

# [Public sector borrowing requirements construction essay](https://assignbuster.com/public-sector-borrowing-requirements-construction-essay/)

## Abstract

This study has been carried with the objectives of assessing and evaluating the general perception of the concept of PPP among top administrators in the public service in Mauritius, by identifying the perceived risks of embarking on such type of projects and identifying the perceived benefits and cost of embarking on PPP projects. A PPP is a contractual agreement between a public entity and a private entity, whereby the private entity performs part of a government organization’s service delivery functions, and assumes the associated risks for a significant period of time. PPP offers 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, thus encouraging crowding-in of private and foreign investment. Mauritius has opened its economy to the world and many foreign businesses have taken the opportunities offered by the country. PPP could be one of them. A literature review was carried out so as to obtain a firm understanding of the concepts of PPP, and specialist in the fields were contacted to learn of its application in the Mauritian context. The research has been carried using a standard methodology for a case study. As part of the research design, the sample size was determined using sampling theory. In addition, the questionnaire was designed and validated by specialist in the field. After administrating the survey instruments, data obtained was coded and was analysed using Excel software. This has provided the basis of making inferences as an initial step toward making feasible recommendationsOn the basis of the findings, it can be concluded that there is still some apprehension among top administrators for adopting PPP projects in the public service of Mauritius. With regard to the cost and benefits, no conclusive findings have been found. Mauritius is still lacking with respect of marketing of PPP concept to foreign investors. Overall, PPP projects are considered to be a high risk ventures. The study shows that PPP projects are more likely to take longer to implement and by its nature it will be subjected to a lot of debate among politicians and the public in general

## Chapter 1: Introduction

## 1. 1 Introduction

In the 2002/2003 budget, it was announced that Public Private Partnership would be used as a new form of procuring and financing infrastructure projects and services in the Mauritian public sector. At Paragraph 100 of the Budget Speech (2002/2003), it was mentioned that:" Government will establish a frame work for a PPP Scheme.  PPP will be used as a new form as financing infrastructure projects such as the Light Rail Transit, Information and Communication Technology and that major capital projects.  A PPP Secretariat will be set up at the Ministry of Economic Development, Financial Services and Corporate Affairs to design a policy framework, including appropriate legislation.’Many authors and academicians have pointed out that insufficient infrastructure not only affects the macro but it also affects the quality of life of a nation. It is a fact that most government face the problem that public financing is not enough to bridge the gap between infrastructure need and available funds. In this respect, infrastructure development has to rely increasingly on private markets to leverage and mobilise capitalIn November 2004, the PPP Bill was approved unanimously in the National Assembly and   it was proclaimed in March 2005 . The Act laid down the institutional framework for PPP in Mauritius. The Act was subsequently amended in June 2008 and provisions were made to set up a PPP committee and to provide for unsolicited bids. The Government of Mauritius has been working with the development partners such as the World Bank and the SADC Banking Association to identify, develop and implement PPP projects such as the road decongestion through the toll road project and the wind park at Curepipe for generating natural sources of energy. It was planned that these projects will be implemented over next five years

## 1. 2 The PPP Concept

According to the literature review, a PPP is a contractual agreement between a public entity and a private entity, whereby the private entity performs part of a government organization’s service delivery functions, and assumes the associated risks for a significant period of time.

Through PPP, the public sector seeks to bring together the expertise and resources of the public and private sectors to provide services to the public at the best value of money. In return, the private entity receives a benefit/financial remuneration according to predefined performance criteria.

The PPP provide for an alternative form of procurement whereby the public sector will acquire services at the most cost-effective manner, rather than directly owning and operating assets. A wide spectrum of PPP arrangements exists and these differ in purpose, service scope, legal structure and risk sharing. At one end of the spectrum , this would involved the outsourcing of some routine operations while at the other end , this involve the private sector conceiving , designing, building, operating, maintaining and financing a project, thereby taking a considerable proportion of risk.  As such, the choice of the PPP arrangement for a particular project will depend on Government’s policy in the specific related sector and on the potential value for money that would be generated under such an arrangement.

## 1. 3 Objectives of PPP

PPP offers 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, thus encouraging crowding-in of private and foreign investment. At the same time, it allows government to set policies and strategies, and where appropriate, to regulate economic activities, while leaving service delivery to the private sector. Operationally, PPP provides opportunities for efficiency gains in terms of better quality and more cost-effective delivery for services, better asset utilisation, clearer customer focus and accelerated delivery of projects.

