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Public-Private Partnership Projects: A Panacea for Infrastructure Deficit?

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Abstract:

This paper aims to study the nature of public private partnership projects in the infrastructure sector and their role in addressing infrastructure deficit especially in developing economies. The paper highlights the arguments for and against adoption of infrastructure public private projects as well as the critical success factors for the same. The methodology used in this study is an in-depth review of extant literature on public private partnerships from various parts of the world in different stages of the development spectrum to examine the application of the public private partnership model in the delivery of public infrastructure projects. The study established that public private partnership projects have been used successfully to bridge the shortfalls in public sector's efficiency and financial limitations and have proved effective in infrastructure development. The public private partnership model is however complex in nature and requires certain enabling factors. This paper adds value to the available body of knowledge on infrastructure public private partnerships projects by relating the study to the Kenyan context and offering an assessment of the gains made in adoption of this model as well as offering recommendations for the model to be sustainable.

Keywords: Public-Private Partnership (PPP) projects, infrastructure, project governance, institutional capacity

1. Introduction

Infrastructure development has been termed as the foundation and catalyst for industrialization and economic growth. According to the World Economic Forum, extensive and efficient infrastructure is a key determinant of the location of economic activity and the types of sectors or activities that can develop in a particular economy as it reduces the distance between regions and integrates national, regional and global markets (World Economic Forum, 2010). Infrastructure has the potential to drive economic growth through higher employment, higher trade, better health and poverty alleviation. As such, it is imperative that significant investments be made in the sector if the country is to reap benefits that are worth the while (World Bank, 2014).

Infrastructure can be broadly categorized into two; economic and social infrastructure. Economic infrastructure refers to telecommunications, roads, irrigation and electricity systems whereas social infrastructure comprises water supply, sewerage systems, hospitals and school facilities (Sawada, 2015). Infrastructure has also been listed as one of the key indicators of a nation's competitiveness- "the set of institutions, policies and factors that determine the level of productivity in an economy, which in turn set out the level of prosperity that the country can earn" (World Economic Forum, 2015). It is estimated that every dollar spent on a capital project (in utilities, energy, transport, waste management, flood defense or telecommunications) generates an economic return of between 5% and 25% per annum (PricewaterhouseCoopers, 2014).

1.1. Characteristics of Infrastructure Projects

As cited by Ehlers (2014), infrastructure projects possess unique characteristics such as capital intensity and longevity. Most public projects are capital intensive with high initial costs, lack of liquidity and a long asset life. They require substantive financial requirements and may not generate positive cash flows during the early phases of operations while others may not generate any revenues entirely requiring government intervention to create investment value. Secondly, infrastructure projects possess huge economies to scale and generate externalities this is because these projects comprise natural monopolies e.g. electricity supply that generate business returns and other social benefits. At times, direct payoffs to an owner of a project may be inadequate to cover project costs, but the investment is still made as the direct externalities of the project can be beneficial to the whole economy. Such benefits are difficult to measure and even if they are measured charging for them may not be feasible or desirable. Thirdly, infrastructure projects involve complex legal arrangements structured to ensure proper distribution of payoffs and risk-sharing to align the incentives all parties. These projects are also unique in terms of the services they provide and their structure and potential complexity makes the investment less liquid. Finally, public infrastructure projects tend to lack transparency due to opaque and diverse structures. The information required by investors to assess these risk structures and infrastructure market in general is limited

and highly scattered, creating uncertainty. The lack of a clear benchmark for measuring investment performance is also seen as one of the many barriers to government project investment.

1.2. Trends in Infrastructure Development

1.2.1. Global Trends in Infrastructure Development

Over the years, infrastructure has continued to secure its position as one of the critical items on the global development agenda. Governments around the world have pledged their support to bridge the infrastructure gap and have initiated and implemented various strategies such as increasing infrastructure expenditure, implementing more efficient approval processes and opening up opportunities for Private Investment in Infrastructure. Worldwide, infrastructure spending is expected to grow from \$4 trillion per year in 2012 to more than \$9 trillion per year by 2025. Overall, close to \$78 trillion is expected to be spent globally between 2014 and 2025 (PricewaterhouseCoopers, 2016). The infrastructure community which has struggled with political and regulatory risks plaguing infrastructure delivery have called for the depoliticization of the infrastructure agenda. The community has also urged for regulatory reforms, formulation of national infrastructure development plans as well as thorough and streamlined processes for the prioritization and evaluation of infrastructure projects (KPMG International Cooperative, 2015). Notably, multilateral organizations and development banks have increased their involvement in the delivery of infrastructure with a goal of enhancing the flow of long-term capital especially in developing economies.

