Critical Success Factors for Public-Private Partnerships in South Africa

Romaina Raghubar

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ABSTRACT

The purpose of this research was to identify critical success factors for public-private partnerships (PPPs) in South Africa. A number of studies have been completed in several developed countries on critical success factors for PPPs (Li et al. 2005; Tang et al. 2009; Zhang 2005). These studies were identified and reviewed in order to document existing findings to evaluate their applicability to the South African situation. From the literature review, it was revealed that thirteen critical success factors exist in the international context. These were used as the point of departure for this research which, in essence, examines these factors seen to be valid in developed countries and assesses whether they are appropriate to South Africa.

The research used semi-structured interviews to collect data from the South African public-private partnership market in Gauteng. Twenty interviews were conducted with experienced senior stakeholders from the public and private sectors representing government, banking and other professions. Content analysis was carried out on the data collected.

The research concluded that all thirteen propositions formulated were applicable to the South African public-private partnership environment, with some being more important than others. A favourable and enforceable legal and regularity framework, government and community support and a stable political and sound economic environment were the three most important factors for a successful South African public-private partnership. Although still regarded as significant, the factors of clear roles and responsibilities, as well as active management of all stakeholder relationships, commitment and trust among the partners, and effective and extensive communication are regarded as less important for a South African public-private partnership. The other factors fell in between the most important and less important. The findings of this work in terms of levels of importance generally differed from the conclusions of related research previously done in developed countries.

DECLARATION

I, Romaina Raghubar, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Romaina Raghubar

Signed at …………………………………………………

On the …………………………….. day of ………………………… 2010

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1 INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to identify and analyse the critical success factors, which should be present in the South African business environment in order to allow for the successful implementation of public-private partnerships (PPPs).

In order for PPPs to be successful, it is important for public and private institutions to have, a clear understanding of the factors that typify their partnerships' performance needs, so that they may enhance their capabilities. It is envisaged that this contribution may assist professionals within this environment to successfully implement projects of this nature.

1.2 Context of the study

Globalisation is shaping the modern world and thereby impacting the traditional nation-state model. This supreme, unitary, autonomous, interventionist state model has experienced challenges with regard to its effectiveness, efficiency and sovereignty (Trafford and Proctor 2006; Calleja 2010). In recent years the public sector has been at a crossroads of multiple and contradictory forces originating from public debt constraints, the rise of information technology and a more sophisticated and demanding consumer base. Sizeable and costly public sectors are becoming more complicated to maintain in a new environment of rising hopes, diminishing resources and global competition (Jamali 2007). On today's competitive global stage, governments worldwide seek new ways to provide and deliver public services (Takim, Abdul-Rahman, Ismail and Egbu 2008).

The idea of the traditional nation-state-centric model has become unsustainable and the time to focus on reconceptualising the relationships between the public and private sector has come (Mohamed and Wahab 2009). It is in partnership with others such as public agencies, private companies, community groups and voluntary organisations, that local government's future lies. Partnerships play a key role in the government's liberalisation policy, which aims to ensure high-quality services are produced and delivered to the public (Trafford and Proctor 2006).

The general concept of a public-private partnership (PPP) is usually a long-term co-operative arrangement between the public and private sector set up for a specific purpose. In this arrangement, the private sector participates in the decision-making and production of a public good or service. There is a clear agreement on shared objectives, for the delivery of a public service by the private sector that would otherwise have been provided through traditional public sector procurement (Cheung et al. 2010; Forrer, Kee, Newcomer and Boyer 2010). In the traditional public sector procurement arrangement, the government has an active involvement in all project tasks, whereas in the PPP, government seeks to maintain a role in those project tasks for which it has a responsibility for the public at large but is less actively involved in those project tasks (Abdel-Aziz and Russell 2001).

Li, Akintoye, Edwards and Hardcastle (2005b) and Siemiatycki (2010) find that, over the past decade, the participation of the private sector in the development and financing of public facilities and services has increased considerably. PPPs have gained extensive interest around the world and have become significantly recognised and received in the public sector (Pongsiri 2002; Hodge and Greve 2007; Garvin and Bosso 2008). The encouragement of PPPs as a new management tool during the 1990s has seen this concept emerge as an answer to public policy globally. PPPs have been established as a key tool of public policy across the world. They have developed into a favoured instrument for making public services available in both developed and developing countries (Osborne 2000; Khanom 2009).

This increased attention to, and attractiveness of, PPPs can be attributed to numerous factors associated with efficiency savings and a reduced load on stressed public resources. Countries are attracted to the phenomenon of PPPs because of the potential of the anticipated benefits, as well as access to private finance for expanding services, innovative ideas, comprehensible objectives, efficient planning and better value (Spackman 2002; Sadka 2006). According to Jamali (2004), PPPs seem to add some vigour and energy into the conventional public services environment.

