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The Effectiveness of Public Private Partnerships A Project Financier's Perspective

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University of Pretoria, in partial fulfillment of the requirements for the
degree of Master of Business Administration**

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ABSTRACT

South Africa like many other countries is faced with the problem of infrastructure backlogs and budget constraints. The South African government through the National Treasury recognized the need to co-operate with the private sector in order to address this problem, by establishing the PPP unit. This research examined the role of financiers in facilitating the implementation of PPPs, as well as the factors that blunt the effectiveness of PPPs as infrastructure delivery mechanism in SA.

The research was done through conducting semi-structured in-depth interviews with 18 experienced and knowledgeable stakeholders in the Private and Public sectors, who are and have been exposed to PPPs in South Africa.

The findings on the success of PPPs as a medium for infrastructure delivery gave credence to the necessity and timeliness of this research. There was a difference of opinion as to the success or otherwise of PPPs between the Public Sector on the one hand and the Private Sector on the other. The major factors which facilitate the successful implementation of PPPs included financial innovation and discipline, technical competency, and supportive legislative framework. The major findings in respect of the inhibiting factors were skills shortage and political commitment. Suggestions were made to stakeholders on minimizing the inhibitors.

DECLARATION

I declare that this research project is my own, unaided work. It is submitted in partial fulfillment of the requirements of the degree of Master of Business Administration for the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university.

.....
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Date:

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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Background to research problem

Public Private Partnerships or PPPs as they are more commonly known are arrangements for procuring infrastructure, goods and services by Government through a joint venture with a private sector provider. The effectiveness of PPPs as the key delivery vehicle for infrastructure development in South Africa has received mixed and largely negative reviews. Why are PPPs perceived negatively in SA and what can be done to change this?

The policy of accessing private finance is based on efficient allocation of risk and is for long-term, strategic reasons. Where the private sector is financing a PPP project, this finance can be provided by way of equity, debt, or typically, a combination of equity and debt. For large infrastructure projects, the private sector will want to put limited recourse project finance structures in place. In these circumstances, the relationships between the parties to a project are largely governed by a series of financial, operational and concession agreements. The conditions of financing attaching to each source of finance are a function of the level of risk assumed, and the range of potential returns available. Project finance is debt rather than equity driven, so a typical project financing structure involves approximately 90% debt and 10% equity. Debt providers minimize the risk on their investment by carrying out a rigorous risk analysis, limiting their exposure. Appropriate risk allocation and sharing are key to successful financing and implementation of PPPs.

The 1990s have witnessed the emergence of PPPs as the key tool of public policy across the world. Variants of the PPP models have been adopted for purposes such as investing in large-scale physical and social infrastructure and related services (Hurst and Reeves, 2004).

As governments around the world turn to PPPs as a means of improving public service delivery, it is critically important that the claims in favour of PPPs are scrutinised on the basis of evidence. The Irish government has followed the global trend and keenly adopted the PPP model as a means of addressing the country's critical deficit in infrastructure without placing a burden on the exchequer (Hurst and Reeves, 2004).

PPPs may have the potential to solve sub-Saharan Africa's profound infrastructure and service backlogs, where nearly 600 million people lack access to electricity, almost 300 million have no access to safe water and there are just eight telephones (either mobile or fixed line) per 100 inhabitants. However, the record of PPPs in Africa over the last 15 years is mixed, the process is complex, and governments should not expect PPPs to be a 'magic bullet' (Farlam, 2005).

1.2 The nature of the problem

Worldwide, and particularly in South Africa, underlying impetus for PPPs is the increasing realisation that the quality and range of infrastructure has a profound impact on economic growth in addition to serving a public need. South Africa like many other countries is faced with the problem of infrastructure backlogs

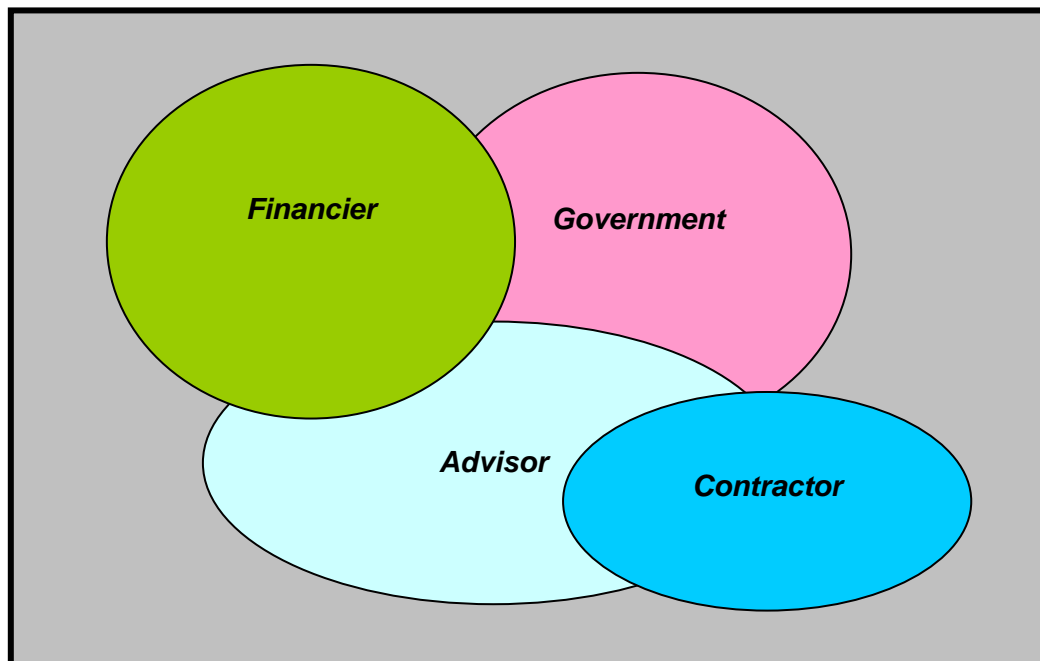
and budget constraints. The Government of the Republic of South Africa through its Department of Finance recognized the need to cooperate with the private sector in order to address this problem. Consequently, various PPP initiatives in various sectors were considered as an alternative way of delivering services. The problem that manifests in negative perception of PPPs derives from the apparent lack of infrastructure delivery using a PPP as a delivery vehicle.

1.3 Funding of PPPs verifies the problem identification

The distinguishing features of a PPP include certain characteristics of the partnership arrangement. These are evident in how a typical arrangement is resourced, that is each partner to the arrangement must transfer resources which include, Funding, Technical expertise and Property and Authority which respectively are represented by the Financier, the Contractor and Government or State department (Grimsey and Lewis, 2004).

A typical PPP involves two (or more) parties, and at least one of them has to be a public or government body. All parties must make an organizational commitment to the partnership. For purposes of this research the only four key parties identified are, a Government Department or Public body, the Contractor, Advisor and the Financier as depicted in Figure 1 below. (whilst acknowledging that a typical PPP structure would consist of more than four stakeholders) Appendix B provides a schematic representation of the PPP stakeholders in the Generic Project Finance PPP structure.

Figure 1: Key parties to a PPP



Of the four key parties to a PPP as depicted in Figure 1 above, the emphasis of the investigation in this document will be on the role of the Financier in the delivery of PPPs, as this role is increasingly becoming critical in the successful implementation of these partnership arrangements. This paper is intended to examine the role of the Financier as seen by other stakeholders, this is so because PPPs are intended to augment the limited capacity of the state to fund required infrastructure from its own limited resources. This statement underscores the pivotal role of a financier in the successful implementation of PPPs.

The delivery of infrastructure in South Africa has been less than satisfactory. Given exceptional delivery of infrastructure seen in other countries like the UK, Canada and Australia an investigation of the impediments of effective delivery

in SA became necessary, not least because of the historical backlogs of the past era. Only R15 billion of the total R409 billion capital expenditure is earmarked for PPP procured World Cup infrastructure in the next three years (Finweek, 2007).

A feature of many PPPs is the commitment of private sector finance to the construction or renovation of facilities. Underpinning the development of the PPP concept has been the development of an appropriate model of channeling the supply of private finance for infrastructure projects, this need is highlighted by the difficulties often experienced by those seeking to raise capital for private infrastructure (Grimsey and Lewis, 2004).

1.4 The PPP Paradox

Whilst there are arguments that direct infrastructure procurement is quicker than taking the PPP route, National Treasury maintains that a proper feasibility study on any PPP project must be undertaken prior approval.

Lenders and project financiers on the other hand typically want the assurance that appropriate authority has been obtained and that due process has been followed in any PPP project under consideration, this would eliminate delays that emanate from due diligences that have to be conducted by lenders to ascertain compliance with the regulatory process. The present process has been found to be cumbersome and drawn out resulting in some reluctance in initiating PPPs (Business Day, 2007).

The same compliance procedures are required whether for a R5 million or R5 billion project, in order to eliminate the delays, simplified procedures need to be considered for smaller PPPs. The painfully slow pace at which PPPs are being approved and implemented has resulted in SA's project finance skills being applied elsewhere often in projects in the rest of Africa, thereby exacerbating local capacity constraints (Business Day, 2007).

There is enough evidence on PPP projects around the world to suggest that a variety of interrelated factors combine to bring about the success or failure of any project. It is important, therefore, to note a few practical ways to improve a project's chances of success by those experts and practitioners. These include: sound organisational planning technical and financial ability on the part of

investor; promoters must be evident and their commitment to carry out the project must be unquestionable; thorough analysis of the project's economic and financial viability; appraisal of the political and economic outlook of the host country; consideration of the relative strength of the financial markets; ascertainment of political will and promoting good relations with the host government; avoiding unreasonable risk allocation; establishing an effective project – management structure; and learning from past experience (Chege and Rwelamila, 2001).

1.5 The relevance of PPPs in SA

A nation's economic growth and the existence of an adequate infrastructure are highly interrelated. Infrastructure plays a critical role in promoting economic growth through enhancing productivity, improving competitiveness, reducing poverty, linking people and organizations together through telecommunications and contributing to environmental sustainability. Population growth and rapid urbanisation have placed enormous pressure on existing infrastructure (Chege, 2003).

Steady growth in the South African economy over the past few years has contributed to an increase in public sector spending, specifically in infrastructure development. In part, shifting the infrastructure development responsibility to the private sector is the result of dissatisfaction with the performance of state-led development programs that have simply not worked. The following elements are among the key findings in favour of the PPP process (Grimsey and Lewis, 2004):

- The realisation that the Public sector and state institutions cannot single-handedly deliver the required infrastructure,
- Infrastructure delivery is seen by the majority of South Africans as some form of apartheid dividend and levels of impatience are quite high, and
- The growing economy requires a robust and reliable support infrastructure to ensure sustainability into the future.

Some of the key elements to successful PPPs according to Shaw (2005) are:

- Good governance,
- Structure, discipline and honesty,
- Transformation and delivery platforms,
- Buy-in from civil society,
- Good relationships amongst parties to a PPP, and
- Desire for success by all parties.

In addition to the foregoing, the largest single public transport project on the African continent and one of the largest PPPs in the world, the Quatrain Rapid Rail Link has unearthed some of the issues common to most PPPs projects in South Africa and probably the world namely:

- Cost escalation - resulting from a deteriorating currency and construction costs,
- Extended timeframes due to protracted negotiations with stakeholders and revision of feasibility studies,
- The acceptable level of market risk to be assumed by both the project and government,
- The acceptable mitigation of the risk of concession termination,
- The appropriate level of empowerment participation, and

- Resolution of property and zoning rights, heritage and environmental matters.

1.6 Challenges in implementing PPPs in RSA

PPPs have become a tried and tested approach to working in partnership with the private sector in the provision of transport services and infrastructure. Some of the generic lessons that emerge are as follows:

- Effective PPPs take time to establish and then yield results;
- Policy makers need to be clear about the objectives they set out to attain through a PPP. It is all too easy for a PPP to become an objective in its own right,
- It is important to construct a PPP model which makes best use of private sector efficiency gains, skills and technology,
- The private sector will require appropriate incentives to deliver and it is important that the PPP contract sets these in place right from the outset,
- The PPP is both a learning experience and a business process. The inevitable result is that some PPPs will fail.