Another trend in global infrastructure development is the rise of megaprojects-large, capital and labour intensive projects meant to provide solutions to major infrastructure challenges-around the world. However, these megaprojects come with huge complexities that may be difficult to navigate such as the financial requirements and management skills required to run the megaprojects. In addition, infrastructure investment has taken a more global approach. Despite the fact that infrastructure development is local by nature, investors, operators and developers (e.g. Japanese Trading Houses and Chinese firms) are traversing borders to seize opportunities that provide attractive returns. Due to the advancement in technology, the infrastructure community has called for market reforms to facilitate the delivery of investment and efficiencies in various infrastructure sectors. Governments are now tasked with ensuring that the regulatory frameworks remain stable to provide security to investors while at the same time ensuring that users or consumers of the infrastructure projects are not exploited. Lastly, the scarcity of resources has also necessitated the implementation of infrastructure projects that conserve the scarce resources. This has seen the launch of projects in sectors such as renewable energy, water and sewerage treatment and distribution. The need to secure resources has prompted the development of efficient infrastructure to mitigate the effect of resource scarcity. (KPMG International Cooperative, 2015)

1.2.2. Infrastructure Delivery in Africa

African governments have realized the importance of infrastructure development in the continent and have continued to implement many projects in a bid to realize the economic gains attributable to efficient and effective infrastructure. There has been considerable investment in this sector, for instance, a group of 20 African national governments reported spending USD 42.2 billion on infrastructure in 2012. Infrastructure spending for Sub-Saharan countries is expected to reach USD 180 billion per annum by 2025. Sectors with the highest budget allocations were transport (36%) and energy (30%). At this rate, the region will maintain its 2% share of the global infrastructure market (PricewaterhouseCoopers, 2014).

1.2.3. Infrastructure Development in Kenya

Enshrined in Kenya's Vision 2030 is the nation's blueprint of achieving middle income status by the year 2030 anchored on sector-specific development projects. As the country strives towards the realization of the Vision, the government has identified some investing in selected flagship projects and priority sectors projects as one of the key strategies in achieving national development priorities. This has been expressly stated in the 2nd Medium Term Plan 2013-2017 as follows: *"To further enhance efficiency and competitiveness of our economy, the government will devote more investment to infrastructure and to the key sectors of the economy that will drive growth..."*. In addition, infrastructure development still remains one of the priority areas in the national development agenda as outlined in the Plan (Ministry of Devolution and Planning Kenya, 2013).

As with other Sub-Saharan countries, Kenya is also experiencing an infrastructure deficit in all major sectors despite having devoted about 27% of the national budget to infrastructure development. The country needs to spend approximately Ksh. 4 Billion annually to meet its infrastructure goals, an amount that is considered one of the highest in Africa. The country presently relies on hydro and thermal power which is susceptible to unfavourable climatic conditions and fluctuation of fuel prices. The electricity generation capacity of these sources is about 1,690 MW which is inadequate to meet the rising demand needed to achieve the targeted economic growth. In addition, Kenya's power tariff (USc 18.7/kw) is relatively high compared to some neighbouring countries' tariffs (Tanzania= USc 9/kw; Ethiopia= USc 3/kw) (African Development Bank , 2014).

By 2012, only 18% of the Kenyan population had access to electricity with many people in the urban areas experiencing scheduled and impromptu blackouts. In the rural areas, only 5% of the population had been able to access electricity. The government through the ministry of energy and the affiliated energy sector companies has made significant strides in diversification of electricity generation sources, and modernization of the power distribution systems in order to enhance usage efficiency and reliability of supply. The country has also invested in regional infrastructure projects that will reinforce Kenya's position in the regional power market while allowing it to benefit from the regional power pool (African Development Bank , 2014).

1.3. Problem Statement

Despite registering considerable economic growth, many emerging economies around the world still do not have access to reliable infrastructure services. An estimated 1.3 billion people globally have no access to electricity, 768 million lacking access to clean water, 2.5 billion suffering inadequate sanitation and 1 billion or more living more than two kilometres away from an all-weather road and 2.8 billion cooking their food with solid fuels such as wood (World Bank, 2016). This global infrastructure access gap has been attributed limited investment in infrastructure. Currently, the world spends about USD 2.5 Trillion annually on infrastructure systems which is not sufficient to address the growing infrastructure demands that will require an annual expenditure of about USD 3.3 trillion annually until year 2030. This trajectory indicates a deficit of USD 350 billion a year even without addressing the present maintenance backlogs (McKinsey Global Institute, 2016).