After the first democratic elections in 1994, transformation of public service delivery has been a major objective of the South African government. The public sector was faced with a challenge to deliver services to all citizens in a quick, well-organised, helpful, basic and flawless manner as required by the Public Finance Management Act 1 of 1999 (Fourie 2008). In South Africa PPPs have been identified as a policy objective (Sinanovic and Kumaranayake 2006). Public-private partnerships in South Africa were introduced in 2000, with the release of a strategic framework for PPPs. This framework brought about new legislation and policies to provide an environment for PPPs to accomplish the goals set out by government in service delivery (South Africa 2000; South Africa 1999). In the South African context, the choice of PPPs as a selected model to drive projects show an upward trend (Sukazi 2004).

Manual (2003: 1) emphasises the importance of efficiently and effectively delivering PPPs in South Africa by stating "We are serious about making public-private partnerships work in South Africa. Deeply, profoundly serious. The challenges we face are deeply serious undertakings. Too often, in too many countries, in too many projects, weakly specified contracts have led promising partnerships into conflict, contestation, failed services, unmet targets, unpaid bills and court proceedings. Hope has ended in disillusionment. Opportunity has ebbed away. We will not go down that route." However, Sukazi (2004) finds that there is a misalignment between government and the private sector on certain matters that are fundamental to PPPs. Fourie (2008) stated that an ongoing assessment for improving PPPs in South Africa is required.

This study will identify and explore the critical success factors influencing PPPs in South Africa, bearing in mind that limited academic research on the subject of PPPs in South Africa appears, as yet, to be available.

1.3 Problem statement

1.3.1 *Main problem*

The purpose of this research is to identify critical success factors for public-private partnerships (PPPs) in South Africa.

1.4 Significance of the study

PPPs have received much attention in the developed world. However, little consideration appears to have been to them in the context of their use in a developing country. Jamali (2004) finds that there have been no systematic evaluation requirements for successful PPP implementation. This is particularly true in developing countries that have only recently started to experiment with various practical applications of co-operation between the public and private sectors.

There is a need to collate information on multi-country experiences and extract lessons from various PPPs (Zhang and Kumaraswamy 2001). These authors go on to state that PPP initiatives should be benchmarked to identify critical factors for overall project success. This research examines such factors in developed countries and sees if they can be applied to South Africa. The conclusions drawn from this study are expected to facilitate better practice in future PPP initiatives in general.

This study seeks to fill a gap in the existing literature in that, although a vast array of research endeavours in the area of PPPs exists, most of the research focuses on developed countries. Currently, very little research on developing countries about the success factors that the public and private sector need to look at in terms of PPPs has been done. In the South African context, this disparity requires attention as PPPs are part of government policy and are on the increase.

The results of this study should provide guidance for professionals within the PPP industry who wish to understand the factors inherent in successful PPP projects within the South African context. This will be particularly relevant for government departments and private parties who deal with PPPs on an ongoing basis.

1.5 Delimitations and limitations

1.5.1 *Delimitations*

- The research focused on PPPs in South Africa across sectors. It is important to understand the broad spectrum of critical success factors for PPPs, regardless of their specific industry. There is therefore no industry bias in the research.

1.5.2 *Limitations*

- The extensive and long process of developing a PPP usually lasts around 25 years and at the moment most of them are only at the initial stage of procurement in South Africa.

- The government requirements for professionals operating in these long-term commitments are that every professional is experienced in this specific process of procurement and that the quota for black economic empowerment is met. PPP is a fairly new process and only a couple of firms have had the opportunity to be involved in them, hence the number of professionals working on PPPs is limited.

- The study explored those factors that may be critical for the success of PPPs in South Africa. No attempt was made to ascertain whether any relationship exists between these factors.

- The sample for the study was purposive. The researcher selected respondents who had the required knowledge and experience to answer the question being addressed in the research endeavour. No attempt was made to ensure that the sample was random and representative of the population.

1.6 Definition of terms

The two particular definitions provided below apply to this research:

Public-private partnership (PPP): There is no universally accepted definition of a PPP. Over the years, many different definitions and classifications of the term have been put forward (Weihe 2008). A number of sources define PPPs. They are all more or less conceptually similar. In terms of South African law, Lund (2004: 6) defines a PPP as: “a contract between government institution and private party, where a private party performs an institutional function and/or uses state property in terms of output specifications, where a substantial project risk (financial, technical, operational) is transferred to the private party and where a private party benefits through unitary payments from government budget and/or user fees”.

Critical Success Factors (CSFs): This refers to the key areas in which favourable results are absolutely necessary to ensure successful competitive performance for the individual, department and organisation (Rockart 1982).