## 1. 4 Problem Statement

In some countries across the world, the state-owned utilities have been plagued by inefficiency and have failed to expand services to meet the rapidly growing demand.  Today, PPP is a new concept for the sustainable socio economic development of the country.  It is a fact that Government alone can no longer support, manage, sustain and optimize allocation of resources to meet the diverse capital projects.  That is why the Minister of Finance is his budget speech 2002-2003 conveyed its intention to develop alliances with the private sector for the purpose of delivering a project or service which was traditionally provided by the public sector. Hence, Government has recognized the role of PPP as a means to foster the gross domestic capital formation of the country. The 2011Budget has made provision for huge investments in various key sectors, namely, information and communication technology (ICT), health, education, public infrastructure and transport. In that respect, a PPP unit was set up in 2004 in the Ministry of Finance and Economic Development

Although that 7 years have lapsed since Government has established the legal and institutional framework for implementing PPP projects, PPP projects have yet to gather momentum in view that there are no project that are being implemented under PPP in Mauritius. As such, this study will investigate as to why Ministries/ Department are not resorting to PPP projects with particular emphasis on its low acceptance among top administrators in the Public Service

## 1. 5 Research Objectives

As such, the objectives of this study are: To assess and evaluate the general perception of the concept of PPP among top administrators in the public serviceTo identify the perceived risks of embarking on such type of projects. To identify the perceived benefits and cost of embarking on PPP projects. To make appropriate recommendations

## 1. 6 Research Questions

In order to meet the research objectives, the following research question will be addressed: What are the views of top administrators in the public sector on the concept and application of PPP projects? What are the perceived risks of implementing PPP projects? What are the potential benefits and cost of implementing PPP Projects?

## 1. 7 Significance of the Study

The study will provide information to top decision makers in the public service of Mauritius on perceived risks, advantages and disadvantages of implementing PPP projects

## 1. 8 Report structure:

## The report structure is set out below:

## Chapter 1: Introduction

Chapter 1 consists of an introduction and also states the problem statement, aim and objectives of the research.  It gives a brief introduction of the subject under study and the significance of the dissertation is defined.

## Chapter 2: Literature Review

Chapter 2 deals with the literature review on PPP projects and it elaborates on the importance of PPP and the possibility of exploiting its potential to achieve value for money in the provision of capital projects. In addition, it covers the risks and cost benefits involved in such type of projects together with the available tools and techniques for dealing with them

## Chapter 3: Research Methodology

Chapter 3 deals with the methodology to be used to gather information from the survey.  A Research Methodology describes the diverse techniques used for the purpose of the research and provides explanations for the selection of the tools used.

## Chapter 4: Analysis of Findings

Chapter 5 deals with the analysis and findings.  The results obtained from the questionnaires have been analyzed and the findings are discussed.

## Chapter 5: Conclusion and Recommendations

Chapter 7 contains the recommendations and conclusions that have been reached based on the results of the analysis of findings

## Chapter 2: Literature Review

## 2. 1 Introduction

Conventional procurement typically involves the procurement of distinct elements of a particular project through an input-based specification, for example the construction of a school. The State then becomes the owner and operator of the school, and only discrete elements of risks such as design risks and portions of construction risks are passed on to the private sector. Procuring a public-private partnership (PPP) agreement is quite different from typical government procurement of a service or commodity. The key difference between the PPP and conventional procurement is the use of an output specification by the State to describe the outputs that the private sector must provide as part of the service agreement. In a PPP, the emphasis falls on the procurement of a complete service. The State may remain the sponsor of the project but very often the private sector provides the financing of the project. Substantial risks, such as project management, design and implementation responsibilities are then passed to the private sector; ideally, the State retains the risks that it is best able to manage. A PPP approach has certain advantages over an input-based approach. Often the input-based approach leads to delays in construction, significant cost overruns and maintenance costs that become steadily less affordable. An output based approach which focuses on what is required rather than how it is to be delivered, transfers the risks of cost and time overruns from the State to the private sector contractor, who is paid only when the output is deliveredAccording to the literature review , under the PPP approach, the contract goes beyond the provision of the asset, for example a school building. By transferring responsibility and risk for the ongoing management, maintenance and operation of the asset to the private sector contractor, it gives the contractor the incentive to develop design solutions that take into account the costs of managing the asset over its entire life. This ensures that the contractor does not design an asset that is cheap to build but unaffordable expensive to manage and maintain over the rest of its life - as has often been the case in the past. The PPP approach offers important advantages to Government, not only more efficient risk allocation and access to private sector expertise but also the delivery of new assets without pressure on Government resources. Revenues can be generated by charging directly the users of the service (ex. toll roads) or Government may pay directly the private partner (ex. Government accommodation). There is also the possibility of combining the user charges and Government subvention, in order to make the cost affordable to the public. A project which does not have any profitability potential should therefore not be considered if the Ministry does not have the needed funding to compensate the private sector and if user charging is not a possible option. In a nut shell, the key features of the output-based approach of PPP are: 1. Specification of the outputs required, not the method of delivery2. Procurement of a service, not the underlying asset3. Allocation of risks to the party best able to manage them4. Value for money as the overriding objective5. Value for money assessed over the whole life of the asset6. Payment for service as received, not as asset delivered.