According to Hurst and Reeves (2004), many challenges remain in enhancing the use of PPPs as a means of delivering public services and infrastructure. A number of these challenges are not so much in the set up of the PPP process but in the support and articulation of the approach that is applied. Government departments lack the skills required to drive PPPs with public officials sometimes resisting private sector participation for fear of the following amongst other:

- Loss of control,
- Negative implications of potential staff cuts,
- Negative public reaction to profit and control,
- Potential risk of failure that will reflect badly on them,
- Limited PPP experience creates the element of risk and fear of the unknown, and
- There is often a lack of an overall vision that encompasses PPPs as a system of service delivery,

Any modified or future system of PPP has to be attractive to the private sector bidders (either as principals or as financiers). The PPP market needs to be understood by the private sector, so that such bidders can develop supply chains for human and development capital and make rational decisions about the deployment of that capital.

1.6.1 Research Problem

The pace of infrastructure delivery has not accelerated despite all efforts to this end by the interested stakeholders especially the National Treasury. The current status of the PPP market is the reason why this evaluation has become so important. The balancing of stakeholders' interests is essential for PPPs to work well and deliver infrastructure. The evaluation of the effectiveness of PPPs is needed in order to understand what lies behind the successes and failures of PPP projects, to learn from these experiences and make appropriate recommendations.

The role of the project financier is key in dealing with the challenges facing the PPP implementation, more so as the decision on the appropriateness of private

finance will be determined by how a PPP project is to be structured. A decision on the project structure is usually made at the PPP assessment stage.

1.6.2 Research objectives

The objectives of this research can be summarized as follows:

- To determine if PPPs are in fact perceived as an effective vehicle for infrastructure delivery by the key stakeholders,
- To investigate the role of project finance in funding PPPs and identify inhibiting and facilitating factors,
- To highlight the pivotal role played by financiers in the successful implementation of PPPs, and
- Finally, to make recommendations as to how to minimise the inhibiting factors.

1.6.3 Scope of the research

The research will cover a defined population within the economic powerhouse of South Africa, the Gauteng Province. The sample included key stakeholders representing:

- Bankers (project financiers),
- Legal, technical and financial advisors,
- Relevant government departments (specifically the PPP unit), and
- Major Construction firms.

Given the successes recorded both in the developed and developing nations derived from utilizing the PPPs for the delivery of public services and

infrastructure, the unsatisfactory levels of infrastructure delivery in RSA triggered the desire not only to examine the contributing factors to the poor state of delivery but also provides an opportunity to learn and make improvements. The findings of this study, it is believed will lead to the improvement of the overall socio-economic conditions for South Africa.

The review of the world of PPPs is examined in the next chapter, bringing into focus international best practice and lessons for South Africa.

CHAPTER 2: LITERATURE REVIEW

This review of literature starts with a brief history of PPPs focusing on how they started and highlights some of the key reasons why they were initiated and subsequent take-off across the world. It further seeks to understand the role of PPPs at the socio-economic level, examines the mechanics of PPPs in South Africa and elsewhere and the financing thereof using project financing techniques. It concludes by highlighting lessons for South Africa, better ways of implementing PPPs and identifies the pivotal role that project financiers play in the success of PPPs.

2.1 A Brief History of PPPs

According to Taylor (2007), PPPs began in the UK in 1992, in response to demands for infrastructure renewal, public sector reform and better delivery of public services. In addition, there was intense pressure for more efficiency and transparency in the allocation of public monies. He further argues that the earliest PPP projects were similar to those of today in that they combined the efficiencies of the private sector with the government's responsibility to meet the service needs of the public.

The three countries that stand out as world leaders in the number and scale of PPPs are, the United Kingdom, Australia and the United States of America. What tends to distinguish the leading countries like the UK and Australia is that PPP activity is conducted through a comprehensive government program rather than on a one-off basis. The concept of public private partnership can vary both

in time and in place depending on one's conception of the role of the "state" in a nation's political economy (Broadbent and Laughlin, 2002).

During the last two decades there has been a worldwide trend towards deregulation and privatization, leading to a decline in the level and kind of services provided by governmental units. This has led to a process whereby needed infrastructure is obtained by enticing private sector entities to provide financing in partnership with the public sector (Broadbent and Laughlin, 2002).

2.2 What are PPPs

Public Private Partnerships or PPPs are not well defined within international markets, and in their widest sense Public Private Partnerships embrace a variety of relationships. A simple definition is that they exist wherever the public sector and private sector work closely together with a common purpose (The Canadian Council of PPPs, 2007). In terms of international experience to date, this commonly breaks down into the following areas:

- contracts to supply services and infrastructure to the public sector;
- contracts to sell services or assets from the public sector; and
- joint ventures to do either of these activities.

A Public Private Partnership is a partnership between the public sector and the private sector for the purpose of delivering a project or a service traditionally provided by the public sector. Public Private Partnerships are not new and in

sectors such as transport, roads and water, they have been evolving for a number of years in Europe and the rest of the world (Guidance note1, 2000).

In Asia, the term PPPs describes a spectrum of possible relationships between public and private actors for the cooperative provision of infrastructure services. The only essential ingredient is some degree of private participation in the delivery of traditionally public-domain services. Private actors may include private businesses as well as non-governmental organizations (NGOs) and community-based organizations (CBOs) (Kumar and Prasad, 2004).

Contemporary public-private partnerships arose to remedy problems with the federal urban renewal efforts. In the lectures delivered at some of the top US universities in 1976, macroeconomist Charles Shultze articulated a new view that the market-based incentive systems should replace command-and-control strategies, regulation and other bureaucratic efforts. The alternative that would enable the public use of private interest was articulated (Sagalyn, 2007).

In South Africa, PPP is the term that the South African government uses to refer to outsourcing the delivery of public services by private parties. PPPs are relatively new in South Africa and support for service delivery through PPPs varies across government departments (Schonteich, 2003).

2.3 Public Private Partnership Forms

The 1990s have witnessed the emergence of public private partnerships (PPPs) as a key tool of public policy across the world. PPPs take different forms.

Variants of the PPP model have been adopted for purposes such as investing in large-scale physical and social infrastructure and related services (for example, roads, schools and hospitals) (Schonteich, 2004).

The main forms of Public Private Partnership that are likely to be most applicable to infrastructure projects in the roads, water and bridges and similar infrastructure are described in the paragraphs below:

Design and Build - contractual relationship between a public sector body and a private sector contractor for the design and construction of a public facility. The construction of the facility is financed by the public sector and the facility is subsequently owned and operated by the public sector.

Design, Build and Operate - contractual relationship between a public sector body and a private sector contractor for the design, construction and operation of a public facility. The construction of the facility is financed by the public sector, but responsibility for the operation of the facility rests with the private sector for a defined period of time. Ownership of the facility remains with the public sector throughout.

Design, Build, Operate and Finance - a contractual relationship between a public sector body and a private sector contractor for the design, construction, operation and financing of a public facility. The private sector contractor is responsible for designing, building, operating and financing the facility and recovers its costs solely out of

payments from the public sector. At the end of the term of the contract, ownership of the facility commonly transfers back to the public sector.

Concession - similar to a Design, Build, Operate and Finance contract, except that the private sector contractor recovers its costs either through direct user charges or through a mixture of user charging and public subvention. In this context it is important to note that Public Private Partnership concessions will not always meet the strict definition of concessions under the EC Procurement Directives, as this will depend on the level of exploitation of the asset.

Outsourcing - in the context of Public Private Partnerships within Ireland, outsourcing refers to operational and service contracts involving some level of risk transfer to the private sector for a term of at least five years.

2.3.1 The role of PPPs in infrastructure provision

The growing popularity of PPPs is unlikely to be a passing fad. One can expect to see more of them, in greater variety, as pressures on public budgets persist and as the private sector begins to appreciate more fully the prospects of making profits through this type of co-operation. It is important, therefore, that they are subject to close scrutiny so that a proper analysis can be made of their impact (Chege, 2003).

Through PPPs, the advantages of the private sector innovation, access to finance, knowledge of technologies, managerial efficiency, and entrepreneurial spirit are combined with the social responsibility, environmental awareness, and local knowledge of the public sector in an effort to solve problems. In cities throughout the world, private firms have demonstrated their ability to improve the operation of infrastructure services. However, it is important to bear in mind that private involvement does not provide an automatic solution to urban infrastructure problems.

PPPs aim to achieve the best outputs by mobilizing private sector funds, technologies, managerial skills, and operational efficiency and facilitating innovations by transferring more risks and responsibilities to the private sector. The broad range of risks and responsibilities undertaken by the private sector necessitates a best value source selection (BVSS) approach in choosing the appropriate private sector partner in PPPs (Zhang, 2006).

Accordingly Zhang (2006) is of the view that Public clients have three main objectives in PPPs:

- mobilization of private sector funds, technologies, managerial skills, and operational efficiency;
- transfer to the private sector risks that can be best managed by them, including design and construction risks, operating risks, revenue stream risks and risks of technological obsolescence, and
- better value for money (i.e. enhanced services at lower cost) than can be obtained by the traditional public procurement route.

To encourage innovations, PPP contracts should be performance based, that is, the client states “what needs to be achieved” rather than “how to get the job done”.

2.3.2 Project Finance and PPPs

Infrastructure projects involving private sector finance have been financed through project finance. Project finance can be defined as limited or non-recourse financing of a project. Limited recourse financing is the more common form of project financing. Under limited recourse project financing, the creditors and investors have some recourse to the sponsors of the project. With non-recourse project financing on the other hand, creditors and investors do not have recourse to the sponsors (Chege, 2003).

The traditional way of financing infrastructure from fiscal budgets is no longer a viable proposition, particularly in developing economies. Macroeconomic instability and growing investment requirements have shown that public financing is volatile, and this has led to the emergence of private sector participation in the provision of public infrastructure.

Project Financing came of age in South Africa with Public Private partnership transactions, in terms of which public and commercial interests looked to banks to fund infrastructural development. According to Mr Peo, it takes a long time to implement a PPP project, he expects more private sector refinancing after 2010. A notable example is the R22 billion Gautrain project, currently the single

largest infrastructure project under way, has attracted only R3billion in Private sector funding (Infrastructure Development for 2010, 2007).

2.3.3 Types of Private Sector Finance

A brief description of the types of private sector finance that are available is set out in the paragraphs that follow. (Guidance Note 2, 2000).

- **Equity finance (“equity”)** in a project finance structure typically accepts the greatest level of operational, financial and market risk, and is rewarded by a higher level of potential return. Equity can be provided by project sponsors (such as building contractors, property developers, or facility operators) who have an operational interest in the contract, or financial investors, whose interest is only as an investment. Equity is usually subscribed by way of share capital.
- **Mezzanine finance (“mezzanine”)** in a project finance structure normally accepts a slightly lower level of risk than equity and thus earns a slightly lower level of potential return. Mezzanine finance is usually provided by the equity investors by way of subordinated loans, for tax efficiency. Subordinated loans rank after Senior debt and Bonds, both in terms of entitlement to a coupon and repayment. In this Guidance Note, mezzanine finance is dealt with and regarded as equity, and the private finance community typically looks at blended rates of return on equity and mezzanine finance in calculating the equity rate of return.