1.7 Assumptions

- The CSFs for PPPs can be generalised based on international experience as applied to the South African business environment.
- A common list of CSFs can be generalised across all industries in South Africa.
- The respondents are knowledgeable and well-informed about the subject matter. Respondents will not add value to the research unless they are able to speak from experience, as this will enable them to participate effectively.
- There will be some factors discussed by respondents that apply to the South African context only.

- The existence of different types of PPPs as well as the different levels of implementation of such PPPs will not influence the validity of the proposed study.

- The overall validity of the study will be influenced by the perceptions and experiences of the respondents in the study.

- The study focused on experts residing and working in the Gauteng Province.

2 LITERATURE REVIEW

2.1 Introduction

This review aims to frame the research on key matters relevant to the study. Important literature sources related to understanding and analysing public-private partnerships (PPPs) and critical success factors (CSFs) were consulted in order to obtain as exhaustive a list of CSFs as was possible. It is organised in two parts. The first section deals with major issues associated with PPPs in developed and developing countries, paying special attention to those relevant to the South African business context. In the second section the literature on CSFs is discussed. The review will conclude with a brief overview of the key findings that have been derived from the various literature articles examined.

2.2 An overview of public-private partnerships

Over the past decade, some governments have tried to improve the efficiency and effectiveness of public service delivery by implementing a host of market-based reforms. The world has witnessed a growing interest in PPPs. As these governments are faced with inadequate budgetary resources to cover investment requirements, coupled with public spending limitations, it has become evident that core public services are not performing as well as they should. In order to remedy this shortcoming, governments have increasingly engaged the private sector in the provision of public services (Connolly, Reeve and Wall 2009; Ion, Andreea and Laura 2009).

Zhang and Kumaraswamy (2001) propose that the worldwide trend toward encouraging PPP as a strategy, aims to generate greater efficiencies and synergies, increased revenues, reduced deficits, quicker market development, faster foreign investments and increased competition. They further state that PPP scenarios are promoted to overcome both government and market failures. Joyner (2007) argues that it is in the best interest of both parties to guarantee that a robust and sustainable structure is created as a result of the initial engagement activities and that these processes are not exceedingly time-consuming.

In both developed and developing countries, a diverse range of PPPs has been implemented with varying results. There have been successful value add-ons through PPPs in many sectors on the one hand, yet, on the other, several difficulties too have been experienced in PPPs worldwide. That such difficulties have arisen is not surprising considering the potential risks inherent in PPP contracts and the inadequate PPP understanding and knowledge in many countries and regions (Zhang 2005b).

Osborne (2000) finds that PPPs bring together parties with different values, objectives and motives. The outcomes of these partnerships can be positive in that the differing positions lead to innovative ideas and solutions. They can also be negative, where the parties are inflexible in understanding each other's values and objectives. In the latter case, the parties concerned act as hindrances to each other. This causes conflict.

Broadbent and Laughlin (2003) found that levels of maturity in PPPs vary worldwide and there is a need for further analysis, as PPPs are likely to be the driver for the delivery of public services for many years ahead. Hodge and Greve (2007:545) state that "there is a critical need to review our experience with PPPs as they have evolved throughout the world". These authors suggest that even though the exact boundaries surrounding PPPs are still emerging, there are currently sufficient experiments and developments taking place around the world to draw lessons from. This global movement towards PPPs gives rise to an urgent need for enhanced performances in the future. A significant step in the right direction would be to recognise and examine different factors that are critical to the success of PPPs in general (Zhang 2005b).

In developed economies, governments have commonly adopted the PPP strategy for the delivery of public infrastructure and services (Jamali 2007). Takim et al. (2008) argues that the United Kingdom, Australia and the USA are the world leaders in PPP. Australia and the USA began using PPPs in the stringent sense as part of their privatisation policy (Hall 2008). Typically, in the United States, PPPs have been related to urban renewal and downtown economic progression, while in the United Kingdom they have been converted into a centrepiece of New Labour’s stakeholder society (Hodge 2004).

PPPs have progressed as a significant aspect of foreign policy toward developing countries (Mitchell-Weaver and Manning 1991). Developing countries experience pressure from international financial institutions, such as the World Bank and the International Monetary Fund, to move to a capable, resourceful and facilitative functioning of government (Jamali 2004). The United Nations Development Programme actively advocates the value of PPPs and has dedicated considerable resources to encouragement of their use (UNDP 1997; Hall 2009). Harris (2003) and Hall (2008) both point out that, during the 1990s, private sector involvement in development has been a priority area in many developing countries’ policy agendas.

