintaining the project. The DB contract is the most common type of contract for transit PPPs, though some states prohibit them. This model is beneficial when the public agency wants more rapid project completion and when there is sufficient public funding available [15]. However, in most developing economies where public funding is a nightmare, this form of arrangement is not ideal.

2.2.2. Build-and-Transfer Scheme (BT)

Under a BT scheme, the private sector player sources the finance and constructs the infrastructure. Upon completion, the company hands the infrastructure to government or responsible government agency, which then takes over all the roles (ownership and operation roles). In turn, the government would pay the company an agreed sum, together with reasonable returns negotiated beforehand. [8] alludes that under this scheme, there is potential to accelerate construction and transfer of design and operating risk since the private player sources the finance and constructs the infrastructure and upon completion hands the infrastructure to the government. He also indicates that this scheme is suited to projects that involve a significant operating content, particularly roads, water and waste projects.

However, a BT scheme requires some funding on the part of Government to be able to pay the private agent, which may be a challenge to most governments of developing countries [5]. Another weakness of this scheme is that in most developing and under-developed nations it does not attract private finance and as a result commits the public sector to providing long term finance. Thus a BT scheme may not be the best option for most developing nations at the moment considering the global economic environment.

2.2.3. Design-Build-Finance-Operate (DBFO)

[15] affirms that with the DBFO model, the private partner is responsible for design, construction, financing and operation of the project. They go on to note that this model is mainly employed when the public sponsor wants to retain ownership of the project but is reasonably sure that it can generate a revenue stream sufficient to give the investors a return. As such, this method is best suited to projects such as toll roads and transit. Such projects generate income which in turn will be used to pay off the investors.

2.2.4. Build-Operate-and-Transfer Scheme (BOT)

[10] states that under a BOT model, a private sector player undertakes the construction of the infrastructure; financing the construction as well as the operation maintenance. The company would then operate the facility for a fixed term, during which the private player would be allowed to impose on users of the infrastructure fees or rates, such as user fees, rentals etc. The charges to consumers would be expected to be exactly as captured in the contract and should enable the company to recover its costs as well as earn a reasonable return. At the end of the fixed term contract, the facility is transferred to the government agency or local government unit concerned.

According to [8], in a BOT model, operational and investment risks can be substantially transferred to the concessionaire. More so, by retaining ultimate ownership, the government controls the policy and can allocate risks to parties that are best suited to assume or remove them. However, the government has explicit and implicit contingent liabilities that may arise due to loan guarantees and subordinate loans provided, and default of a sub-sovereign government and public or private entity on non-guaranteed loans. BOT projects may also require direct government support to make them commercially viable.

The concessionaire's revenue in a BOT project comes from managing and marketing of the user facilities (for example, toll revenue in a toll road project) and renting of commercial space where possible. Concessions for BOT projects can be structured on either maximum revenue share for a fixed concession period or minimum concession period for a fixed revenue share, a combination of both, or only minimum concession period. This model is most suitable for road infrastructure project, building construction projects, water and waste projects.

2.2.5. Build-Own-Operate-and-Transfer Scheme (BOOT)

This is a scheme where the private sector company finances, constructs, own and operates the infrastructure for a fixed term, asset transfer occurs after a specified operating period when the private provider transfers ownership to a public agency [15]. Ownership implies that the company is allowed to make any decisions it sees fit during the ownership tenure, with minimal or no government interference. It also gets the opportunity to recover its total investment, operating costs, etc. as well as a reasonable return. This would be done through collecting tolls (e.g. for highways), fees, rentals or other charges. At the expiry of the fixed term, the infrastructure is handed over to government, which would then take all responsibilities.

2.2.6. Build-Lease-and-Transfer (BLT)

Under a BLT model, the private sector constructs the infrastructure and once complete, it hands the operation issue to the government on a lease arrangement, where the government/government agency would be paying for the lease [14]. The lease payments would give the company an opportunity to recover its costs, and after an agreed term, the government stops paying the lease and assumes ownership and control over the facility (transfer). In a BLT type of arrangement, the concessionaire makes investments and operates the facility for a fixed period of time after which the ownership reverts back to the public sector. One of the major weaknesses this model has as noted by [8] is that it does not attract private finance and contracts are also more complex.

2.2.7. Build-Transfer-and Operate (BTO)

A BTO scheme entails the private sector company building the infrastructure and upon completion, transfers the infrastructure to the government. However, despite not having ownership, the company is allowed to operate the infrastructure on behalf of the government, with proceeds being distributed as per contract agreement. Just like in the BLT model, this model has the weakness noted by [8] that is that it does not attract private finance and contracts are also more complex.

2.2.8. Rehabilitate-Operate and Transfer (ROT)

According to [5], ROT involves a system where the infrastructure that is already in existence but in a sorry state is handed over to the private sector player for refurbishing, maintenance and reconditioning. The private player is allowed to operate the infrastructure for a period, recoup investment costs and get a reasonable return, following which the facility is handed back. [8] notes that other authors refer to the ROT as Build-Rehabilitate-Operate-Transfer (BROT) and in this arrangement, the concessionaire makes investments and operates the facility for a fixed period of time after which the ownership reverts back to the public sector.