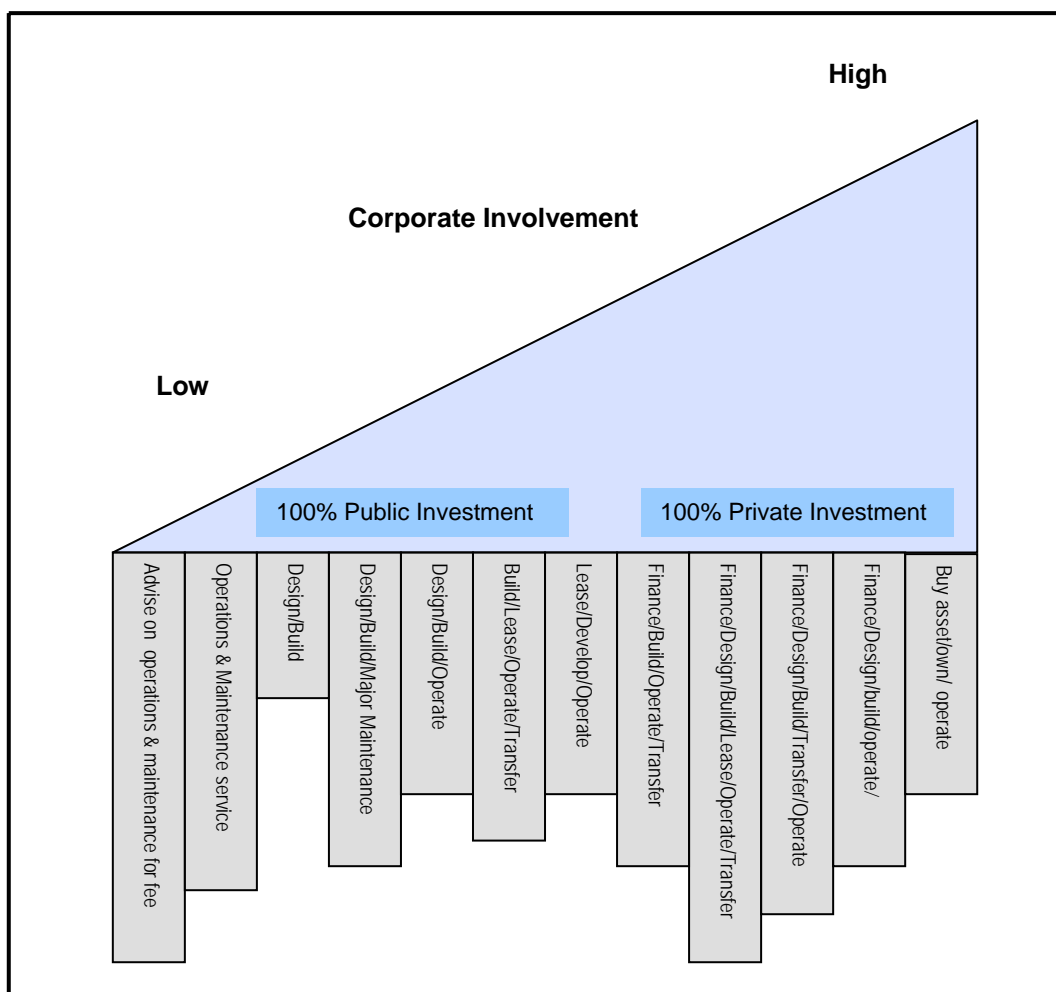
Debt finance (“debt”) can be provided by way of Bank Loan or Bond Finance (Guidance Note 2, 2000).

- *Bank loan - or Senior Debt*, bears the fewest risks, earns the lowest return, and is typically the first class of funding to be repaid. Bank finance is normally provided at a variable rate linked to the inter-bank rate, interest rate swaps can be used to fix the interest rate over the life of the contract. Bank finance is typically co-ordinated and arranged by one bank (the lead arranger), and syndicated to other banks (the syndicated banks) in order to limit their exposure on an individual project. The advantages of using bank finance are its relative flexibility in terms of drawdown and repayment, the relative maturity of the bank finance market, and its availability to a wide range of projects; and
- *Bond finance* - is raised by issuing bonds on the capital markets, in the case of a public offering, or a private placing of the bonds with investors, such as pension funds and life assurance companies. A bond typically carries a fixed coupon, and can be readily traded. The advantages of using bond finance are that the term is normally longer, up to 30 years, and, the financing terms can be better than those available on bank debt. Bonds can be guaranteed by AAA-rated insurers in order to reallocate risks and potentially reduce the costs of funds.

Facing tighter budgets, public authorities at all levels, from federal and provincial governments, through to civic governments, are increasingly looking toward partnerships with private sector for the provision of infrastructure and service. The growing popularity of PPPs is unlikely to be a passing fad. It is

expected that a greater variety will be seen as pressures on public budgets persist and as the private sector begins to appreciate more fully the prospects of making profits through this type of cooperation (Loxley, 1999). Conceptually one can envisage a continuum of possibilities in terms of private/public sector cooperation see Figure 2 below.

Figure 2 – Public Private Partnership Spectrum



Source: An Analysis of Public Private Partnerships S.J. Loxley (1999)

The nature of PPPs in South Africa are biased in towards high corporate involvement as represented in Figure 2 above, this confirms that the key driver

for successful PPPs would be the availability of private sector finance, especially in light of the established budgetary constraints faced by all levels of government. It is quite evident that the more complex and cash hungry a project is, the higher the level of private investment required. Similarly, the simpler projects are fully funded by the public sector.

2.4 The benefits of PPPs

In an increasingly competitive global environment, governments around the world are focusing on new ways to finance projects and build infrastructure and deliver services. PPPs are becoming a common tool to bring together the strength of both sectors (Loxley, 2005).

Designed appropriately, Public Private Partnerships can generate substantial benefits for consumers and taxpayers. The scope of potential benefit will, however, depend on the type of project being undertaken and the exact terms of the contract governing the Public Private Partnership. Experience elsewhere in the world as confirmed by De Bettignies and Ross, (2004), suggests that the more significant potential benefits include:

- Acceleration of infrastructure provision - Public Private Partnerships provide an opportunity for the public sector to translate upfront capital expenditure into a flow of ongoing service payments. This enables the public sector to proceed with projects at times when the availability of public capital may be constrained, thus bringing forward much needed investment.

- Faster implementation - the allocation of design and construction risk to the private sector, combined with payments linked to the availability of a service, provides significant incentives for the private sector to deliver capital projects within short construction timeframes.
- Reduced whole life costs - Public Private Partnership projects often require the private sector to be responsible not only for constructing the asset, but also for maintaining and operating it over time. This provides the private sector with a strong incentive to ensure that it minimises costs over the whole life of a project, something that is inherently difficult to achieve within the constraints of traditional public sector budgeting.
- Better allocation of risk - a core principle of any Public Private Partnership is the allocation of risk to the party best able to manage it at least cost. The aim is to optimise rather than maximise risk transfer, to ensure that best value is achieved. The ability to secure cost effective risk transfer is dependent on the scope of the services provided by the private sector and it is most likely where the private sector has clear ownership, responsibility and control of relevant risks. The basic principle of allocating risk to the party best able to manage it leads to more consideration and better control of the complete range of project risks across the whole life of the project.
- Enhanced public management - by transferring responsibility for providing public services to the private sector, government officials will act as regulators and will focus upon service planning and performance monitoring instead of the management of the day to day delivery of public services. In addition, by exposing public services to competition,

Public Private Partnerships enable the cost of public services to be benchmarked against market standards to ensure that the very best value for money is being achieved (Guisto, 2007).

2.4.1 Socio-economic benefits

Developmental infrastructure concerns more than just economic growth and diversification. One measure of its empowering effect is its contribution to reducing poverty. The vulnerability of poor people can be countered by redressing low income levels, hazardous conditions, social powerlessness and isolation. Infrastructure has considerable potential in this regard. For example, energy provision can ensure a better work and study environment, access to information through the media, and more time for productive activities (Sagalyn, 2007).

However, infrastructure provision does not inevitably contribute to the eradication of poverty. Ill-designed infrastructure could have more costs than benefits for poor people because of inadequate targeting or adverse social, health, financial and environmental effects. Infrastructure provision can also widen the gap between poor and non-poor people when access to services is expensive, or where infrastructure services were not planned specifically around the needs of the poor, for example, the Chief Albert Luthuli Hospital has come under criticism in certain quarters as too highly specced for local needs (Infrastructure Backlog, 2005).

2.5 Critical Success Factors

A crucial aspect of public-private partnership research is the ability to identify and quantify outcomes and to establish that changes in these measures that coincide with public-private partnership efforts were actually the result of public-private partnership activities. Addressing questions such as the following should use both qualitative and quantitative methods of analysis, as appropriate to the situation (Barr, 2007):

1. What were the intended outcomes of the public-private partnership effort?
2. Did the effort identify specific, measurable indicators of the intended outcomes?
3. Did the effort identify specific target levels to be attained for these indicators?
4. Are the methods used to measure the outcome indicators reliable and consistent over time?
5. Were there any outcomes from the effort (either beneficial or detrimental) that were not expected to occur?

The effectiveness of a PPP program can be best evaluated using the best value contributing factors as suggested by Zhang (2006), such factors include:

- Transfer of risks related to construction, finance and operation
- Reducing the size of public borrowing via off-balance-sheet financing
- Reduced disputes and claims
- Acquisition of a fully completed and operational facility

- Additionality - acquisition of facilities that would otherwise not be built by the public sector
- Long project life span
- Low tariffs/tolls
- Optimized resource utilization
- Life-cycle cost
- Early project completion or service delivery.

The private sector is not always more efficient and the service provision is often more expensive to the consumer. Big government contracts are complex and demanding and prone to abuse by unscrupulous individuals, firms or politicians, unless controlled by disciplined, highly transparent procedures (Farlam, 2005).

2.6 International Practice

Public Private Partnership initiatives in other parts of the world have in general started with a preparation phase involving changes in legislation to facilitate the development of Public Private Partnerships, the establishment of public sector advisory groups and the creation of special taskforces within key departments or ministries. For example, in Japan and Italy new legislation has recently been passed to enable the development of Public Private Partnerships, while in Holland, Finland, South Africa and the United Kingdom dedicated Public Private Partnership teams have been created in a number of important government departments (Grimsey and Lewis, 2004).

Public Private Partnerships are increasingly being seen as an attractive approach to the provision of infrastructure projects and services across Europe

and the rest of the world. An ever increasing number of countries are embarking upon Public Private Partnership programmes that will lead to a significant redefinition in the role of the public sector in the financing and provision of public services (De Bettignies and Ross, 2004).

Infrastructure projects being undertaken through public-private partnerships are increasingly common in Europe, Asia and Australia. The UK has a successful record of delivering public infrastructure projects using PPPs for 15 years, Australia for over 8 years and more recently, Asia. In the UK alone more than 620 Private Finance Initiatives (PFI) contracts with a value of Euros 60billion have been signed and 450 projects are operational. As a model of procurement, governments are becoming more comfortable with the approach. The increased use of PPPs internationally means more competition for sponsor government to attract both domestic and international businesses to participate in their respective markets (Grimsey and Lewis, 2004).

2.7 PPPs in Africa

The record of PPPs in Africa over the last 15 years is mixed, the process is complex, and governments should not expect PPPs to be as the panacea for infrastructure development. Farlam (2005) argues that South Africa has the greatest cumulative experience of public-private partnerships in Africa, with over 50 such partnerships in development or implementation at national or provincial level, and 300 projects at municipal level, since 1994.

Some of the successful PPPs in Sub-sahara Africa are listed below.

- *N4 Toll Road from South Africa to Mozambique;*
- *Maputo Port;*

- *Multi-Utility Provision in Gabon;*
- *Prison Contracts in RSA; and*
- *Ugandan Telecommunications Sector*

Most of the successful PPP projects in Africa are the result of very strong political commitment. That has been the underlying factor of success of all these abovementioned projects, especially in countries where there has been an absence of regulatory and legal frameworks to govern these projects. The private sector has needed some guarantee or commitment from a senior political body to ensure that they are going to get a good return on their investment.

The abovementioned PPPs have benefited from having a political champion who brought their influence to bear to ensure that they are implemented successfully.

2.8 The regulatory structure of PPPs in South Africa

There are a range of regulatory provisions which must be adhered to in the initiation of a PPP. At municipal level the Municipal Systems Act (2000) provides the basis for managing the financial accountability of municipal government and includes sections outlining the procurement process. Section 76 of the Act provides the basis for procurement as a PPP. This section provides the essential design criteria for private sector provision of services. The Act makes consultation and the dissemination of appropriate information to the community and public at large a requirement of private sector involvement.

It also emphasizes the need to establish the direct and indirect costs and benefits of the PPP approach being considered. The core of all private sector provision in public service or infrastructure development is the process of competitive bidding, including mechanisms for preferential procurement and the promotion of SMMEs (National Treasury, PPP Unit, 2004).