Africa's infrastructure has failed to keep pace with the rest of the world with an estimated 30% of infrastructure in Africa being in a dilapidated state and plagued by massive backlogs across the various infrastructure types. Poor access to infrastructure has also been cited as a major constraint to doing business in Africa, lowering firm productivity by about 40%. Similarly, lack of funding is often cited as the biggest reason behind Africa's infrastructure deficit and the continent is required to spend about USD 93 billion annually until 2020 to bridge its infrastructure gap. More specifically, the largest infrastructure deficit in Africa is found to be in the power sector in terms of generation capacity, electricity consumption and security of supply. Sub-Saharan Africa is most affected in the continent (PricewaterhouseCoopers, 2014). Of some 196 active infrastructure projects in Africa, 141 or 72% are still in the conceptual, planning or pre-implementation phase. In other words, only 28% of projects are being implemented (Ernst & Young, 2014). In a PwC, Sub-Saharan Africa survey, 47% of the respondents indicated they experienced delays in the project with East African respondents indicating delays of more than 6 months, 36% of the respondents had experienced budget overruns of between 10% and 50%. In the same survey, 32% of the respondents indicated presence of quality problems or variations from original specifications in some or most cases of their projects (PricewaterhouseCoopers, 2014). The challenges have been attributed to financing challenges, governance challenges, lack of internal capacity, poor project management skills, lack of continuous monitoring and control.

In Kenya, having adopted Vision 2030 the government has realized the need for massive investment in infrastructure if the country is to attain the desired middle income status. Improving Kenya's infrastructure up to the level of middle-income countries, for example, would boost annual economic growth by more than three percentage points (PricewaterhouseCoopers, 2014). The energy sector in Kenya suffers the biggest shortages with a current capacity of 1,300 MW against a rising demand of 2,000 MW. As previously mentioned, only 18% of the Kenyan population had access to electricity. In the rural areas, only 5% of the population had accessed electricity by 2012. Besides the deficit, the energy sector plays the most crucial role in sustainable development and poverty reduction. It also facilitates the meeting of basic human needs such as food and shelter provision; and contributes to development and transformation by promoting manufacturing as well as improving education and public health (United Nations Economic Commission for Africa, 2011). The government is however committed to increasing accessibility to especially electricity infrastructure in a bid to spur economic growth.

Over the years, the national government has borne the responsibility of implementing public sector projects, especially infrastructure projects, given the inherent public good nature of the projects and the positive externalities often generated by such facilities. However, public deficits, the increased public debt to GDP ratios and at times the inability of the public sector to deliver efficient investment spending have in many economies led to a reduction in the level of public funds allocated to infrastructure (Organisation for Economic Cooperation and Development, 2015). To address the funding deficit, and thereby the resultant energy infrastructure gap; the government has resorted to seeking alternative sources of finance to complement public expenditure. Selection of appropriate project financing options requires consideration and evaluation of the cost of finance, risk management processes and contractual arrangements involved (Kayser, 2013).

Empirical studies conducted around the world have pointed to the PPP arrangement as an effective solution to the infrastructure challenge owing to the success rate of PPP projects in countries such as Argentina, China and Canada (Zangouinezhad & Azar, 2014; Kort, Verweij, & Klijn, 2015; Ismail & Haris, 2014). However, not much empirical literature exists on infrastructure PPP projects in Kenya. Most of the literature on PPPs in various sectors in Kenya is prescriptive, recommending PPP projects as the answer to project delivery challenges. This study seeks to assess the effectiveness of PPP arrangements in implementing electricity subsector projects. The researcher seeks to establish whether PPP projects have indeed delivered the projects on time, within budget, and within scope while meeting the quality specifications; and whether these arrangements have taken care of the shortfalls of traditional public procurement.