This model has the strength of promoting private sector innovation and improved value for money, improved quality of operation and maintenance and resultantly the government will be able to focus on core public sector responsibilities. However, there is a need for contract management and performance monitoring systems to be put in place. More so, possible conflict between planning and environment considerations may arise.

2.2.9. Lease, Develop and Operate (LDO)

Under an LDO scheme, the private sector player leases an existing facility from the government, renovates, modernises or expands it before assuming operation rights for a fixed term. In that process, the company gets an opportunity to recover costs, with the government benefiting from the lease payments [5].

2.3. Institutional and Regulatory Framework of PPPs

[16] states that a clear policy is an important basis for a successful PPP framework. To develop a PPP pipeline, government agencies need to understand PPPs and how they may be able to use them to achieve their policy ends. Equally, clear information on the PPP program reduces the cost to potential investors of considering opportunities in the country.

Governments should establish a clear, predictable and legitimate institutional framework supported by competent and well-resourced authorities. This means that the political leadership should ensure public awareness of the relative costs, benefits and risks of PPPs and conventional procurement. In order to maintain key institutional roles and responsibilities the procuring authorities, the Supreme Audit Institution and sector regulators should be entrusted with clear mandates with regards to PPPs. The authority that is procuring the PPP is the institution ultimately responsible for the project, subject to approval, monitoring and advice from the other actors at various stages. At the same time, the Supreme Audit Institution (SAI) has an important role ex post examining whether the risks involved in PPPs are managed effectively [17].

Sound regulatory policy promotes the efficient functioning of regulatory agencies by ensuring that they operate under an appropriate and clear mandate, with the necessary independence from political influence and regulated subjects. Given the complexity of PPPs and their infrequent use, critical skills to ensure value for money may need to be concentrated in a PPP Unit that is then made available to the relevant procuring authorities. In order to prevent conflicts of interest and scrutiny roles should not be the responsibility of a single unit. All significant regulation affecting the operation of PPPs should be clear, transparent and enforced. Red tape should be minimised and new and existing regulation should be carefully evaluated.

[17] also stresses that a government agency should have the necessary powers laid down by statute or legal act to enter into a PPP agreement with a private party and undertake obligations under the agreement. A PPP project may also require authorization from government bodies at different levels of government. However, in an emerging PPP market, it may not be always clear what government bodies/agencies may have the legal authority to make such agreements or can authorize a PPP project. It is important to note that obligations undertaken or agreements made, or authorization provided without legal right are *ultra vires* and generally considered to be void and unenforceable. An *ultra vires* act may be void by law and can affect the acts of private companies and government agencies.

In order to clarify these important legal issues, some countries have enacted special laws on PPPs that define the legal regime, administrative and approval processes involved and other related matters. The coverage in national laws may vary widely but should provide clarity and certainty to award contracts and implement projects and may specify:

- Division of responsibility between levels of government and powers of government bodies;
- Sectors covered, details of project identification, approval, procurement and implementation arrangements;
- Types of permitted PPP models and general conditions for these models;
- Guidelines on risk sharing arrangements;
- Provision of financial and other incentives by the government;
- Provisions concerning contract management including dispute resolution;
- The extent to which lenders can undertake security over project assets and its liabilities;
- Administrative process involved in PPP project development and implementation;
- Rights of the parties to a PPP contract agreement.

[8] affirms that it is important to note that the PPP legal regime may, however, scatter over many legal instruments, not just the special law. These instruments may include the private contract law, infrastructure sector regulatory laws, company law, tax law, labour law, competition law, consumer protection law, insolvency law, infrastructure sector laws, property law, foreign investment law, intellectual property law, environmental law, public procurement law or rules, pledge law, acquisition or appropriation law and many other laws. Separate sets of operational rules and guidelines may also exist for many of such ap-

plicable laws. All such applicable laws, statutes, operational rules and guidelines and other specified institutional and administrative arrangements together constitute the legal regime of PPPs in a country.

However, [17] stresses that careful consideration of the legal regime is necessary to examine the extent to which it:

- Provides the legal coverage to enter into an enforceable contract;
- Provides the private sector the necessary legal coverage to finance, build, operate and collect revenues or service payments;
- Covers issues to avert future confusions related to regulatory control, obligations of parties, services, land acquisition, risk and profit sharing, pricing and handover of facilities;
- Deals with issues in contract management (monitoring, dispute settlement mechanisms);
- Additionally provisions in the legal framework concerning the following four important aspects need to be carefully considered;
- Do they sufficiently meet the requirements/interests of the government and the private parties involved;
- How a contract would need to be structured around the provisions in all applicable laws;
- How difficult it would be to enforce the rights of the parties;
- What obligations are allowed to undertake and what government agency has the power to make an agreement and what government body has the authority to approve the project.

To summarise, [17] proposes a three-stage development model for PPPs. During the first stage the government defines the policy framework, tests legal viability, identifies a project pipeline and develops underlying concepts to guide project evaluation and the procurement process. The government also needs to start developing the PPP market. In the second stage, the government establishes the PPP unit, develops the market and the PPP pipeline further. The third stage is more of an outcome than a process. The system is fully developed and legal impediments to PPPs have been removed. The system operates with the required skill, while risk allocation is sophisticated and funding is available for projects.