A key challenge in sustaining effective service delivery through PPP involvement is regulation of the provision of services and the monitoring of implementation of 'service delivery agreements'. The Municipal Systems Act makes this feedback and oversight mechanism a legal requirement. The Act also includes the need for regulatory oversight of the control of the process of subsidisation and contractual terms and conditions for the adjustments of user tariffs. Ineffective feedback, monitoring and poor long-term oversight have been identified by a number of studies as one of the key reasons PPPs have been less effective than they could have been.

The PPP Manual and Standardised PPP Provisions are issued as Treasury PPP practice notes in terms of the Public Finance Management Act (PFMA) which governs the financial management of the national and provincial spheres of the South African government. They are therefore applicable to national and provincial departments and the public entities to which Treasury Regulation 16 to the PFMA applies. Municipal financial management is governed by the Municipal Finance Management Act (MFMA) which became law in 2003. Municipal PPP regulations were finalised in early 2005, and the PPP Unit is working on special Guidelines for Municipal PPPs. There is substantial policy

consistency between the PFMA and MFMA PPP regulations, so while the institutional systems and decision-making processes differ, the principle approaches to PPP affordability, risk transfer and value-for-money are consistent. (National Treasury PPP Unit, 2004).

The government, through the National Treasury has adopted a regulated and top down approach in the implementation of PPPs throughout the country. Its commitment to making PPPs work appears to be sincere and strong. Too strong, some would argue given the government's persistent temptation to err on the side of over-regulation (Schonteich, 2004).

The impact of the existing regulatory structure has elicited mixed views both from the Public sector as represented by Transport Minister Radebe and the Private sector as articulated by the Financiers. Both views are reproduced below:

the private sector has not come to the party in so far as the provision of public infrastructure is concerned. We acknowledge that by its own nature, the private sector is risk averse, is interested in the highest rate of return within the shortest period. We will, however, continue to champion the cause of public private partnerships. We call on the private sector to come to the party and share the risk with us, as government, so that we both can reap, in the long term, the benefits that will accrue from infrastructure investment. (Radebe, 2007).

A number of private sector practitioners are quoted in the survey as demanding certainty around governance issues and need to be satisfied that the contracting party had followed due process and has the authority to contract on behalf of government. Lenders and Project Financiers on the other hand will only participate in a PPP upon authentication of the feasibility study (Business Day, 2007).

2.9 Constraints and barriers

Despite the advantages of involving the private sector in infrastructure provision, there are still certain blockages preventing effective private sector participation (Chege, 2003), including:

- a. **Policy and regulatory concerns.** As mentioned in the preceding section on project finance, the policy and regulatory framework must be supportive. In many countries, private sector involvement in infrastructure is a new concept and as a result the policies and regulations should be adapted in a way that promotes these innovations.
- b. **Weak domestic capital markets,** unable to provide long-term financing for infrastructure projects that have long pay-back times and earn little or no foreign exchange (World Bank, 1997a).
- c. **High transaction and bidding costs.** Infrastructure projects involving private sector involvement typically have high transactions costs. In a review of transaction costs in infrastructure, Klein, So and Shin (1996) contend that these costs amount on average to some 5 to 10 percent of total project costs. This is a prohibitive factor and since the burden of these high transaction and bidding costs will eventually trickle down to the taxpayers,

the onus is on the various institutions responsible for awarding these projects to keep these costs down.

The reasons for the gradual evolution of the Public Private Partnership approach vary from country to country, but some of the most common barriers to a more rapid implementation of the approach as articulated in Guidance Note 1, 2000 are summarised below:

- a. Structural barriers - many countries devolve a significant amount of public sector responsibility to regional and local government. Establishing the right organisational structures within which to develop Public Private Partnerships has therefore taken some time and has required significant intervention and support on the part of central government. Public sector reform to facilitate the wider use of Public Private Partnerships is only really starting in mainland Europe, although some examples of Public Private Partnerships are beginning to emerge at a regional level. For example, the Portuguese and Spanish roads projects, and the new privately financed hospital in Valencia.
- b. Legislative barriers - the legislative frameworks governing responsibility for the delivery of public services are usually complex and restrictive. As a result, many countries have had to introduce new legislation in order to facilitate the development of Public Private Partnerships. For example, legislative changes have already taken place in the United Kingdom, Italy, Japan and South Africa.

- c. Political barriers - the utilisation of the Public Private Partnership approach in the transport sector has been politically acceptable for some time, but there is much greater sensitivity, regardless of any structural or legal difficulties, about the role of the private sector in the delivery of other public services. As Public Private Partnership forms develop, there is increasing evidence, supported by independent scrutiny, that Public Private Partnerships can provide better value for money if properly structured. This has renewed interest in the application of the Public Private Partnership approach to many aspects of public service provision, but political sensitivities still remain (Guidance Note 2, 2000).

Once a decision has been taken to examine the Public Private Partnership approach in detail, the first schemes procured by a government usually tend to be pilot projects. The purpose of these pilot projects is to determine the ground rules and best practices for particular forms of Public Private Partnership and to provide a firm basis for future development (Brown et al, 2003).

2.10 Lessons for South Africa

While many opportunities exist to forge PPPs that have the potential to transform communities and create incredible projects that will result in economic growth and vitality, leadership is a key attribute that solidifies any development. Government needs to lead this process through creating conditions that are conducive to participation by all stakeholders, especially the private sector (Guisto, 2007). Such conditions can be created through the following measures:

- There needs to be enough competent bidders or bidding consortia to make private provision process competitive,
- Scarce skills can be trapped into a project via allocating project to a private partner who not only has the skills but also the incentive (through “ownership” of the project) to perform at a high level,
- There needs to be a forum where the bargaining can take place, where the public interest has the same status at the table as private interests,
- Government, labour, and community-based NGOs must have resource support for participating,
- Labour and other NGOs at the table must be in for the long haul and learn the procedural and technical aspects of the matter and its regulation. This may require training,
- The bargaining must reflect the public interest and result in enforceable rules for the partnership that includes codification of the public part of any deal, and
- The regulatory framework should be supportive of all stakeholders.

Finally, PPPs are not, and probably never will be, the dominant method of infrastructure acquisition. They can be too complex, and costly, for many small projects and can constitute ‘using a sledgehammer to crack a nut’. In some cases, they may be beyond the capacity of the public sector agencies to implement and manage. Nonetheless, it is expected that PPPs will continue to be an important component of infrastructure development policies.

Competition holds the key, competitive bidding between private enterprises for the financing, construction and operation of infrastructure facilitates the choice

of the most efficient solution for market development and project risk. Efficient private financing rests on competition between potential operators and keeps the lid on costs (Grimsey and Lewis, 2004)

2.11 Conclusion

What countries like the UK, Canada and USA have achieved through PPPs, notwithstanding some of the notable failures confirm that infrastructure delivery through PPPs, is effective. In the African continent, particularly sub-Saharan Africa there is some evidence of success e.g. Maputo Port, N4 Toll Road and Ugandan Telecommunications. South Africa has successfully completed high ranking infrastructure projects using PPPs, in recent years, however, there appears to be a disconnect between the massive infrastructure backlog and the expected pace of delivery. Given the urgency of infrastructure delivery and its associated socio-economic benefits, factors that contribute to the slow down of such delivery require investigation.

The increasing participation by the private sector (specifically, the financiers) through amongst others, tapping into capital markets to raise and underwrite debt into a PPP project remains commendable. This bears testimony to the much needed and growing support provided by the Private sector. The success of PPPs elsewhere in the world and the role of financiers in creating competitive funding conditions for projects and associated efficiencies, underscores the need to conduct this research in South Africa.

CHAPTER 3: RESEARCH QUESTIONS

The aim of this study is to explore and delve into the underlying reasons of why are PPPs delivering so little in the face of such huge infrastructure backlogs. Notwithstanding the public acknowledgement by the National Treasury of the importance of bringing the private sector as a partner in infrastructure provision and the commendable adoption of the PPP guidelines.

The questions are intended to explore the role of financiers or lack thereof in the successful implementation of PPPs. According to Daft (1983), significant studies have often approached the research problem as open-ended questions to be answered and discovered rather than specific hypotheses to be proved.

The open ended questions that this research seeks to get answers to are:-

Research question 1:

How successful are PPPs perceived to be in infrastructure delivery?

Research question 2:

What is the role of financiers in infrastructure provision using PPPs?

Research question 3:

What are the major facilitating and inhibiting factors in the financing and implementation of PPPs? Please name five of each.

Research question 4

How can these inhibiting factors be overcome?

Research question

What are the recommendations would you make to key stakeholders

Research question 6

Is there anything else you would want to see changed or introduced ?

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Qualitative research design

A qualitative research design is one where the data are collected in the form of words and observations, as opposed to numbers. Qualitative research is associated with research questions and phenomena of interest that require exploration of detailed in-depth data, aimed at description, comparison or prescription (Partington, 2003).

Daft (1983) recommended a craft-like quality of the research process and that it is a journey of discovery, where the surprises are what makes the journey worthwhile, he supports the idea of a deep exploratory study by stressing that it is not the data that is important but rather the continual asking of the question “why” is what leads to the discovery of real knowledge, and this is the rationale behind the proposed qualitative approach to this research. Qualitative research provides the opportunity to develop a descriptive, rich understanding and insight into individuals' attitudes, beliefs, concerns, motivations, aspirations, behaviors, and preferences.

This method was chosen so that deep underlying impediments surrounding the utilization of PPPs as delivery vehicles for infrastructure can be unearthed. Once they have been uncovered, recommendations will be made as to how to ensure successful implementation of PPPs. The research paradigm is governed largely by the nature of the research, the method of data collection and the purpose of the research (Leedy and Ormrod, 2001). The research method proposed was qualitative in nature underpinned by the following elements:

- Experience surveys given its exploratory nature
- In depth semi-structured interviews will be used to collect data
- The data to be collected will be descriptive and encompass personal views.

The value of qualitative research can best be understood by examining its characteristic. One of the primary advantages of qualitative research was that it is more open to adjusting and refining of research ideas as an inquiry proceeds. Also, the researcher does not attempt to manipulate the research setting (Wisker, 2001). Qualitative research data are believed to be attractive because they provide amongst others:

- Well grounded, rich descriptions and explanations,
- Preservations of time flows, chronologies and causality
- Serendipitous findings for new theory construction and
- A quality of undeniability.

4.2 Methodology

A survey method using a semi-structured interview format was employed to gather information from the sample. This method was underpinned by an in-depth literature review on PPPs as well as relevant points gleaned from the problem definition. According to Saunders, Lewis and Thornhill (2002) the main reason for conducting interviews is to understand how individuals construct the meaning and significance of their situations. Interviews semi-structured or unstructured are appropriate when:

- It is necessary to understand the constructs that the interviewee uses as a basis for opinions and beliefs about a particular matter or situation

- One aim of the interview is to develop an understanding of respondent's world so that the researcher might influence it either independently or collaboratively.

4.2.1 Population and Sample

The respondents were selected based on their experience in the PPP environment. Given the fact that PPPs were relatively new in South Africa and a need for practitioners in the sector was required, a snowball sampling approach was used. This method enables the researcher to collect a contact list of possible respondents who have the requisite expertise. The process begins by asking well-situated people questions like, who knows a lot about my topic? Whom should I talk to? By asking a number of people who else to talk with, the snowball gets bigger as new information-rich cases are accumulated (Patton, 2002).

The target population was drawn from, Investment Banks, Legal firms, the Treasury and Provincial PPP units, Development Finance Institutions and Construction firms. The sample was purposive in nature as the researcher purposefully selected the respondents who would have the relevant experience to answer the questions. Thus no attempt was made to ensure randomness. Respondents were drawn according to their underlying experience and expertise. Knowledgeable people were selected for their ability to articulate information, the researcher was not trying to establish a representative probability sample. The purpose of surveying such experts was to help formulate the problem and clarify concepts rather than develop conclusive evidence (Zikmund, 2003).