## 2. 2 Benefits of PPP

This section will delve on the benefits of PPP projects to all the parties involved i. e the Government, the contractors the public and other stakeholders

## 2. 2. 1 Value for Money

Value for money as defined by Grimsey and Lewis (2004) is the optimum combination of whole lifecycle costs, risks, completion time and quality in order to meet public requirements – isDo not put el al . list all the authorsanother important consideration, especially for the public sector (Chan et al., 2006) Innovation is another important advantage that the private sector can bring to public services. Generally speaking, the public sector may not be as innovative as the private sector. According to Chan et. al( 2006), the private sector, on the other hand, is continuously searching for new products and services to increase its competitive edge and to save costs.

## 2. 2. 2 Risk Management

According to Corbett and Smith (2006), risk transfer is one of the main reasons for adopting the PPP approach. The private sector is in general more efficient in asset procurement and service delivery and as a result it is to the government's advantage to share the associated risks with the private sector in line with widely accepted principles, For example, the contractor would take up the construction risk, the designer would take up the design risk, and the government would take up environmental approval risks, land acquisition risks, etc. He went on to add that cost savings refer to the reduction in price as a result of delivering a project by PPP instead of traditional methods.

## 2. 2. 3 Business Opportunities

According to United Nations Economic Commission for Europe, 2004; business opportunities are also created due to the large scope of works and these will benefit different sectors of the economy . To the private sector participants, PPP provides access to public sector markets. If projects are priced accurately and costs are managed effectively, projects can provide reasonable profits and investment returns on a long-term basis. Also, these projects tend to be large, and therefore expertise from many areas is required. Hence, co-operation among different collaborating parties is encouraged

## 2. 2. 4 Reduction in Public Sector Borrowing Requirements (PSBR)

Jeffries and Mc Georges (2009) found out that early PPP projects in the UK and Australia were mostly initiated because they offered the opportunity to invest in infrastructure ‘ off balance-sheet’ – borrowing for infrastructure investment was replaced by paying a tariff to the private sector for infrastructure use. This shift of public sector borrowing requirement into operational expenditure alleviated budgetary constraints for infrastructure development

## 2. 2. 5 Management of cash flows

To the government, PPP frees up fiscal funds for other areas of public service and improves cash flow management, as high upfront capital expenditure is replaced by periodic service payments. PPP also provides cost certainty in place of uncertain calls for asset maintenance and replacement. Public sector projects delivered via the private sector normally involve private sector funding. On these aspects Li, Akintoye, Edwards and Hardcastle, ( 2005)are of the view that the public funding required for public services can be reduced and redirected to support sectors of higher priority, for example education, healthcare, community services, etc;

## 2. 2. 6 Acceleration of infrastructure provision

Askar and Gab-Allah (2002) pointed out that PPP strategies allow the public sector to proceed with the provision of public facilities without providing funding upfront. Instead, the payment depends on the availability of services delivered by the private sector. According to Li, et al.(2005), PPP enables the government to bring forward infrastructure in demand, when lacking of public funding or under limits on public spending imposed by budgetary constraints PPP this provide government opportunities to advance priority infrastructure projects for economic development

## 2. 2. 7 Better risk allocation

Under PPP arrangements, risks related to financing, designing, building and operating the public assets and services can be partly or wholly transferred to the private sector (Chan, et al., 2009; Li, et al., 2005b). The private sector is generally seen as better at managing risks than the public sector. Achieving better risk allocation has been identified as a significant driver for PPP adoption in a wide range of practical PPP guidance materials and academic publications (Cheung, et al., 2009; Efficiency Unit, 2008; European Commission, 2003; United Nations Economic Commission for Europe, 2004).