3. Materials & Methods

This research was descriptive and analytical in nature and it sought to inquire on the implementation PPPs in Zimbabwe through clarification of their elements and characteristics [18]. The research was therefore both quantitative and qualitative in nature, based on a combination of a case study and a cross-national comparative component, the research methods that were employed included a mix of multiple data collection methods. These include secondary data analysis (desk study) and primary techniques which included key informant interviews (semi-structured) and questionnaires. The study also utilized non-probabilistic sampling techniques. This was so because the researcher intended to target a particular group of people who have knowledge on the area of research. The key informants were project managers in various private construction projects as well as project managers within the Publics works of Zimbabwe. Managers at IDBZ (Infrastructure Development Bank of Zimbabwe) were also part of the key informants who provided primary data (see Table 1 below).

The study area was Harare, Zimbabwe. Harare was chosen because it is the capital city of Zimbabwe and houses the head offices of all government ministries and departments. Moreso, the majority of contractors and private financiers (especially banks) are housed in Harare.

There are very few documented infrastructure projects implemented through PPPs and these include the Beitbridge Bulawayo Railway (BBR), the New Limpopo Bridge (NLB), the Newlands By-Pass (NBP) [13], Plumtree-Mutare Highway rehabilitation and a few small scale water and sewer projects. This research therefore focused on relevant government departments/ministries, Harare city council, ZINARA, contractors in Harare and financiers in the private sector who take part in PPP projects so as to have an all-inclusive overview of the research problem in the industry as a whole. The researcher targeted directors and chief personnel in government departments and financing institutions as these were considered to have access to the information that the researcher required for the study. Consulting quantity surveyors and town planning professionals were also included in the study.

Table 1. Informants used in the research.

Consultants	Size
Quantity surveyors	2
Town Planners	2
Contractors/Developers	6
Government Departments	
Ministry of Local Government, Public Works and National Housing	4
Ministry of Transport and Infrastructure Development	4
Ministry of Health and Child Welfare	2
Zimbabwe National Water Authority	2
Ministry of Environment, Water and Climate	2
Zimbabwe National Road Authority (ZINARA)	4
Harare city council	4
Financing Institutions	3
Old mutual	2
Infrastructure Development Bank of Zimbabwe (IDBZ).	2
FBC	2
CBZ	2
Total	**40**

4. Discussion of Results

4.1. The Role of PPPs

Responses from questionnaires (see **Appendix 1**) and interviews reveal that PPPs play a vital role in the Zimbabwean economy and any other economy (**Figure 1**). A greater population of the respondents noted that one of the major roles of PPPs is providing an alternative source of funding for huge infrastructure projects. This was represented by a frequency of 25. This is mostly common when a government engages a private partner on either a turn-key basis on the project or it allows the other party to finance the project. Most construction projects require huge capital which is a challenge in acquiring in the Zimbabwean economy and other economies of developing nations [19] henceforth PPPs will come in very handy.

A significant number of the respondents cited that PPPs help ease pressure on governments as far as infrastructure development is concerned, with a frequency of 18. They noted that PPPs are a viable procurement method on infrastructure projects as they can substitute traditional procurement which has a tendency of burdening governments of most developing nations. This is so because if road infrastructure projects are procured using the traditional method, funds have to be disbursed from the national budget (treasury) which is already over budgeted in most economies due to the economic crunch facing the whole world [20].

Moreso, some of the respondents noted that PPPs also stimulate faster economic growth through provision of basic infrastructure; this had a frequency of 15. This is mainly triggered by the development of new commercial opportunities which will in turn attract Foreign Direct Investment (FDI) inflows. [21] noted that construction is a key sector of every economy. In almost all the countries, the construction industry constitutes a large part of the economy. Studies show that construction contributes between 5 and 10 percent of gross domestic product. There are also many reasons for the industry's importance. First, the construction industry is important because of the outputs and outcomes of its activities. It contributes to national socio-economic development by providing the buildings which are used in the production of all goods in the economy.

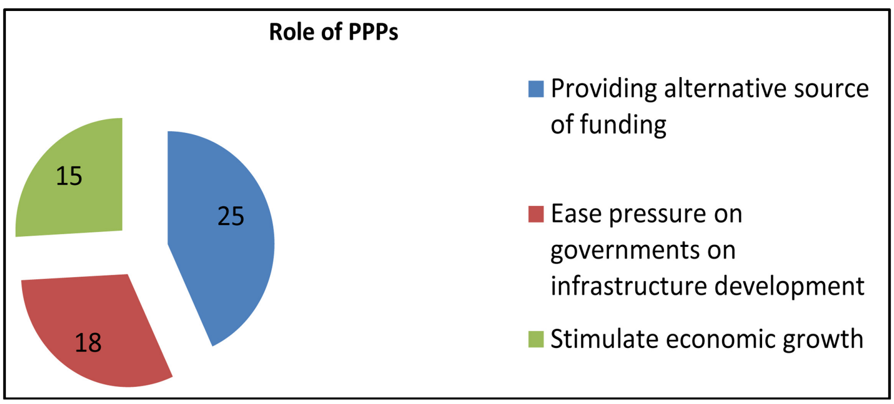

Figure 1. Role of PPPs.