The sample size, while limited by the number of individuals with relevant experience in this field, consisted of 18 respondents drawn as follows:

Table 1 Sample of respondents

Public Sector	Private Sector
PPP unit representative(s)	6-Project Financiers
DFI official(s)	6-Financial/Legal Advisors
1-Provincial Govt officials	3-Construction firms

4.2.2 Questionnaire Design

The semi-structured questionnaire was carefully designed to yield valid information. Meticulous attention was paid to ensure that individual questions are relevant, appropriate, intelligible, precise and unbiased. The order of the questions was carefully arranged, and the layout of the questionnaire was clear. The questionnaire approach (Appendix A) was used as a basis for conducting face-to-face interviews with the respondents. The questions are open ended so as to allow respondents to express their views without undue limitation by the specificity of a question. The questionnaire was pre-tested that is, piloted on a small sample of people characteristic of those in the sample. The clarity and development of the questionnaire was enhanced through the incorporation of suggestions by members of the research panel and the research supervisor into the final draft (Dorfman, 2004).

4.2.3 Data Collection

The targeted respondents were contacted telephonically and the nature and purpose of the research explained. Once the respondent agreed to participate in the research, an appointment was made to conduct the interview and where

appropriate, the questionnaire was sent electronically ahead of time. Interviews were conducted in the offices of the various respondents or a place of their choice. Each interview was semi-structured and lasted between 45 minutes and one and a half hours.

4.2.4 Data Analysis

Data analysis in qualitative research can be likened to a metamorphosis where the researcher retreats with the data, applies his analytic powers and finally emerges with the findings. The process is highly intuitive and it is not always possible to locate a source of an insight (Merriam, 1998)

Content analysis (Leedy & Ormrod, 2001) was used to analyse the data. This entailed viewing data in its entirety, after which the data was clustered into categories. Clustered responses were then tabulated based on the identified stakeholder groups and then added together to determine a total frequency of responses per cluster category. This facilitated the identification and categorization of responses into clusters based on the frequency with which the response to a question is repeated by the individual respondents. The responses were rank ordered based on the total derived by counting the number of times they are repeated. Two table formats were used to present data, the first format of tables provides a comprehensive detail of responses to the research questions which are categorized into clusters. The second format of tables provides a summary using the cluster categories. This was done to facilitate the ease of interpreting the results. The tables appear in chapter 5.

4.3 Limitations

One of the noted limitations of descriptive research is the possibility that the researcher simply describes everything. The theory cautions against this, and puts the onus onto the researcher to ensure that only selected focused items are considered.

The most important limitation of qualitative research is that the findings cannot be directly generalized to the larger population being studied or for whom a communications program is being designed (Zikmund, 2003). The reasons for this limitation are:

- Participants often are not selected randomly. In other cases, selection strategies that introduce a selection bias may have been employed.
- The number of participants in a typical qualitative research study is too small to be representative of the population.
- Qualitative research does not collect numeric data from a representative sample of the target audience. As a result, this type of research cannot be subjected to statistical analysis to estimate to what extent opinions expressed by participants reflect the opinions of the population studied. The most important implication of this limitation is that researchers should refrain from drawing any conclusions about the actual prevalence of specific concerns, attitudes, or beliefs among the target audience.
- The quality of the data collection and the results are highly dependent on the skills of the interviewer and on the rigor of the analysis. The skill and experience of the analyst(s) also influence how well the data are summarized into themes and insights that are useful for subsequent program planning.

Qualitative research is not without its weaknesses and limitations. Misuse or misunderstanding the capabilities of qualitative research is commonplace. Companies often fall in love with the data-rich results and assume that the results are projectable. This assumption is incorrect. Because the analysis is subjective and deals with a small sample size, projectability is not possible. Another common misconception is the expectation that qualitative research will always produce definitive conclusions. In reality, the results will not provide companies with definitive conclusions, but only with enough information to establish a firm basis for decision making (Fitzgerald, 2000).

The sample was selected from the Gauteng province only, this could be justified as the province is not only the economic engine of South Africa but the majority of the stakeholders were based in Gauteng. A number of these stakeholders have been involved in the biggest PPP in the African continent, The Gautrain Rapid Rail Project. The province has become the hotbed of PPP activity as a result.

Of the targeted 20 respondents, only three from the public sector (i.e National Treasury and a DFI and Provincial PPP unit) two targeted respondents declined the request to participate in the research process. As a consequence, the views from the Private sector are likely to dominate the findings as, the private sector respondents were more forthcoming. However, the views of the Public sector are represented as reflected in the results chapter that follows.

CHAPTER 5: RESEARCH RESULTS

This chapter details the results of the raw data collected during the interview process. This data will subsequently be used to answer the questions raised in Chapter Three.

5.1 The Respondents

Eighteen of the targeted twenty semi-structured interviews were conducted. In line with the analysis presented in Table 1 in chapter 4, 18 respondents were categorised into four groups: namely, the public sector entity, the project financiers, legal and financial advisors and construction firms.

The fifteen private sector stakeholders interviewed were from law firms, investment banks, financial services firms and a logistics firm. All fifteen respondents are currently involved in a range of PPP projects and have the relevant experience in infrastructure PPPs.

Interviews were also conducted with three public sector representatives, the respondents were drawn from three separate entities within the public sector. Their experience spanned a number of PPPs over the past 8 to 10 years.

5.2 Presentation of results

The purpose of the research was to determine what factors blunt the effectiveness of PPPs as a delivery vehicle for infrastructure in South Africa. This determination was made by way of face to face interviews with the relevant stakeholders as identified in Appendix C.

The focus of the research sought to identify factors that impact on the financing aspect of PPPs, due to what appeared to be a reluctance to participate in the largest PPP in Africa and one of the largest in the world, the Gautrain project.

5.3 Tabulated Content Analysis

The Tables 2 through to 8 represent data obtained using the semi-structured interview process for the six research questions. The tables reflect the following information:

- A listing of responses to the six questions;
- A number of broad categories created by clustering related responses;
- A list of responses within each cluster;
- Frequency of responses per cluster per stakeholder group;
- A consolidated total of all stakeholders responses for each cluster.

5.3.1 The success of PPPs as infrastructure delivery vehicle

Table 2 below provides an analysis of responses per sector based on the comments made by the individual respondents to question 1. The responses to the question are captured across the scale of 1 – 4. The number 1, denoting “Not successful at all” through to the number 4, denoting “Very successful”. The numbers 2 and 3 respectively, denoting “Somewhat successful” and “Successful”.

It is quite evident from Table 2 that the majority of the Private sector responses indicated that the PPPs were somewhat successful as represented by over 70% of the respondents, with the 30% split between those who believe they were successful and very successful. The Public sector respondents indicated that the PPPs were successful to very successful

Table 2: The success of PPPs as infrastructure delivery vehicle

Response	Not at all	Somewhat successful	Successful	Very Successful
Private Sector	0	11	3	1
Public Sector	0	1	2	0
Total	0	12	5	1

The data contained in the following tables is based on responses to the questions per the questionnaire. The responses per question were constructed into clusters and each response was categorized into the appropriate cluster/themes to ensure ease of interpretation of data per cluster or theme. At the end of each cluster of responses, the number of responses tallied up as a subtotal.

The respondents were categorized into the four sectors: Public sector, Project financier, Financial/Legal advisor and Construction firm. All the responses were then captured under each sector and counted as represented below.

5.3.2 The role of financiers in infrastructure provision using PPPs

There was a wide range of opinions on the role as perceived by different stakeholders.

Financiers are considered to play a pivotal role in the in the provision of different forms of finance to PPPs particularly given the underlying assumption that part of the reason for the partnership is to augment the state's limited funding. They also bring financial discipline and management efficiencies to the PPP process. Their role in risk allocation through the use of financial engineering techniques is crucial to the success of the projects.

Table 3: Role of financiers

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
1	Financial discipline & innovation	• Financial Discipline	1	2	3		6
		• Provide/Advise on optimum structure	1	2	3		6
		• Ensure financial model integrity			1		1
		• Financial innovation			1	1	2
		• Financial expertise & capacity		1			1
			2	3	5	1	16
2	Debt provision	• Alleviate state financial burden	1	1			2
		• Provide debt to transaction		2	1	1	4
		• Govt freed to focus on needy			1		1
			1	3	2	1	7
3	Risk taker	• Underwriter of risk	2			1	3
		• Provider of BEE Funding			3		3
			2	0	3	1	6

5.3.3 Identified facilitating factors

These factors are the drivers of success in PPP implementation and financing, Table 4 reflects the four key clusters derived from the responses to the questions..

Table 4: Facilitating factors

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
1	Competent participants	• Higher Deal flow	1		2	1	4
		• Competition	1				1
		• Clarity of objectives	1				1
		• Competent advisors on both sides		4	3	1	8
		• Realistic expectation on timing		1			1
			3	5	5	2	15
2	Legislative framework	• Regulatory framework intact	2	3	2	1	8
		• Standardisation of processes	1		2	1	4
			3	3	4	2	12
3	Political Commitment	• Partnerships with Private Sector	1	1	2		4
		• Political support for projects		2	1	2	5
		• Project Champion in line dept		1			1
		• Prompt in dealing with land issues			1		1
			1	4	4	2	11
4	Developed Financial Markets	• Access to funding	2			1	3
		• Risk appetite for PPPs				1	1
		• Ability to underwrite risk	1			1	2
			3	0	0	3	6

5.3.4 Identified inhibiting factors

Table 5 shows the details of factors believed to be responsible for poor delivery by the PPP process based on answers to the questions.

Table 5: Inhibiting factors

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
1	Technical capability	• Skills shortage	2	2	2	2	8
		• Limited project flow		1	1		2
		• Risk allocation		1			1
		• Feasibility studies				1	1
		• Capacity constraints	1	2			3
		• Lack of competition	1				1
		• Lack of dedicated capacity		1	1		2
		• Lack of collective learning			1		1
		• Project complexity			1	1	
			4	5	4	2	15
2	Inherent Inefficiencies	• Regulatory framework refinement	1			1	2
		• Standardisation of processes			1	1	2
		• Approval delays		2	1	1	4
		• No incentives to do PPPs		1			1
		• Scope Creep				1	1
		• Cumbersome Technical Approval process		1			1
			1	4	3	3	11
3	Political Pressure	• BEE Funding	1	1	1		3
		• Lack of political will					
		• Criticism by Treasury	2		1		3
		• No PPP specific funding			1		1
			3	1	3	1	8
3	Costs	• High bidding costs	2	2	1		5
		• Mis-pricing of deals		1	1	1	3
			2	3	2	2	8

Table 5: Inhibiting factors (continued)

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
4	Risk	<ul style="list-style-type: none"> High risk projects 				1	1
		<ul style="list-style-type: none"> Limited dealflow Demand for infrastructure 		1		1	1
			0	1	0	2	3

5.3.5 Overcoming inhibiting factors

Table 6 depicts responses on ways to overcome the inhibiting factors which blunt effectiveness of PPPs.

Table 6: Overcoming inhibiting factors

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
1	Re-engineering processes	<ul style="list-style-type: none"> Decentralise decision making 			1		1
		<ul style="list-style-type: none"> Simplification of processes 	1				
		<ul style="list-style-type: none"> Flexibility Privatise PPP unit 	1	1	2	2	6
		<ul style="list-style-type: none"> Cost sharing 	1	1		1	2
			3	2	3	4	12
2	Capacity building	<ul style="list-style-type: none"> Skills training 	1	2	1	1	5
		<ul style="list-style-type: none"> Shared learning 		1			1
		<ul style="list-style-type: none"> Team of project champions 		1			1
			1	4	1	1	7
3	Political pressure	<ul style="list-style-type: none"> Innovation in BEE funding 			1		1
		<ul style="list-style-type: none"> Political will 		1			1
			0	1	1	0	2

Table 6: Overcoming inhibiting factors (continued)

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
3	Governance	<ul style="list-style-type: none"> • Certainty of authority • PPP unit internal politics 		1			1
					1		1
			0	1	1	0	2
3	Promotion	<ul style="list-style-type: none"> • Highlight good PPPs • Pref funding for PPPs 			1		1
				1			1
			0	1	1	0	2

5.3.6 Recommendations to minimize inhibiting factors

Table 7 reflects the responses in respect of the recommendations suggested to the Financiers, in particular by the respondents on how to minimize the inhibiting factors.