1.4. Objectives of the Study

1.4.1. General Objective

The main objective of this to review literature on the factors that affect delivery of infrastructure PPP projects

1.4.2. Specific Objectives

The specific objectives of the research are as follows:

1. To assess the relationship between project governance practices and the delivery of infrastructure PPP projects
2. To examine the relationship between the institutional capacity and the delivery of infrastructure PPP projects

2. Theoretical Review

2.1. Agency Theory

The Agency theory stemmed from an expansion of the work of economists in the 1960s and 1970s who studied risk-sharing among individuals and groups where the risk-sharing problem arose when the collaborating parties possessed differing attitudes towards risk. The Agency theory then broadened the perspective to consider agency problem emanating from the division of labour among the cooperating parties (Eisenhardt, 1989). The agency relationship is defined as a situation in which one party (the principal) engages another party (the agent) to perform some service on their behalf. To facilitate this, the principal will delegate some decision-making power to the agent (Jensen & Meckling, 1976). The agency relationship is governed by a contract between the principal and the agent. This theory argues that firms are composed of various parties such as managers, debtors and shareholders with each party having its own interests and expectations.

The aim of the Agency theory is to explain and resolve the two common problems that exist in an agency relationship. First, this theory brings to light the agency problem which occurs when the goals or interests of the principal and agent are in conflict; or when it is difficult for the principal to ascertain what the agent is actually doing. This is because it is impossible to perfectly capture every possible action of the agent which would affect the welfare of both the principal and the agent and stipulate it in the contract. The challenge is therefore to induce the agent to act in the best interest of the principal (McColgan, 2001). The second problem is that of risk-sharing which would occur, as previously mentioned, when the parties in contract have different attitudes towards risk. As the contract forms the unit of analysis, this theory then argues for the development of the most efficient contract to govern the principal-agent relationship considering several assumptions about people (self-interest, bounded rationality and risk aversion), organizations (goal conflict among members) and information (information is a purchasable commodity). It therefore becomes critical to establish whether a behavioural oriented contract will be more efficient compared to an outcome oriented one or vice versa (Eisenhardt, 1989). In the PPP arrangement and project management context, the principal in this case is government (i.e. the respective public sector organization) while the agent is private company engaged to implement the infrastructure project. Within the project, similar principal-agent relationships may also be formed e.g. between the project manager and the contractor; between the contractor and supplier etc. This delegation of tasks is established and stipulated in the PPP agreement or contract. However, it is assumed that the agent organization will try to act in its own best interests which in some instances may jeopardize the welfare of the principal. Infrastructure projects as earlier mentioned comprise multiple stakeholders working together to achieve a particular objective and their interactions and relationships are guided by the flow of information amongst the counterparties. The parties involved in the project may not be in possession of the same information all the time and due to self-interest, the parties may not be willing to divulge this information all the time. This results in information asymmetries which may lead to adverse selection, moral hazard and hold-up (Ceric, 2012).

The adverse selection problem occurs during the early stages of the project prior to signing of the contract between the principal and the agent. This is whereby the principal does not have all the information about the agent prior to hiring. The agency relationship in this case could be between the public sector (principal) and the private organization (agent) or between the private organization (principal) and the project contractor (agent) etc. Adverse selection has been said to have an impact on project performance and especially project quality. The moral hazard problem occurs after signing of the contract between the principal and the agent. For example, after securing the contract the principal is uncertain that the agent will be fully focused on mobilizing their capabilities and resources and direct them to the particular project in question or the agent will be working more for other clients who might seem to serve their self-interest better. The moral hazard problem has been linked to supply chain management, procurement systems, outsourcing and make-or-buy decisions. Hold-up problems occur when the principal or agent act in an opportunistic manner and fail to cooperate with each other. For example, if both the principal and the agent are supposed to make an investment into the project at a particular phase of the project, then one party may contribute their investment and the other party fails to fulfil their part of the bargain. The hold-up problem occurs in the context of sub-contracting and procurement. To counter these three problems and minimize the risks to the project the parties involved engage in screening and monitoring. These two exercises have a cost implication and are therefore termed as agency costs. However, screening is critical because it enables the principal to gather useful information on the agent such as references, qualifications, credit worthiness among others. Monitoring involves keeping track on the agents to ensure that they are working in line with the contractual agreement (Ceric, 2012).

3. Review of Empirical Literature

3.1. Project Governance

The International Project Management Association (2016) defines governance as “*the set of policies, regulations, functions, processes, procedures and responsibilities that define the establishment, management and control of projects, programmes and portfolios*”. Project governance aims at spelling out the responsibility and accountability lines within the project, giving stakeholders the authority to manage their interests, providing a platform for dispute resolution, sharing information with the project stakeholders, supporting the project team to deliver the project outcomes (through efficient use of resources), providing access to best practice and independent expert advice and monitoring project performance (UK Office of Public Sector Information, 2007). PPP governance processes therefore focus on selecting the right projects to undertake, creating an environment that facilitates the implementation of the selected project and lastly creating systems that validate the efficiency of ongoing projects and provides feedback into the selection and oversight functions of governance.