Moreover, the physical infrastructure, built through construction activity, is the nation's economic backbone as it forms the arteries for the facilitation of productive activity by enabling goods and services to be distributed within and outside the country.

4.2. Models of PPPs

Out of the total population, 45% of the respondents noted that considering the current economic situation in Zimbabwe, a Build Operate Transfer model is most preferable (**Figure 2**). In support of this opinion most respondents cited a few advantages that this model presents in comparison to other models. They noted that a BOT model is less risky in terms of reliability or default by the government to perform its obligations especially on payments. The model helps attract more partners as they have some sort of security of recouping their investment from the infrastructure built by implementing a user pays principle, for example toll fees.

[8] supports this view when he notes that in a BOT model, operational and investment risks can be substantially transferred to the concessionaire. The concessionaire's revenue in a BOT project comes from managing and marketing of the user facilities (for example, toll revenue in a toll road project) and renting of commercial space where possible.

30% of the population preferred the Build Transfer Operate (BTO) model. They argued that public infrastructure is best managed by the government therefore it is best that the private partner after building he transfers the infrastructure to the government since despite having ownership the party is allowed to operate the infrastructure on behalf of the government. Those who were not in support of this model noted that at times government intervenes in the management and collection of user fees henceforth disadvantaging the other party and this alone scares away investors. [8] concurs with this view as he notes that this model has the disadvantage that it does not attract private finance and contracts are also more complex.

Only 15% of the population were in support of the Build Transfer (BT) model. A greater percentage however noted that this model is more risky to the private

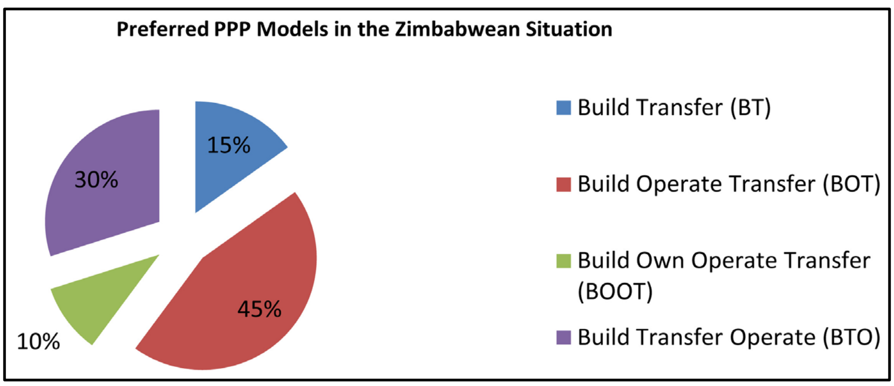

Figure 2. Models of PPPs in Zimbabwe.

party as there is no form of security to guarantee payment of your money if the government fails to pay, unlike other models where one can actually manage and collect user fees from the infrastructure. This 15% greatly constituted respondents from government departments who also cited the point raised above that public infrastructure is best managed by the government.

10% of the population preferred the Build Own Operate Transfer (BOOT) model. They noted that this model gives the financier of the project security of investment. Most of the respondents however did not support this model as they noted that it is very risky to let a private party own public infrastructure as he can do whatever possible to maximise returns from the property and in the process there might be change of use of the property before it is handed to the government hence disadvantaging the public who are the rightful owners. [15] bears with this view as they state that ownership implies that the company is allowed to make any decisions it sees fit during the ownership tenure, with minimal or no government interference.

4.3. The Legal Framework of PPPs in Zimbabwe

Out of the total respondents, 65% noted that they were not aware of any legal or regulatory framework or policy concerning PPPs in Zimbabwe (**Figure 3**). The remaining 35% were aware of the legal framework of PPPs in Zimbabwe. They noted that as of now, Zimbabwe has not yet passed a policy specifically concerning PPPs; the policy is still in draft form. However, on PPP projects the government is guided by supporting policies such as the Procurement Act, the Income Tax Act, the Indigenization and Economic Empowerment Act, the Reconstruction of State Indebted Insolvent Companies Act, the Zimbabwe Investment Authority Act, the Urban Councils Act, and the Rural District Council Act.

An analysis of some of the supporting policies that guide the government of PPPs showed that the sections that relate to PPPs have a negative impact on attracting investment. Interviewees from government departments noted that two major policy documents that are mostly referred to are the Procurement Act and the Indigenisation and Economic Empowerment Act of 2007.