Table 7: Recommendations to minimize inhibitors

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total	
1	Re-engineering of Processes	<ul style="list-style-type: none"> • Privatised PPP unit • Stop reinventing processes • Align with govt objectives • Streamline procurement • Process simplification • Standardized sector docs 				1	1	
					1			1
			1					1
				1				1
							1	
			1	1	2	2	6	

Table 7: Recommendations to minimize inhibitors (continued)

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
2	Private Sector Appetite	• More risk sharing	1	1	1		3
		• Financial engineering			1		1
		• Cheaper debt terms			1		1
			1	1	3	0	5
2	Capacity building	• Provision of Technical assistance				1	1
		• Capacity to close deals					
		• Smarter advisors		1			1
		• Consult internationally		1	1		1
		• Monitor bid costs				1	1
			0	2	2	1	5
3	Competent participants	• Deal flow	1				1
		• Competition	1				1
			2	0	0	0	2
4	Promotion	• Sell PPP benefits to government departments		1			1
				1	0	0	1

5.3.7 Suggested changes to ensure PPP effectiveness

Table 8 below, represents responses in respect of what the stakeholders want to see changed to increase the effectiveness of PPPs.

Table 8: Changes required to ensure effectiveness of PPPs

Rank	Cluster	Response	Public Sector	Project Financier	Financial/Legal Advisor	Construction Firm	Total
1	Capacity building	• Creation of capacity in Government	2	1	2		5
		• Deal closure focus		1			1
		• Clients' needs assessment			1		1
		• PPP benefits awareness				1	1
		• Time to deal closure			1		1
		• Skills development			1		1
		• Deal flow			1		1
		• Enhanced feasibility studies	1				
			3	3	5	1	12
2	Re-engineering of processes	• Centralisation of procurement			1		1
		• Deal pipeline coordination					
		• Relaxing procurement rules		1			1
		• Change tender process		1			1
		• Consider unsolicited bids		1	1		1
		• Template for small deals		1			
				4	2	0	6
3	Political pressure	• Enhanced legal framework		1			1
		• Enforced use of PPPs by National Treasury	1		1		1
		• Increased social projects	1				1
			2	2	0	0	4

Concise Data Presentation

Tables 2-8 above present a comprehensive representation of the data collected through the interview process. This data which is in effect the responses to the research questions is categorized into clusters identified on the second column of each table. The responses are tallied up and totals highlighted on the last column. These totals are used to rank each cluster of responses. Tables 9-13 represent the consolidated total of all stakeholders responses per cluster rank ordered in order to facilitate the interpretation of the results and presentation of the findings in an easy to read manner.

Table 9: Summary of Role of Financier in PPPs

Rank	Cluster	Total no. of responses
1	Financial Discipline and Innovation	16
2	Debt and Equity provider	7
3	Risk taker	6

The cluster of responses have been rank ordered and the number one item to the respondents is the financier's role in bringing Financial discipline and innovation to the PPP process.

Table 10: Summary of facilitating factors affecting financing and implementation of PPPs

Rank	Cluster	Total no. of responses
1	Competent and Knowledgeable participants	15
2	Legislative framework	12
3	Political commitment	11
4	Developed financial markets	6

The rank order of the responses in table 10 places Competence and know-how as the key factor in facilitating both the financing and implementation of PPPs. This is closely followed by the Framework which helps to standardize compliance with legislation governing PPPs. Political commitment is a close third.

Table 11: Summary of inhibiting factors affecting financing and implementation of PPPs

Rank	Cluster	Total no. of responses
1	Lack of technical capability	15
2	Inherent inefficiencies	11
3	Political pressure	8
3	Costs	8
4	Risk	3

Table 11 indicates the lack technical capability as the leading inhibiting factor to implementing and financing of PPPs, followed closely by inherent inefficiencies, which is largely a reference to Public sector operational inefficiencies. Political pressure and Costs appear to contribute as inhibitors specifically where politicians fail to support the PPP processes.

Table 12: Summary of ideas on overcoming the inhibiting factors

Rank	Cluster	Total no. of responses
1	Re-engineering of processes	12
2	Capacity building	7
3	Political pressure	2
3	Governance	2
3	Promotion	2

There is a degree of overlap in the responses obtained from respondents on dealing with inhibiting factors as represented in Table 12 above and Table 13 below. The overlap is quite evident in cluster headings. The degree of overlap suggests a higher level of consciousness regarding the nature of the problems afflicting the PPP process and that solutions have been given due consideration.

Table 13: Summary of recommendations to minimize inhibiting factors

Rank	Cluster	Total no. of responses
1	Re-engineering of processes	6
2	Private sector appetite	5
2	Capacity building	5
3	Competent participants	2
4	Promotion	1

Table14: Summary of any other recommended changes

Rank	Cluster	Total no. of responses
1	Capacity building	12
2	Re-engineering of processes	6
3	Political pressure	4

The responses to the question on recommendation in respect of changes that the stakeholders want to see to ensure the effective functioning of PPPs are captured in summary as represented in Table 14 above. Tables 12 and 13 indicate some overlap in cluster headings. The cluster headings in respect of the two tables indicate the intention was to get the respondents to recommend or suggest to how to deal with the identified inhibiting factors. Some of the recommendations are far reaching in that they call for the complete overhaul of the PPP process and the top down approach proposed to politicians to weigh on departments on the use of PPPs.

CHAPTER 6: DISCUSSION OF THE RESULTS

This chapter analyses the results presented in the previous chapter. The interpretation was facilitated by insights gained from the theory in the literature review. The analysis was then used to test the validity of the research questions.

Furthermore, reference is made to relevant comments made during the interview process and such comments are used to facilitate the interpretation of the data and the results.

Sample data

The sample included key stakeholders representing:

- Bankers (project financiers),
- Legal, technical and financial advisors,
- Relevant government departments (specifically the PPP unit),and
- Major Construction firms.

The sample size, while limited by the number of individuals with relevant experience in this field, consisted of 20 participants, however, 18 key stakeholders participated in the interview process. The final sample consisted of individuals from their respective areas of expertise as follows:

Public Sector	Private Sector
1 Treasury PPP unit official	5-Project Financiers
1-DFI official(s)	6-Financial/Legal Advisors
1-Gauteng Province PPP head	3-Construction firms
	1-A logistics management firm

The respondents were drawn according to their underlying experience and expertise in the broader PPP market. Whilst not all the targeted respondents were able to participate in the research, a significant number of PPP stakeholders were able to respond to the request positively and made this research possible.

6.1 Research Question 1

The success of PPPs in infrastructure provision and financing in South Africa

Table 2 in Chapter 5 provides an analysis of responses per sector based on the comments made by the individual respondents to question 1. The responses to the question are captured across the scale of 1 – 4. The number 1 denoting “Not successful at all” through to the number 4 denoting “Very successful”. The numbers 2 and 3 respectively denoting “Somewhat successful” and “Successful”.

It is quite evident from Table 2 that the majority of the Private sector responses indicated that the PPPs were somewhat successful as represented by over 70% of the respondents, with the 30% split between those who believe they were successful and very successful. The Public sector respondents indicated that the PPPs were successful to very successful, which suggests that they have bought into the concept of co-operating with the Private sector and from their perspective PPPs do deliver on their expectation and therefore are a success.

The record of PPPs in Africa over the last 15 years is mixed, the process is complex, and governments should not expect PPPs to be as the panacea for infrastructure development. Farlam (2005) argues that South Africa has the

greatest cumulative experience of public-private partnerships in Africa, with over 50 such partnerships in development or implementation at national or provincial level, and 300 projects at municipal level, since 1994.

The last two decades have seen a worldwide trend towards deregulation and privatization, leading to a decline in the level and kind of services provided by governmental units. This has led to a process whereby needed infrastructure is obtained by enticing private sector entities to provide financing in partnership with public sector (Broadbent and Laughlin, 2002).

According to Taylor (2007), PPPs began in the UK in 1992, in response to demands for infrastructure renewal, public sector reform and better delivery of public services. In addition there was intense pressure for more efficiency and transparency in the allocation of public monies. He further argues that the earliest PPP projects were similar to those of today in that they combined the efficiencies of the private sector with the government's responsibility to meet the service needs of the public.

The enthusiasm and energy with which the South African private sector embraced the PPP concept is borne by the depth of knowledge that has been developed around all aspects of PPPs. Underpinning the relative success in South African PPPs, is arguably the most developed PPP legal framework in the SADC region, whereby the national and provincial government spheres are regulated by the 1999 Public Finance Management Act (PFMA) and Treasury Regulation 16 (issued in terms of the PFMA), and Municipal PPPs are governed by the 2003 Municipal Finance Management Act (MFMA).

The conclusion reached is that South Africa has seen a significant number of successful PPPs in the past ten years despite the challenges associated with co-operation between the Public and Private sectors. Both sectors have come full circle through the promulgation of the enabling legislation by National Treasury. Research shows that South Africa had to learn fast and some of the successfully implemented PPPs are world class and include amongst others:

- N4 Toll Road
- Prisons
- Chief Luthuli Hospital

There remain concerns around some PPPs which never got past the first Technical Approval stage 1 (TA1) and the resultant levels of infrastructure backlog. In addition, the pipeline of PPP projects has left most stakeholders doubting South Africa's ability to maintain the momentum it has built around PPPs in the past 5 years. The profile of responses as represented on Table 2 confirm the need for this research. This assertion is based on split of opinion between the two sectors, the majority of the private sector respondents are of the view that PPPs are somewhat successful, whereas, a majority of the public sector respondents are convinced that the PPPs are in fact successful.

6.2 Research Question 2

The role of financiers in infrastructure provision using PPPs

Data contained in Table 3 in Chapter 5 above provides a profile of responses clustered into three categories which are rank ordered namely, Financial discipline and innovation , Debt provision and Risk taking. These three clusters provide a summary of how the role of financiers is seen by the various PPP stakeholders.

Financial discipline and innovation is mentioned by the respondents 16 times and testify as to the majority of views held by the stakeholders that it is the key role of the financiers. It encompasses financial integrity and expertise that the project financiers bring to most transactions in which they participate. This was followed by Debt provision which is intended to augment government's limited funding resources and other stakeholders including the BEE partners who typically have limited or no capital.

The Risk taking role of the financier takes the form of the relevant institution's willingness to underwrite the risks associated with the project to ensure that it materializes.

PPPs aim to achieve the best outputs by mobilizing private sector funds, technologies, managerial skills, and operational efficiency and facilitating innovations by transferring more risks and responsibilities to the private sector. The broad range of risks and responsibilities undertaken by the private sector necessitates a best value source selection (BVSS) approach in choosing the appropriate private sector partner in PPPs (Zhang, 2006).

The traditional way of financing infrastructure from fiscal budgets is no longer a viable proposition, particularly in developing economies. Macroeconomic instability and growing investment requirements have shown that public financing is volatile, and this has led to the emergence of private sector participation in the provision of public infrastructure.

Facing tighter budgets, public authorities at all levels, from federal and provincial governments, through to civic governments, are increasingly looking

toward partnerships with private sector for the provision of infrastructure and service. The growing popularity of PPPs is unlikely to be a passing fad. It is expected that a greater variety will be seen as pressures on public budgets persist and as the private sector begins to appreciate more fully the prospects of making profits through this type of cooperation (Loxley, 1999).

The conclusion reached links into the theory reviewed where the emphasis of the funding aspect was highlighted as amongst the major motivators for the establishment of PPPs in South Africa and elsewhere. Critically, the role of providing financial discipline to projects is key to the achievement of the value for money and forms the basis for PPP agreements. Technical and financial ability on the part of Financiers and promoters must be evident and their commitment to carry out the project must be unquestionable as well as thorough analysis of the project's economic and financial viability.

6.3 Research Question 3a

Facilitating factors that affect the financing and implementation of PPPs

The data in Table 4 above depicts the responses clustered in rank order into four categories, namely, Competent participants, Legislative framework, Political commitment and Developed financial markets.

Competent participants get mentioned 15 times by the respondents followed by the Legislative framework which mentioned 12 times. Political commitment is mentioned 11 times, whereas Developed financial markets get mentioned only six times.