Patel & Robinson (2010) established that inadequate governance structures have a negative impact of project deliverables and milestones. Since PPP projects have multiple stakeholders, it is crucial to have a central governing body comprising representatives of the key organizations involved to enhance the stewardship of the project. The presence of a central governing body provides clear leadership responsibilities, simplifies decision making structures and quickens processes that are fundamental to project delivery, financial success and change management. Despite the differing needs of the project stakeholders, Hashim, Sapri, & Low (2016) also established that it is important to maintain good governance in PPP projects. Poor relationship management caused challenges in project implementation due to ineffective flow of information amongst stakeholders. In a review of Australian PPP governance structures; Wilson, Pelham, & Duffield (2010) emphasize the importance of project governance by concluding that creation of successful PPP projects require harmonization of with the strategic goals of the public sector and private sector parties. Due to the long-term nature of the infrastructure projects the partnership needs to go beyond the basic contractual relationship to a relational one taking into consideration the social, environmental and sustainability objectives of the project.

3.2. Institutional Capacity

Institutional capacity in this document will be used to refer to technical and social improvements that enhance the performance of projects. It includes technical assistance of personnel, technical training of local personnel, improvement of management/operating systems and improvement of working conditions (Langaas, Odeck, & Bjørvig, 2008). A survey conducted by PricewaterhouseCoopers among selected infrastructure project stakeholders in Sub-Saharan Africa revealed that infrastructure project failure has been attributed to lack of appropriate technical skills required to implement projects and poor project management skills (2014). Project managers have the critical responsibility of task, team and stakeholder needs in every project. In addition to the general management skills, the project manager should essentially possess knowledge (about managing projects), performance (what the project manager is able to accomplish through application of project management knowledge) and personal (the behavior or the project manager while carrying out their responsibility) competencies (Project Management Institute, 2013).

Infrastructure projects have multiple stakeholders in addition the the time, cost and quality constraints common in all projects necessitating effective project management. The private sector brings in part, individuals with the relevant project management capabilities. This is because the motivation of private sector is also to achieve financial success and must therefore ensure that the project is effectively managed. PPP arrangements have been said to bring better quality of public property management and deliver increased project efficiency (Wojewnik-Filipkowska & Trojanowski, 2013; Haran, et al., 2013). The PPP model also brings highly qualified staff from private organizations to deliver infrastructure projects. PPP arrangements where private companies are selected through a competitive bidding process facilitates engagement of technically capable and innovative firms (World Bank, 2014). Zangouenezhad & Azar (2014) also established that public private partnership projects in infrastructure can enhance project operational efficiency because: the introduction and application of private sector governing principles reduces mispricing, cost overruns and lack of transparency. The sustainable pricing policies and financial discipline associated with the private sector provide a wider pool for investment funds and eliminate the financial constraints that hamstringing the public sector. Also, more robust investment sources enable partners to meet increased demand and to conduct resources toward the previously underserved public and finally the private sector can attract and offer new and innovative services owing to their technical expertise and business development savvy.

4. Discussion

Empirical evidence presents several factors that transcend national and project boundaries which when effected ensure the success of infrastructure PPP projects. Elements such as good governance, political stability, existence of a national public-private partnership unit in government, existence of policy and regulatory frameworks, cooperation among the stakeholders among others are fundamental in any PPP project. The focus of this study being project governance and institutional capacity. The study findings established that while there have been challenges associated with traditional procurement of infrastructure projects, PPP arrangements are offering tenable solutions and have been widely adopted globally. Public-private partnerships enhance project governance and build the institutional capacity of public organizations and aspect of continuous improvement that have been lacking in public procurement.

In the Kenyan context, several of these requirements have been met such as the establishment of a dedicated PPP Unit and the development of the PPP Act to create a favorable environment for the project. Notable in the Kenyan context is the political goodwill and public sector's inclination towards adoption of the PPP model to implement national infrastructure projects. The World Bank Implementation Status and Results Report pertaining to the Kenya Infrastructure Finance and Public Private Partnership Project, further cements the fact that Kenya has made significant traction in adoption of the PPP model. The report shows that progress has been made in staffing the PPP Unit, provision of support and capacity building to PPP Nodes, Amendments to the PPP Act and PPP sector laws when in conflict with the PPP Act, updating the County PPP regulations and other legal institutional activities for development of bespoke financial products for PPPs. The same report however shows that in terms of risk-rating political and governance factors pose substantial risk to the success of the PPP model while institutional capacity for implementation and sustainability poses high risk (World Bank, 2015).