- **Procurement Act**

This Act unfortunately though used as a supporting policy document mainly

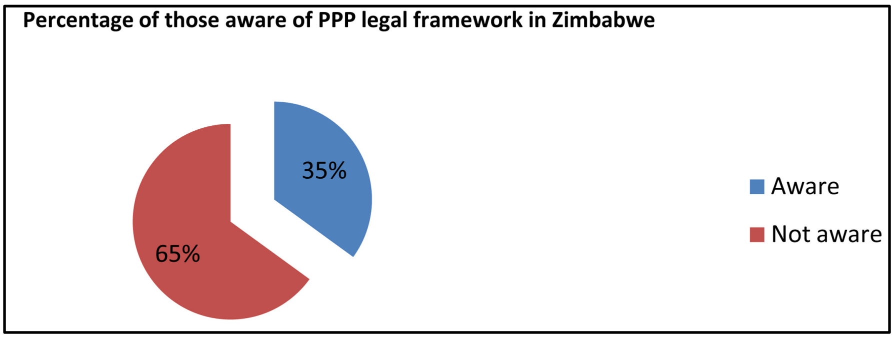

Figure 3. Awareness of PPP legal framework in Zimbabwe.

focuses on the setting up and functions of the State Procurement Board (SPB). This Act states that all public projects are to be procured through the State Procurement Board and this is stated in Section 5. Part IV addresses the procurement proceedings. Goods or construction work shall be done by means of tendering and the SPB is given the power to restrict participation in procurement proceedings to persons who are citizens of or ordinarily resident in Zimbabwe (Section 34(2)). This however scares away some investors as they will not be citizens of Zimbabwe though they may have the capacity to perform the procurement contract. Moreso, considering the economic conditions in Zimbabwe it is not very wise to shy away foreign investors who are willing and have the capacity to partner on infrastructure projects. Though the Act recognises BOOT and BOT contracts as procurement contracts, there is a need to provide for equal preference of both domestic and foreign suppliers.

The Procurement Charter provides for the approval process on PPPs. There is a lot of red tape on the approval process on PPPs. The relevant line ministry completes the initial technical appraisal and submits the project to the Inter Ministerial Committee on Public Private Partnerships (ICPPP) for economic, social and environmental impact appraisal. If approved, the ICPPP will submit the proposal to the Cabinet Committee on Investment and Development (CCID) through its working party. The CCID will then recommend the project to the Cabinet, then it goes to the line ministry or Local Authority (L.A) and this is a lengthy and time consuming process.

- **Indigenisation and Economic Empowerment Act**

This act provides support measures for the further indigenisation of the economy to provide for support measures for the economic empowerment of indigenous Zimbabweans. This policy also has some sections which can scare away investors. Under the code of ethics in this act, it is stated that businesses shall utilise locally available resources and indigenous knowledge systems and this bars investors/contractors from importing resources which might be a cheaper option for them henceforth they will just move their investments to other countries willing to accept their terms.

Part 2 (f) actually states that all companies shall procure at least 50% of their goods and services in Zimbabwe and from indigenous Zimbabweans and any subcontracting required to be done shall be done in favour of businesses owned by indigenous Zimbabwean. This also discourages foreign investors.

The Government of Zimbabwe Report of August 2009 asserts that one of the major challenges currently hindering investment in form of PPPs projects in the construction industry is that there is no legislation, policy, or institutional framework that pertains specifically to PPPs in Zimbabwe. The situation has not changed since then as [22] also denotes the same challenge as they note that in 2011 PPIAF provided technical assistance for a public-private partnership (PPP) assessment to provide guidance for the Government of Zimbabwe on the development and implementation of its PPP program, covering the transport, electricity, telecommunications, and water sectors because there still was no policy on PPPs. [23] report also denotes that there is still no policy on PPPs in Zimbabwe yet. Moyo (2013) in her recommendations in her research on PPPs on water sector she notes that for private sector involvement to be successful, the recommendations include the need for a regulatory framework for PPPs in Zimbabwe, establishment of a regulator through policy, political willingness and transparency which also reflects that there is no PPP policy in Zimbabwe which is a cause for concern.

Lack of policy however scares away investors as there will be little or no security of investments. [22] report of 2012 states that a clear policy is an important basis for a successful PPP framework. However, to develop a PPP pipeline, government agencies need to understand PPPs and how they may be able to use them to achieve their policy ends. Equally, clear information on the PPP program reduces the cost to potential investors of considering opportunities in the country. Moreso, it is important that a policy framework on PPPs be developed, which would guide the PPP process. In addition, a public institution to oversee the whole process also needs to be developed. The institution would also play an active role in developing the legislative framework for PPP. The existence of policy framework, legislation and PPP institution plays the most critical role in making PPP successful.

The importance of a proper PPP legal framework can never be under estimated. Examples can be found where PPPs failed due to absence or weak legislative frameworks. For example, in Poland, the need for specific laws or regulations was not considered until at a highly advanced stage. Due to the absence of the legislative framework, it took almost seven years between the selection of the concessionaire and the signature of the concession agreement in the case of the A1 Toll Motorway Project in Poland. This was after it was later identified that the procurement legislation was not good enough, and a decision was made during procurement to amend a piece of legislation (Toll Motorway Act) to define the legal framework for PPP in the road sector. The lengthy legislative process was costly as the benefits were delayed [9].

4.4. The Roles and Powers of the Parties in a PPP Arrangement

The underlying logic for establishing partnerships is that both the public and the private sector have unique characteristics that provide them with advantages in specific aspects of service or project delivery. The most successful partnership arrangements draw on the strengths of both the public and private sector to establish complementary relationships. The roles and responsibilities of the partners may vary from project to project.