Most of the successful PPP projects in Africa are the result of very strong political commitment. That has been the underlying factor of success of all these abovementioned projects, especially in countries where there has been an absence of regulatory and legal frameworks to govern these projects. The private sector has needed some guarantee or commitment from a senior political body to ensure that they are going to get a good return on their investment.

There are a range of regulatory provisions which must be adhered to in the initiation of a PPP. At municipal level the Municipal Systems Act (2000) provides the basis for managing the financial accountability of municipal government and includes sections outlining the procurement process. Section 76 of the Act provides the basis for procurement as a PPP. This section provides the essential design criteria for private sector provision of services. The Act makes consultation and the dissemination of appropriate information to the community and public at large a requirement of private sector involvement.

The government, through the National Treasury has adopted a regulated and top down approach in the implementation of PPPs throughout the country. Its commitment to making PPPs work appears to be sincere and strong. Too strong, some would argue given government's persistent temptation to err on the side of over-regulation (Schonteich, 2004).

A number of private sector practitioners are quoted in the survey as demanding certainty around governance issues and need to be satisfied that the

contracting party had followed due process and has the authority to contract on behalf of government. Lenders and Project Financiers on the other hand will only participate in a PPP upon authentication of the feasibility study (Business Day, 2007).

The conclusion reached is that there is a combination of factors whose presence in any PPP project would ensure its successful implementation. The literature refer to some projects that would have failed had it not been political support. Whilst fundamental to any project, competent advisors and participants are critical throughout the PPP process and the success of any project is dependent on such participants. The regulations governing the process are also key to ensuring compliance with the basic tenets of the PPP provisions.

6.4 Research Question 3b

Inhibiting factors that affect the financing and implementation of PPPs

The data in Table 5 details the rank ordered cluster of responses under the following headings. Technical capability, Inherent inefficiencies, Political pressure, Costs, Risk and Legislative framework.

Technical capability was mentioned 15 times by the respondents as a key inhibitor, followed by Inherent inefficiencies referred to 11 times. Political pressure was cited on 8 occasions by the respondents as were the costs associated with the bidding process. Risk was referred to only 3 times.

The traditional way of financing infrastructure from fiscal budgets is no longer a viable proposition, particularly in developing economies. Macroeconomic

instability and growing investment requirements have shown that public financing is volatile, and this has led to the emergence of private sector participation in the provision of public infrastructure.

Project Financing came of age in South Africa with Public Private partnership transactions, in terms of which public and commercial interests looked to banks to fund infrastructural development. According to Mr Peo, it takes a long time to implement a PPP project, he expects more private sector refinancing after 2010. A notable example is the R22billion Gautrain project, currently the single largest infrastructure project under way, has attracted only R3billion in Private sector funding (Infrastructure Development for 2010, 2007).

While many opportunities exist to forge PPPs that have the potential to transform communities and create incredible projects that will result in economic growth and vitality, leadership is a key attribute that solidifies any development Government needs to lead this process through creating conditions that are conducive to participation by all stakeholders, especially the private sector (Guisto, 2007).

According to Hurst and Reeves (2004), many challenges remain in enhancing the use of PPP's as a means of delivering public services and infrastructure. A number of these challenges are not so much in the set up of the PPP process but in the support and articulation of the approach that is applied, Government departments lack the skills required to drive PPP's with public officials

sometimes resisting private sector participation for fear of the following amongst others:

- Loss of control,
- Negative implications of potential staff cuts,
- Negative public reaction to profit and control,
- Potential risk of failure that will reflect badly on them.
- Limited PPP experience creates the element of risk and fear of the unknown,
- There is often a lack of an overall vision that encompasses PPP's as a system of service delivery,

One is persuaded to conclude that the major inhibitor is the scarcity of skill and therefore technical capability. The complexity of PPPs and the requisite legislative compliance requirements demand of participants a high level of technical capability. In the absence of such capability, certain inherent inefficiencies associated with the public sector act as an inhibitor to the PPP process. One of the respondents suggested that one of the key inhibitors which everyone is loath to admit to was “good old private sector greed”

6.5 Research Question 4

Views on how can these inhibiting factors/challenges be overcome

The data in Table 6 give details of the clustered and rank ordered responses in respect of ways of dealing with inhibiting factors. The responses are clustered in the following categories, Re-engineering of business processes, Capacity building, Political pressure, Governance and Promotion.

Re-engineering of business processes which is cited by respondents 12 times suggest changing the ways in which PPPs are administered through simplification of the processes, decentralization of decision making and perhaps even considering privatizing the PPP unit. Capacity building is referred to 7 times by the respondents is indicative of the pervasive nature of the skills shortage problem in South Africa particularly in the Public sector. Methods of capacity building suggested include shared learning by practitioners as well as the establishment of project champions within government departments.

Political pressure is cited only 2 times, whilst politics are an inevitable part of the mechanism controlling the inter-relationships among stakeholders in any country or region, it appears from the respondents that it is not seen as significant as earlier thought.

Better allocation of risk - a core principle of any Public Private Partnership is the allocation of risk to the party best able to manage it at least cost. The aim is to optimise rather than maximise risk transfer, to ensure that best value is achieved. The ability to secure cost effective risk transfer is dependent on the scope of the services provided by the private sector and it is most likely where the private sector has clear ownership, responsibility and control of relevant risks. The basic principle of allocating risk to the party best able to manage it leads to more consideration and better control of the complete range of project risks across the whole life of the project

Any modified or future system of PPP has to be attractive to the private sector bidders (either as principals or as financiers).The PPP market needs to be

understood by the private sector, so that such bidders can develop supply chains for human and development capital and make rational decisions about the deployment of that capital.

According to Shaw (2005) some of the elements that would increase private sector appetite for PPPs are:

- Good governance
- Structure, discipline and honesty
- Transformation and delivery platforms
- Buy-in from civil society
- Good relationships amongst parties to a PPP
- Desire for success by all parties.

The conclusion reached is that capacity constraints are at the core of the challenges facing the PPP process and therefore, capacity building would be the starting point towards dealing with the inhibiting factors. There is, however, potential to minimizing the inhibiting factors through restructuring of business processes, which would resulting better risk allocation and thus mitigate associated costs.

6.6 Research Question 5

Recommendations to be made to the key stakeholders (particularly the Financiers) to minimize the inhibiting factors

Table 7 captures the responses to question relating to recommendations to minimize the inhibitors. The responses are rank ordered and clustered as

follows: Re-engineering of business processes, Private sector appetite, Capacity building, Competent participants and Promotion of PPPs.

Re-engineering of business processes is cited 6 times by the respondents, as suggested in 6.5 above, it appears to be at the core of minimizing the inhibiting factors. Some of the suggested ways of re-engineering the processes includes, streamlining of procurement processes, introduction of standardized sector documents and alignment of every PPP to broader government objectives.

Private sector appetite is referred to 5 times by the respondents as one of the means of minimizing inhibiting factors. This would manifests itself through increased risk sharing between the two sectors, better financing terms and innovation brought by financial engineering. Capacity building as seen previously as at the core of facilitating PPPs helps minimize the inhibiting factors though provision of technical assistance to the line departments and BEE partners, ensuring quicker implementation of projects

Acceleration of infrastructure provision - Public Private Partnerships provide an opportunity for the public sector to translate upfront capital expenditure into a flow of ongoing service payments. This enables the public sector to proceed with projects at times when the availability of public capital may be constrained, thus bringing forward much needed investment.

PPPs are not, and probably never will be, the dominant method of infrastructure acquisition. They can be too complex, and costly, for many small projects and can constitute 'using a sledgehammer to crack a nut'. In some cases they may be beyond the capacity of the public sector agencies to implement and manage.

Nonetheless it is expected that PPP will continue to be an important component of infrastructure development policies. Competition holds the key, competitive bidding between private enterprises for the financing, construction and operation of infrastructure facilitates the choice of the most efficient solution for market development and project risk. Efficient private financing rests on competition between potential operators and keeps the lid on costs (Grimsey and Lewis, 2004)

The conclusion reached is that Re-engineering of business processes will amongst other things improve private sector appetite for PPP transactions. Increased competition would contribute towards a robust PPP market and increased deal flow, which in turn would increase the skills base for future transactions. This will inevitably resulting the containment of costs associated with bidding and advisory for PPPs in the long run.

6.7 Research Question 6

Anything you would want to see changed or introduced to ensure the effectiveness of PPPs

The data in Table 8 depicts responses to question 6 as to what each respondent would want to see changed. The responses were rank ordered and

clustered as follows: Capacity building, Re-engineering of business processes and Political pressure.

Capacity building is referred to 12 times by the respondents and confirms the concern that was raised at all the interviews that creation of capacity, particularly the building of skills will eliminate most of the challenges identified. This would see benefits of PPPs communicated to government departments effectively, needs assessments performed properly, feasibility studies enhanced and deal closure expedited.

Re-engineering of business processes was referred to 6 times by the respondents and entails centralization of procurement, changing of tender processes, acceptance of unsolicited bids and establishment of templates for smaller PPP projects. Political pressure referred to 4 times entailed enforced use of PPPs by the political heads, enhancement of the legal framework and increased social projects.

The growing popularity of PPPs is unlikely to be a passing fad. One can expect to see more of them, in greater variety, as pressures on public budgets persist and as the private sector begins to appreciate more fully the prospects of making profits through this type of co-operation.

Faster implementation - the allocation of design and construction risk to the private sector, combined with payments linked to the availability of a service, provides significant incentives for the private sector to deliver capital projects within short construction timeframes. The painfully slow pace at which PPPs are being approved and implemented has resulted in SA's project finance skills

being applied elsewhere often in projects in the rest of Africa, thereby exacerbating local capacity constraints (Business Day, 2007).

PPPs aim to achieve the best outputs by mobilizing private sector funds, technologies, managerial skills, and operational efficiency and facilitating innovations by transferring more risks and responsibilities to the private sector. The broad range of risks and responsibilities undertaken by the private sector necessitates a best value source selection approach in choosing the appropriate private sector partner in PPPs (Zhang, 2006).

The conclusion reached is that the fundamental improvement can be achieved through building capacity, as a range of other benefits flow from having competent individuals executing complex transactions. A respondent exhorted the PPP unit to stop dithering and develop a template for smaller PPPs and drive the process from the ground up. He went to say, “They should not wait for the incompetents to tell them what they want, they should drive the process from the top, in order to generate meaningful pipeline”.

CHAPTER 7: CONCLUSION

This chapter deals with a number of issues, key of which are the main findings, followed by the recommendations to stakeholders, some suggested future research ideas and the conclusion.

7.1 Research Objectives

The purpose of this research can be summarized as follows:

- To determine if PPPs are in fact perceived as an important vehicle for infrastructure delivery by the key stakeholders,
- To investigate the role of project finance in the context of PPPs and identify inhibiting and facilitating factors,
- To highlight the pivotal role played by financiers in the successful implementation of PPPs, and
- To make recommendations to minimise the inhibiting factors

7.2 Main findings

The findings highlight the paradoxical nature of the relationship between the two main sectors, Public and Private in respect of PPPs. The evolution of the relationship between the two sectors underpins the relevance of PPPs in South Africa and how the challenges are resolved especially given that PPPs are a relatively new phenomenon. The relevance of financiers is highlighted as underpinning the successful implementation of the infrastructure projects.

7.2.1 The success of PPPs as vehicle for infrastructure delivery

There appears to be a sectoral split as captured in Table 2 in that the Private sector respondents in the main view the PPPs as somewhat successful, whereas the Public sector respondents overwhelmingly view PPPs as successful. This finding seems to vindicate the need for this research as captured in the first chapter where the research problem is introduced. The research problem manifested in the following ways: Negative perception of PPPs in both sectors, the record of PPPs in South Africa in the recent past considered to be mixed given the complexity of the PPP process..