## 2. 2. 8 Whole of life cost savings

Chan, et al(2009) are of the view that the private sector has been historically involved in design, build, maintenance and operation phases of public services and as such they can optimise costs associated with these elements of service provision . Cheung, et al.( 2009) also shared this view and argued that under a PPP scheme, in which the long term maintainability of built infrastructure will accrue benefits to the private sector operator through reduced operational costs, the PPP contractor can increase design specifications and standards to reduce maintenance costs. Locking in such operational economies and innovations is hard to achieve using traditional procurement models (Dixon, et al.), This is primarily so in view that there is no direct incentives to construction contractors to do so. In a PPP contract in which the contractor not only constructs but thereafter manages service provision from the asset, the contractor is more likely to directly benefits from any innovations through the reduction of maintenance and operation costs. Grimsey and Lewis, (2004) have also supported these views and they have opined that in a PPP project, the consortium is also responsible for the long-term maintenance of the facility/service. The concession period may range from a few years to decades. Therefore the consortium is keen to design and construct the service/facility to ensure better maintainability at least within the concession period if not beyond. In addition to the above , proponents of PPP have argued that cost certainty is more easily achieved in PPP projects as financial terms are identified and included within the contract. Since the private consortia will normally be responsible for financing, designing, constructing and operating the facility over an extended period, any cost saving can naturally result in a better chance of securing profit. Hence they are keen to control their spending tightlyThe saving could be a result of the private sector's innovation and efficiency which the public sector may not achieve The private sector generally achieves higher operational efficiency in asset procurement and service delivery by applying their expertise, experience, innovative ideas/technology (e. g. using durable materials to reduce future maintenance costs) and continuous improvements. Overall cost savings to the project can be achieved by striving for the lowest possible total life cycle costs while maximising profits

## 2. 2. 9 Improved quality of services

Grimsey and Lewis, (2004) pointed out that PPP contracts leave more space for the private sector to innovate throughout the project lifecycle. With the aid of innovative techniques and managerial skills, end users are more likely to receive better public services In addition , under PPP arrangements, the private sector is required to ensure that services delivered satisfy pre-agreed benchmarks; otherwise the government will not make payments. In some cases, the private sector may be motivated by rewards due to high quality of services provided (Li, et al., 2005b).

## 2. 2. 10 Timely delivery of projects

One argument in favour of PPP projects is that public sector projects delivered by the PPP model can often be completed on time and even with time savings because the consortium would start receiving revenue once the facilities/services are up and running. Therefore, the project team is keen to complete design and construction as quickly as possible. Once it starts to accrue revenue it can begin to pay off the initial costs and build up profits, whereas in a traditionally procured project there are no extra financial incentives for public servants to deliver projects faster. As a result, projects can proceeded as scheduled (Akintoye. Hardcastle, Beck, Chinyio, and Asenova (2003)Boussabaine,(2007) went on to support PPP projects based on the argument that time certainty is found to be more easily achieved in PPP projects. The consortium is often paid according to milestones of the project schedule, and any delay might be subject to liquidated damages. Therefore the consortium is often motivated to reach these milestones on time, if not earlier. This is a common behaviour observed in the private sector, but may not be the case in the public sector

## 2. 2. 11 Likely to access additional revenue sources

Under a PPP, there are incentives for the private sector to seek additional revenue sources to meet the overall cost of the project. For instance, additional revenues may be generated through the use of spare capacity of public facilities (European Commission, 2003).

## 2. 2. 12 Benefits for local economic and social development

The Efficiency Unit( 2008) is of the view that building, upgrading and maintaining public facilities create more job opportunities, thus alleviating social pressure caused by unemployment, especially under the current world-wide economic recession . PPP allow the private sector to participate in the provision of public facilities and services. The innovations achieved from private sector expertise might help to facilitate technology transfer to the local market.