The respondents generally agreed that the major role of the private partner is to provide access to funding, executing the project, providing expertise and also providing required equipment. Amongst these roles providing access to funding had the highest frequency of 25 (**Figure 4**). Moreso, the interviewees also shared

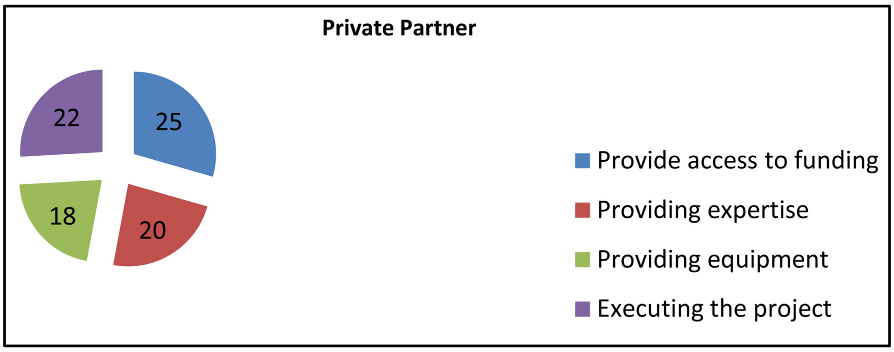

Figure 4. Role of private partner in PPPs.

the same opinion that the major role of PPPs is to provide an alternative source of funding for infrastructure projects especially those that are capital intensive. They noted that most governments especially of developing nations do not have the capacity to embark on huge infrastructure projects at the same time because their budgets are already constrained hence the need to partner with private players who can bring in funds to finance the projects. [15] also notes that in PPPs the private party is there as a financier in most cases and this is their major role. This in turn ensures timely completion of projects as funds will be available.

Executing the project had a frequency of 22. Most of the respondents noted that apart from financing the project, the private party also has the responsibility of executing the works, the Plumtree-Mutare highway and the Newlands By-pass were given as examples amongst other projects where it was evident that the private partners (G5 and Lewisham Investments) did the construction of course under the supervision of the government and city council respectively. [24] also noted that in most partnerships, the private partner has the duty of executing the project and providing equipment and expertise. This has the advantage that if the private partner has the responsibility of financing and executing the project it is most likely that the project will be completed on time and within budget as there will be very little or no diversion of funds like what usually happens in most government projects.

Providing expertise had a frequency of 20. Most respondents noted that since the private partner has the responsibility of executing the project, then it is also his responsibility to ensure that he has the required experts on the projects. [25] notes that PPPs lead to transfer of knowledge, management skills and new technology. This is made possible as small and medium enterprises and indigenous entrepreneurs can invest in PPP projects. [8] concurs to this when he notes that partnering with the private sector brings a specialized management capacity for transportation projects, including access to private sector expertise in the financing of a project, and private sector knowledge of new technological innovations can also help create better transportation initiatives. Outcomes of this kind of expertise include project cost savings and improved quality and system performance from the use of innovative materials and management techniques.

Additionally, providing equipment had a frequency of 18 and this was regarded almost similar to the role of providing expertise discussed previously. There is a great advantage especially to the developing nations of transfer of technology through hi-tech equipment since the private contractor will have to bring in his equipment. This will aid in timely completion of some activities. Kong (2011) [8] notes that the private party actually has the capacity to provide technologically sound equipment on projects and this enhances timely completion of projects.

The respondents noted that the major roles of the government include; setting the policy or legal framework governing PPPs in Zimbabwe which had a frequency of 23 (**Figure 5**). The respondents noted that it is the responsibility of the government to draft policies which govern PPPs in the country. This is so because the government has the authority to do so through the relevant departments and ministries. Having a clear policy has the advantage of attracting investors and this will make it easier for government to sell its projects. Furthermore coming up with the project and selling it to investors is the responsibility of the government and it had a frequency of 22. When it comes to provision of public services, the government is the one responsible with coming up with a portfolio of projects and prioritising them basing on the state of urgency.

Supervising during and after project implementation had a frequency of 20. Most of the respondents noted that public infrastructure should benefit the public and as such the government should protect the interests of the public and this is enhanced through supervising the projects so as to make sure that the project is delivered as according to the plan. They also noted that after completion of a project the government still plays a supervisory role since most of the contracts last for years on the payback period. An example of such a scenario can be that of collection of toll fees on the Mutare-Plumtree highway, though the money collected from these tolls is for G5, ZINARA however has its staff on the tolls for collection and records keeping of the money. The government cannot solely entrust the private party to operate the infrastructure without any supervision whatsoever.

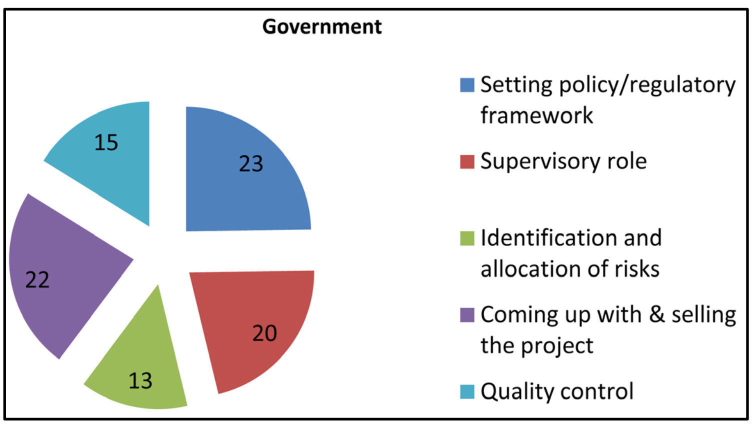

Figure 5. Perceived role of government in PPPs.