7.2.2 The role of financiers in PPPs

There appears to be agreement among the stakeholders that the role of financiers is, mainly, to bring Financial discipline and innovation to the PPP process. The financing of projects is dominated by investment institutions and fund managers which typically look for safe investments for their funds. Financial innovation in all its forms helps ameliorate some of the risks associated with infrastructure projects. It has been said by one of the respondents that ‘financial engineering instead of civil engineering has become key to the success of any project’. In this context, debt and equity structuring becomes critical in the implementation of PPPs and project risks are appropriately allocated and mitigated

7.2.3 Identified Facilitating factors

The major finding on facilitating factors was the availability of competent and knowledgeable participants both on the advisory and implementation aspects of PPPs. This finding coupled with the presence of enabling legislation which

invariably is aligned with the higher level of political commitment on the part of government in seeking to ensure that PPPs are effective. The existence of developed financial markets features as a facilitating factor for the purpose of raising capital both for the projects directly and for the funding of stakeholders seeking to participate in the PPP process.

7.2.4 Identified Inhibiting factors

The major finding confirmed the often contentious but well publicized issue of skills shortage as evidenced by the lack of technical capability. There was consensus on this finding as almost all the stakeholders cited this aspect as a major stumbling block.

The inherent inefficiencies appear to derive from the lack of appraisal techniques and formulation of a more refined business case for PPPs within the public sector. The traditional system of public sector accountability relies on political accountability via a chain of relationships. Very often in practice the lines blur and inefficiencies creep in.

7.2.5 Overcoming Inhibiting factors

Almost all the stakeholders concurred that one of the ways to overcome inhibiting factors was to change the way things are currently done. The re-engineering of business processes around PPPs was key as some of the inefficiencies were resulting from cumbersome processes that could be reformed or changed completely. Capacity building is pivotal to overcoming the elements that serve only to blunt the success of PPPs. Relevant training as part

of capability creation will in the long run minimize and probably eliminate the inhibiting factors.

7.2.6 Recommendations to minimize inhibiting factors to stakeholders

Whilst there is not an apparent overlap in the suggested ideas on how to deal with the inhibiting factors as put forward by the stakeholders and the ways of overcoming them as cited on 7.2.5 above. Private sector appetite for PPP transactions would result in more resource allocation by this sector with the concomitant increase in the capability of persons dealing with PPPs.

7.2.7 Changes that stakeholders recommended

The major finding centred on building capacity within the public sector in particular. There was a sense that the private sector's capability is intact , however , increased interaction between the two sectors through a formal industry specific forum would enhance the working relationship

7.3 Recommendations

Implementing and sustaining successful PPP projects requires the co-operation numerous stakeholders and the integration of a myriad of factors. While the complexity of PPPs cannot be entirely removed, focusing on a number of key elements may influence the process. Below are recommendations to key stakeholders based on the major research findings.

Project Financiers

- Innovation through providing financing structures that translate in meaningful risk sharing and transfer should be the cornerstone of project financiers' participation in PPPs.
- Sourcing of project funds beyond the financiers own balance sheets through accessing the Capital markets could should be given due consideration as means of mitigating risks and provision of finance at competitive pricing.

National Treasury and PPP Unit

- The PPP unit needs to be provided with a sustainable budget by National Treasury so as to be able to attract and retain top talent for the unit through market related remuneration regime and thereby increase its capacity to deliver PPPs on time and in deal decisively with the backlogs
- Retain a team of roving PPP champions whose expertise will available to government departments as and when required.
- Consider developing guidelines to facilitate unsolicited bids as they are key to increasing deal flow and would address one of they inhibitors to PPP implementation.

Private Sector

- There is a perception of avarice on the part of the Private sector which manifest in higher fees on transactions. This deals a deathblow on one of the key considerations for entering into PPPs, namely, a demonstration of value for money by the line department in government. Industry

forums should create some awareness for both sectors which would eliminate potential misunderstandings.

- The Public sector should be treated as an equal partner in the PPP process and not as a junior partner who is at the mercy of technically astute advisors.

Government departments

- There is a need to educate line departments about the value provided by implementing major infrastructure projects using PPPs through highlighting the benefits.
- Project champions within line departments need to be created so that proper evaluation of projects is done timeously, thus eliminating unnecessary delays.
- Senior management within line departments should promote communication with key private sector entities thereby increasing their own technical capability.
- Appropriate application of PPP process would result in an increasing pipeline of deals which over time would eliminate the skills gap and increased knowledge sharing would result in the elimination of most of the inhibiting factors.

7.4 Future research ideas

- The future of PPPs in South Africa as a viable delivery medium for infrastructure.

- Investigation of some of the successful PPPs, specifically in the UK and Canada and identification of critical success factors.
- The impact of Black Economic Empowerment in infrastructure provision using PPPs
- The relationship between the economic growth rate and the level of infrastructure development in South Africa.

7.5 Conclusion

The research explored elements that blunt the successful delivery of infrastructure using PPPs. A number of facilitators and inhibitors were identified with the emphasis on minimizing the inhibiting factors. PPPs remain the most transparent and effective way of delivering infrastructure in South Africa and elsewhere, however, this document has been able to identify elements that blunt the effectiveness of the PPP process. A number of stakeholders have raised their concerns at the lack of a pipeline of PPP projects as generated by government departments. Such concerns have formed part of this research as infrastructure is desperately required both by the communities and the obligations associated with hosting the 2010 World Cup tournament. The perceptions of lack of political commitment and the public sector capacity to ensure that projects are realized were prevalent in this research.

The role of financiers was broadly characterized as the key cog in the facilitation of effective implementation of PPPs. The financial discipline and innovative ways of funding not only the transaction but also some stakeholders confirmed the pivotal role that the financier plays in this process. It is hoped that the

findings of this document will contribute towards the development of a more sustainable PPP process which will contribute to effective infrastructure delivery. The success of many projects around the world has become more a function of financial engineering rather than civil engineering.

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APPENDIX A: QUESTIONNAIRE

**TOPIC: The Effectiveness of Public Private Partnerships: A Project
Financier’s Perspective**

Thank you for agreeing to participate in this research. As was discussed telephonically, this research is a prerequisite for the interviewer, Bongani M Zulu to attain the degree of Master in Business Administration (MBA).

The research will focus on investigating factors that inhibit and facilitate the financing of infrastructure using PPP as a vehicle for such delivery. The questionnaire is aimed at collecting data based on answers given by the respondents (such as yourself) who have experience in this field.

To facilitate this, please answer the questions based on your own experience.

Although the completed research falls under the ownership of the Gordon Institute of Business Science (GIBS), the findings fall under the public domain and as such you as a respondent will have full access to the consolidated findings, should you so wish. All responses will be consolidated with a view to obtain an overall assessment of the factors under investigation. Please note that these responses will be generalized and not be attributable to any specific individual respondent. The confidentiality of your responses is therefore assured.

RESPONDENT’S DETAILS

NAME				
DESIGNATION				
ORGANIZATION				
EXPERIENCE WITH PPPs				
SAMPLE Category	PS	PF	LA	CF

Questions

1. How successful have the PPPs in infrastructure provision and financing in South Africa?

Not at all	Somewhat successful	Successful	Very successful
1	2	3	4

Please tick the appropriate box

2. What is the role of financiers in infrastructure provision using PPPs?

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.....

3. What factors affect the financing and implementation of PPPs?

a. Please identify 5 of the inhibiting factors

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b. Please identify 5 facilitating factors

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4. How can these challenges be overcome in your view?

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.....

5. What recommendations would you make to the key stakeholders to minimize the identified impediments

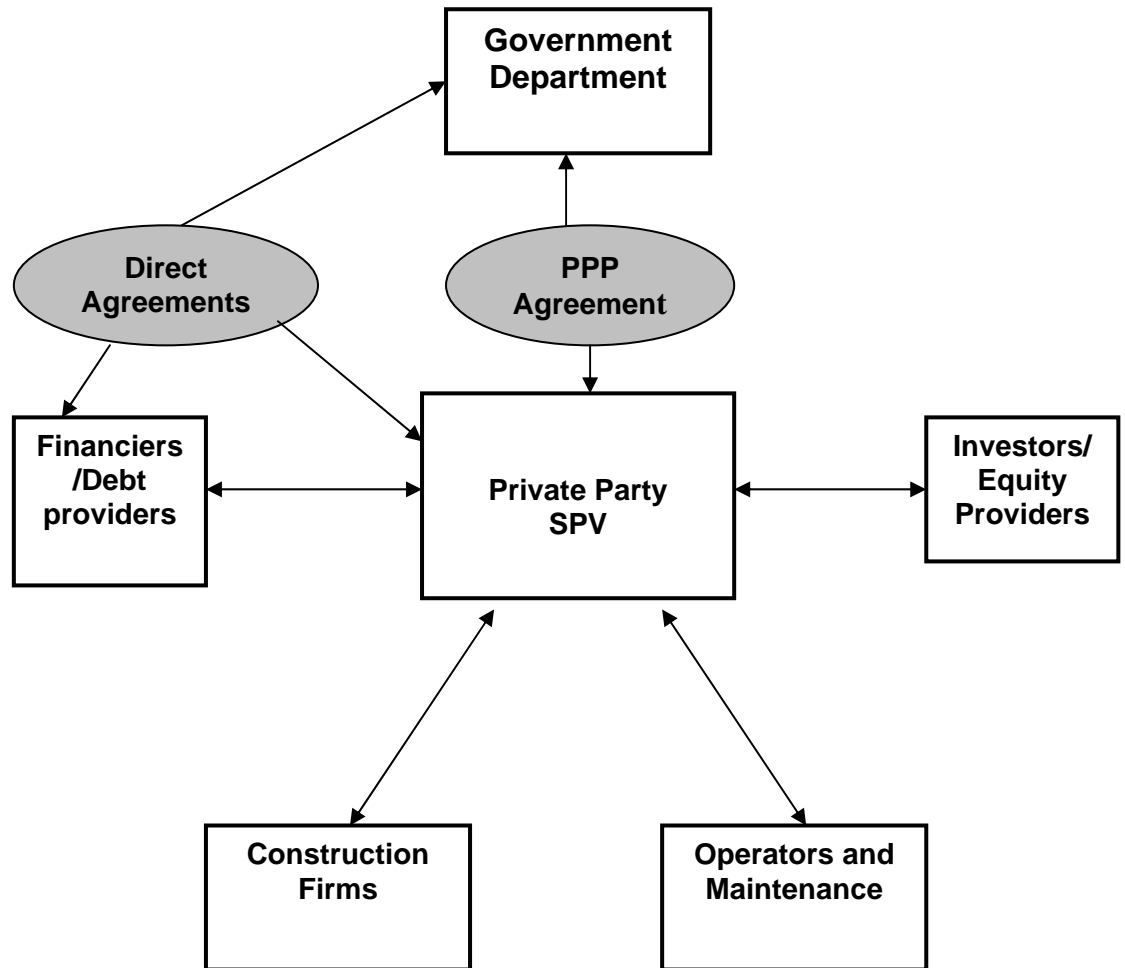
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6. Is there anything you would want to see change or introduced to ensure the effectiveness of PPPs

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THANK YOU FOR YOUR TIME

APPENDIX B: GENERIC PROJECT FINANCE STRUCTURE FOR PPPS



Source: Adapted from National Treasury PPP Unit (2005)

APPENDIX C: LIST OF RESPONDENTS

PUBLIC SECTOR

Name	Institution/Position
1. Liesel Lombaard	Gauteng Treasury Department PPP Unit Head
2. Lucy Chege	DBSA - Investment Officer Project Finance
3. Kogan Pillay	National Treasury PPP Unit -Director

PRIVATE SECTOR

Name	Company/Position
1. Mike Edington	Grinaker LTA - MD Concessions
2. Laura Bezuidenhout	Bell Dewar Attorneys
3. Ravi Kalaichelvan	Kagiso Financial Services
4. Akona Ngcuka	Group 5
5. Dennis McCarthy	SACM - Financial Director
6. Brigette Ballie	Webber Wentzel Bowens - Director
7. Kantha Rattay	White & Case - Partner
8. Dave Pilling	PWC – Senior Manager
9. Ron Parker	Murray & Roberts, Commercial Manager
10. George Kotsovos	Standard Bank, Director
11. Werner van Oudenhove	RMB , Senior Manager
12. Mike Peo	Nedbank Capital Head Project Finance
13. Mike Meeser	Investec Bank, Director
14. Sekete Mokgehle	Nedbank Capital, Senior Transactor
15. Coenraad Kriege	Mcquarrie First SA