## 2. 2. 13 Improved project scrutiny

AustraliaThe Public Sector Comparator (PSC) is commonly used by the government entities to benchmark expenses incurred by procuring infrastructure through standard procurement mechanisms with the costs accrued by the adoption of PPP. This comparator is used to justify the selection of a procurement methodology for a governmental project

## 2. 3 Inhibitors of PPP projects

This section of the literature review deals with the costs and constraints in implementing PPP projects

## 2. 3. 1 Political, social, and legal risks

Carrillo, et al. (2008) has found out that one significant reason for PPP failure is the political risk contingent on any project. This is inclusive of public opposition and legislative restrictions on involving the private sector in the provision of infrastructure projects, and the perception of apparently easy terms by which, corporate entities secure long and lucrative concessionary contracts at public expenseAccording to some authors , politicians may not be aware of the dynamics of risk transfer which are the distinguishing characteristics of PPP. PPP tend to be misunderstood by the public as a form of privatisation This, in turn, may create difficulties in persuading the various stakeholders in a project to agree with using PPP strategies. Mahaligam (2010) divide stakeholders into two political groups . Quite simply depending on the side of the political spectrum that a stakeholder resides will indicate whether a PPP solution is perceived as a positive or negative in the evaluation of a project procurement framework. Right of centre/conservative stakeholders tends to support PPP, however left of centre/socialist stakeholders tend to view PPP as a removal of public assets into private hands. Algarni et al.(2007) are of the view that legislation in some countries concerning public sector procurement imposes strict constraints on how the public sector engages in procurement of private sector services and these seems to hinder PPP

## 2. 3. 2 Unfavorable economic and commercial conditions

Zhang, (2005), in his research, found out that in some countries, poor prospects for economic growth adversely affect the confidence of the private sector to enter into the local market. In some other cases, the project fundamentals cannot justify the private investment. Sometimes lacking a strong capital market makes it impossible to achieve private financing

## 2. 3. 3 High transaction costs and lengthy lead time

According to Carrillo, et al. (2008); PPP have been criticised among international practitioners and researchers for the high transaction cost and lengthy lead time of bringing infrastructure into serviceDixon, et al (2005) and Kwak, et al.( 2009) who studied PPP international practices found out that PPP are not always successful as they feature high transaction cost, long bidding and negotiation duration, and complex contractual and financial arrangements

## 2. 3. 4 Problems related to the public sector

Governmental decision makers lack a clear understanding on why PPP approaches can be used and what are the obstacles for PPP adoption A common problem hampering the use of PPPs is that the public authorities are not experienced in selecting and structuring PPP projects (Li, et al., 2005). The relevant public authorities might not be clear about their roles throughout the procurement process. They either become too involved, which undermines the innovations achieved by the private sector or do no

## 2. 3. 5 Risk Sharing

According to the PPP newsletter of the PPP Unit ( Ministry of Finance , 2003) risk management means transferring risks to the partner who is best able to manage it. If a risk is better managed, the cost linked to its occurrence will decrease, lowering the total cost and thus generating value-for-money. The objective is not to transfer all risk to the private sector, as it will either not take it or charge a premium for something it cannot control. A project without clearly identified risks that the private sector will be willing to take should not be considered as a suitable candidate to provide commitment and support which prolongs the bidding duration (Zhang, 2005 ).

## 2. 3. 6 Problems related to the private sector

PPP projects are likely to result in failure, if the private sector is not able to deliver the projects in accordance with the output specification. The private sector’s failure might be due to insufficient techniques and financial capability in building and operating the public assets (Chan, et al., 2010 )

## 2. 4 The Public Sector Comparator (PSC)

Along with the development of PPP projects , public agencies have developed a new technique for evaluating PPP projects i. e The Public Sector Comparator (PSC) , The PSC provide detailed quantitative methods on deciding whether to proceed with PPP projects and this technique has been used in Australia and the UK (HM Treasury, 2006; Partnerships Victoria, 2001)In fact , the financial costs and benefit are worked and these became the benchmarks against which bids from private contractors are assessed. It is prepared using cash flows basis so that investment appraisal could be done using the discounted cash flow method. The analysis also include transaction costs (costs of professional expertise), inflation, the residual value of the investment etcHowever, PSC is commonly criticised for not being able to precisely reflect the non-quantifiable factors of the proposed project (Ozdoganm and Birgonul, 2000; Salman, et al., 2007). According to Head (2003), the PSC is never seriously considered. Although the U. K Treasury has claimed that the PSC has been designed so that there is no preference for any particular model of financing projects , these claimed are undercuts by the statements of Ministers and otherpolitical actors that projects will proceeds as long as it can secure private financing and approval under the Public Financial Initiative program

## 2. 5 Conclusion

The next chapter deals with the methodology. This chapter have given an overview of the risks, benefits and constraints in adopting PPP.