Quality control had a frequency of 15. Most of the respondents noted that the major reason of supervising the private party/contractor during project implementation is to ensure that required quality standards are met. Additionally, another responsibility is that of identifying risks and allocating them to responsible parties who can best manage them and this had a frequency of 13. Most of the interviewees noted that it is the government that should allocate risks to the respective parties since they are also responsible for supervising projects under PPPs in most cases. [26] supports this view when he notes that one of the advantages PPPs offer is that of risk management through allocation of risks to parties who can best manage them. However, in most partnerships, it is the duty of the government to allocate these risks as it is the overall supervisor on public projects.

4.5. Challenges of PPPs

Lack of policy had the highest frequency of twenty two (22) (**Figure 6**). Most of the respondents noted that in Zimbabwe we do not have a clear policy concerning PPPs and some cited that they were not aware of any policy. They also noted that a clear policy provides some security for investors hence attracting investors. Regarding the issue of the PPP policy in Zimbabwe, [22] alluded that PPP policy environment in Zimbabwe is still at its infancy, the Policy Framework is still in draft form, and the legal framework and the regulatory regime have not been fully developed which is a great challenge.

Political risk had a frequency of eighteen (18). Most respondents noted that Zimbabwe is considered politically unstable which makes it a risky environment for investors. Of late we have had investors from the east mostly triggered by the look east policy after we had disagreements with the western countries. [27] noted that the risk factors associated with political instability in Zimbabwe are growing. [5] also notes that countries considered politically unstable, fragile and prone to conflict present unique challenges, caused not only by heightened risks of new or recurring political violence, but also by structural and institutional weaknesses. As a result, the volume and composition of foreign capital flows to

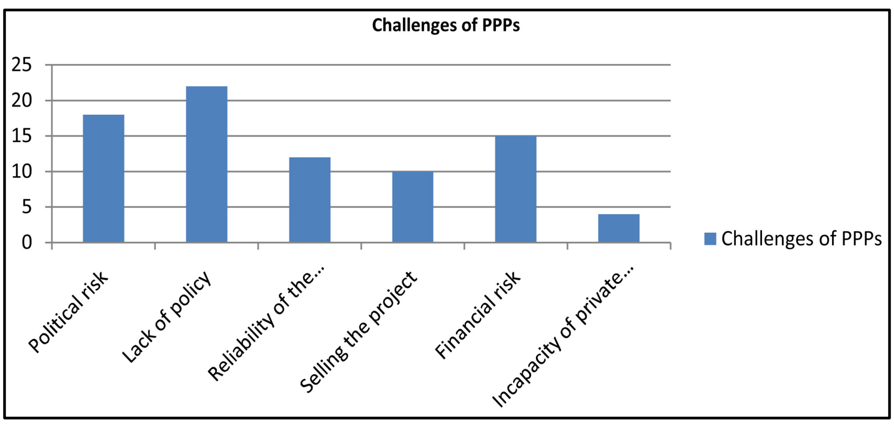

Figure 6. Challenges faced in PPP structures.

these countries is significantly different from patterns observed in politically stable countries in general.

Following was financial risk with a frequency of 15. Most respondents noted that some PPP models pose financial risk to the investors. They noted that it is a possibility that the government might fail or take too long to repay the investors the capital injected in a project. Amongst the models cited to pose this risk was the BT and BTO model. The BT model does not give the investor a way of recouping his investment from the built infrastructure whilst the BTO scheme gives the government the right to intervene on managing the property. [28] also noted that financial risk may also come in the form of shortage of financial resources.

Reliability of the government had a frequency of twelve (12). The respondents generally agreed that the Zimbabwean government at times is unreliable. In view of this, [28] notes that all levels of government face, to some extent, the dilemma of how to budget for the multi-year outlays required by PPPs without actually receiving multi-year allocations for those projects. This may in turn cause the government to default some payments. Moreso, [22] on challenges of PPPs in South Africa notes that fear of losing control of infrastructure assets, authority, or responsibilities may make the government breach PPP contracts. Political leaders may dislike private sector involvement in infrastructure because of a fear that they will have to cede responsibilities, authority, or control of infrastructure assets. Many constituencies dislike PPPs for similar reasons, namely, that the private sector will destroy, rather than create jobs.

This was followed by ability to sell the project with a frequency of ten (10). Interviewees generally agreed that not all projects are marketable to investors. When it comes to public projects, most investors are hesitant to come in as partnering with the government is a bit complex, there are too many parties involved in terms of the departments and bureaucracy.

Incapacity of the private players had a frequency of four (4). Most respondents noted that this was not much of a challenge as the private sector is capable of financing construction projects as evidenced by the projects being implemented around the country. However a few respondents noted that the private sector can also be unreliable as they are in business to make money hence public projects may not be quite desirable to them. In [22], it is noted that there is a general mistrust among the implementing agencies of private sector involvement in provision of infrastructure services and this is also the case here in Zimbabwe.