With regard to governance factors Kenya as a country should work towards achieving good regulatory quality, enhanced government efficiency, rule of law, control of corruption and adoption of collaborative approaches in engagement with private sector. An atmosphere of transparency and accountability will strengthen the relationship between public and private sector. Rule of law covering property rights and contract enforcement would attract private sector (knowing that their interests are protected) and stimulate

investment in infrastructure PPP projects. Closely related to the rule of law is the quality of regulation available for PPP projects. A sound regulatory framework will enhance the efficiency of government and private sector as well and lead to the provision of better services to the public. Strengthening of accountability processes will also play a role in stamping out the corruption malaise that the country is currently grappling with. Another key governance component is collaboration between the stakeholders. The PPP Unit should work towards correctly identifying the relevant stakeholders to each of the projects under their purview and devise innovative approaches of engaging them to ensure attainment of the project objectives. Critical to securing cordial interactions among the project stakeholders is communications management. The PPP Unit and the respective PPP nodes should work together to ensure that there are no cases of asymmetric information which would lead to a section of stakeholders feeling “out of the loop” and potentially jeopardizing project implementation. A stable political environment, which in this case is the responsibility of government, is bound to attract more private investment as well as provide the conditions necessary for project implementation. With the expressed commitment from the current government to use the PPP route to address the infrastructure deficit in the country, Kenya is well placed to benefit from this model.

Institutional capacity with regard to PPP project implementation and sustainability is increasingly gaining momentum in both public and private organizations. However, there is need to further raise awareness on PPP project implementation and the requirements and potential benefits to the Kenyan context. This is especially important in light of the devolution of public service provision to the county governments which is bound to create institutional challenges unique to the counties. Staff members of both public and private entities as well as the influencers in the localities set to benefit from the projects must receive training on the nuances of this model. As the PPP approach to public service delivery is not yet mature in Kenya, local financial institutions need capacity building on how to engage with private contractors and the government in these kinds of partnerships. With best practice, available from the UK, Australia, Canada, USA, Malaysia, South Africa and other countries, actors in the PPP projects space should equip themselves with knowledge and skills for developing feasible and sustainable projects.

The literature reviewed covering the drivers of PPP project implementation did not give weight to the concept of monitoring and evaluation of PPP projects. The CSFs enumerated in the previous sections create a conducive environment for public private partnership projects to thrive but they need to be monitored during the life of the project to detect any variations from the anticipated conditions. A solid monitoring and evaluation framework for infrastructure PPPs should be put in place at the inception phase of the project through the collaborative efforts of the relevant project stakeholders. Regular assessments of the projects should also be conducted to determine whether the project is still on course as planned or establish any deviation from the project plan. This will facilitate corrective action or change management procedures if necessary. Monitoring and evaluation activities in infrastructure PPPs will contribute to continuous improvement and provide information that would inform strategic decision making and policy development. In addition, information obtained from monitoring and evaluation exercises would aid the building of a body of knowledge on public private partnership projects in Kenya’s infrastructure sector which currently suffers a dearth of relevant literature.

5. Conclusion

There is copious evidence of the success of infrastructure PPP projects from around the world. Similarly, there are numerous failed projects, some of which have stalled and others which are enmeshed in controversy. The need for infrastructure to meet the needs of the public has however provided the impetus for adopting the PPP project model in implementation of infrastructure projects. As a developing country, Kenya stands to gain a lot from PPP arrangements provided that the necessary critical success factors such as good governance, political stability, institutional capacity, sound regulatory framework, accountability and the others listed in the previous section are taken into consideration. Continuous monitoring and evaluation is also necessary for PPP project success. Public sector’s support to private sector during the entire duration of the project is also a major determining factor of the effectiveness of the PPP model. The focus of this paper was mainly to build a case for the adoption of the PPP model as a potential solution to the infrastructure deficit in Kenya. It highlighted the pros and cons of the shift towards PPPs, the critical success factors of PPP projects and the status of implementation of infrastructure PPP projects in the country. There is still room for further research on PPPs and further studies can be conducted on devolution and its effects on the implementation of PPP projects in Kenya and the actual impact (effectiveness) of PPP arrangements in infrastructure project delivery in Kenya.

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