5. Conclusions

Public Private Partnerships have become a widely acceptable and viable financing model for infrastructure projects throughout the world. Though most developing countries have embraced PPPs recently in comparison to the developed nations, they have been quite effective on the execution of infrastructure projects as far as time, cost and quality are concerned.

- For PPPs to be effective they need an enabling environment and this includes creating a policy enabling environment and this is what is lacking in Zimbabwe. A clear policy and regulatory framework encourages investors to partner with the government as this gives them a sense of security of investments and provides transparency for the infrastructure projects. In Zimbabwe the policy specifically for PPPs is still in draft form, it has not been passed yet and for the projects done under a PPP arrangement supporting policies have been used and these include the Indigenization policy, Urban Councils Act, Procurement Act, Rural District Councils Act among others.
- Apart from a clear policy, the models of PPP arrangement should be seriously considered, a win-win situation is favourable to both parties. [11] emphasizes on the need to ensure that private players in these PPPs are rewarded adequately if these should remain sustainable in a country. In developing countries, financing for construction projects has proved to be a challenge as most of the projects are capital intensive and the governments are struggling to raise the funds. However, models such as BOT and BTO have proved to be quite preferable as they offer security to both parties in that the private partner has some kind of guarantee to recoup his investments and at the same time the government has control over operation of the public infrastructure. From this research, it can also be concluded that the BOT and BTO models are most preferable as these will attract investors.
- From this research, it can also be concluded that the PPP financing model does not only offer benefits but also does present some challenges. Challenges that are relevant to Zimbabwe include political risk, lack of policy, financial risk, selling the project and lack of reliability by the government as they can breach the contract.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix 1: Interview Questionnaire

National University of Science and Technology
Think in Other Terms

Questionnaire Guide

Introduction

My name is Yvonne Munanga and I am a student at the National University of Science and Technology (NUST) undertaking Master of Science in Construction Project Management Degree. I am carrying out a research entitled "An evaluation of the effectiveness of Public-Private Partnerships development finance model on Zimbabwe infrastructure projects". The research will help improve project success on road infrastructure projects as a result of better understanding and appreciation of benefits and challenges of the PPPs financing model in Zimbabwe. All information provided by respondents will be treated with strictest confidence.

SECTION A: GENERAL INFORMATION

Background Profession					Work Experience			
Architect	Civil Engineer	Town Planner	Quantity Surveyor	Other (Specify)	0 - 5 years	6 - 10 years	11 - 15 years	Other (Specify)

SECTION B; PUBLIC-PRIVATE PARTNERSHIPS (PPPs) LEGAL FRAMEWORK

1) Do you understand PPPs?

Yes □ No □

2) Are you aware of any policy/legal framework governing PPPs?

Yes □ No □

3) If yes to the above question, shed more light.

……………………………………………………………………………………

……………………………………………………………………………………

4) Which PPP models do you think are most suitable on road infrastructure projects considering the Zimbabwean situation and why?

Build Operate Transfer (BOT) □ Build Transfer (BT) □
Build Own Operate Transfer (BOOT) □ Build Transfer Operate (BTO) □

……………………………………………………………………………………

……………………………………………………………………………………

5) What are the roles or advantages of PPPs in any economy?

Providing an alternative source of funding □

Ease pressure on governments □

Stimulating economic growth □

6) What are the roles of the government in a PPP?

Supervising □ Setting policies □

Identification and allocation of risks □ Quality control □

Coming up and selling the project □

Other……………………………………………………………………………

7) What are the roles of the private players in a PPP?

Proving access to funding □ Providing expertise □

Executing the project □ Providing equipment □

Other……………………………………………………………………………

8) What are the challenges likely to be encountered in a PPP?

Financial □ Risk of government reliability □

Lack of policy framework □ Incapacity of private players □

Political risk □ Selling the project □

9) From the above mentioned challenges, which challenges greatly relate to the Zimbabwean situation?

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………………………………………………………………………………

10) In your opinion or judging from experience, how effective are PPPs on infrastructure projects in Zimbabwe?

………………………………………………………………………………

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11) Do you have any comment you want to share concerning the PPPs financing method on construction projects?

………………………………………………………………………………

………………………………………………………………………………

12) What would you recommend to improve PPPs in Zimbabwe?

………………………………………………………………………………

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Appendix 2: Interview Guide

National University of Science and Technology

Think in Other Terms

INTERVIEW GUIDE FOR GOVERNMENT MINISTRIES

1) Is there any policy/legal framework governing PPPs on road infrastructure projects in Zimbabwe?

2) What is your role as the government in a PPP arrangement?

3) How many projects have you implemented under a PPP arrangement?

4) Which PPP models do you think are most suitable in road infrastructure projects in Zimbabwe?

5) How reliable are private players in PPPs as far as fulfilling their obligations?

6) Considering the uncertainty of construction projects (variations occur in most projects) how flexible are PPPs?

7) How easy is it to find a partner on road infrastructure projects?

Thank you for your cooperation