Within emerging economies, the use of private capital for projects has become quite common, where public administrations that are financially challenged seek assistance from the private sector to develop basic services (Esty 2003). In many developing countries, PPP financing propositions have the ability to attract foreign and private capital, which have been identified as innovative tools for financing major projects (Ke, Zhao, Wang and Wang 2009).

2.2.1 *PPP concept*

The PPP concept is disputed and a specific and commonly accepted definition does not exist. Few people agree on what a PPP actually is. There is always the concern that a narrow definition of PPPs will not be of any practical value. However, when considering the diverse activities and the varied relationships between jurisdictions that characterise PPPs, it is evident that the concept needs to be broadly defined (Khanom 2009; Cheung, Chan and Kajewski 2010).

While the term PPP may be interpreted differently in diverse environments from country to country, it is fundamentally a form of collaboration between the public and private sectors (Ahadzi and Bowles 2004; Maskin and Tirole 2008). The principles embodied in PPPs are underpinned by a government's desire to resolve public budgetary constraints by calling upon private sector management skills and private financing to increase the quality of public services delivery (Li et al. 2005b; Kyvelou and Karaiskou 2006; Jefferies 2006). Carrillo, Robinson, Foale, Anumba and Bouchlaghem (2008) also find that the private sector plays a vital role in contributing to project management skills, innovative design, financial management and risk management expertise. As seen in Figure 1, the belief is that private-sector processes and efficiencies are traded-off against a higher cost of capital, causing a net benefit for government.

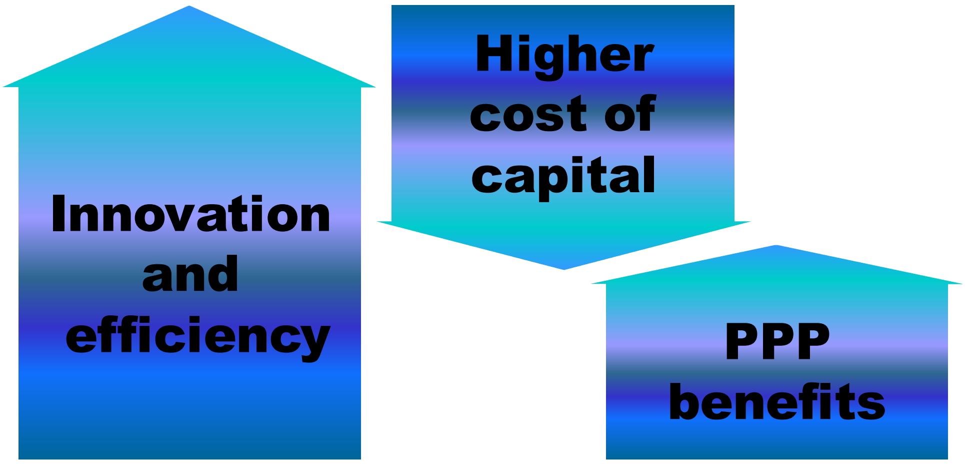


Figure 1: PPP benefits (Cooper, Grey, Raymond and Walker 2005)

PPPs provide goods and services such as private toll roads, schools, prisons hospitals, security services, waste-water treatment and emergency response. The public sector becomes a partner with the private sector in decision-making and delivery but ultimately final responsibility of the delivery of goods and services lies with government (Forrer et al. 2010). Thia and Ford (2009) conclude that, as most PPP projects fall within the domain of public goods and services, they are definitely the responsibility of government. However, the economic and social benefits of such projects may exclude some members of the community because of the private sector involvement.

While numerous authors market PPP as an original and superior trend, others deduce that it is not. Hodge (2004) concludes, that for centuries, governments have been involved with the private sector with long-term financial implications. He finds that what is new is the use of private finance agreements, highly complex contracts and the changed accountabilities and governance associated with this. PPP is still an evolving concept (Calleja 2010).

2.2.2 *Project Finance*

According to Esty (2002:2), the concept of project financing has become more narrowly defined in recent years in that it, "involves the use of limited or fully non-recourse debt by a corporate parent to finance investment in and ownership of a legally independent, single purpose, industrial asset, usually with a limited life". This definition illustrates exactly why PPPs use project financing.

Similar to other forms of project financing, PPPs are usually typified by the existence of multiple stakeholders such as project sponsors, financing institutions (project lenders) and public sector licensors (See Figure 2). It is doubtful that sponsors would invest major capital in projects exclusively on the condition of private investors' equity. The common standard is that the project's necessary capital requirements are met by inviting lenders (banking and financial institutions) to contribute to the project funding subject to an agreed debt-to-equity ratio. Thus, project bankability becomes a decisive factor in influencing the attractiveness of suggesting a project be run according to the PPP model. The absence of an appropriate appetite from banks and financing institutions jeopardises the capacity to recommend the project as a PPP (Mohamed and Wahab 2009).

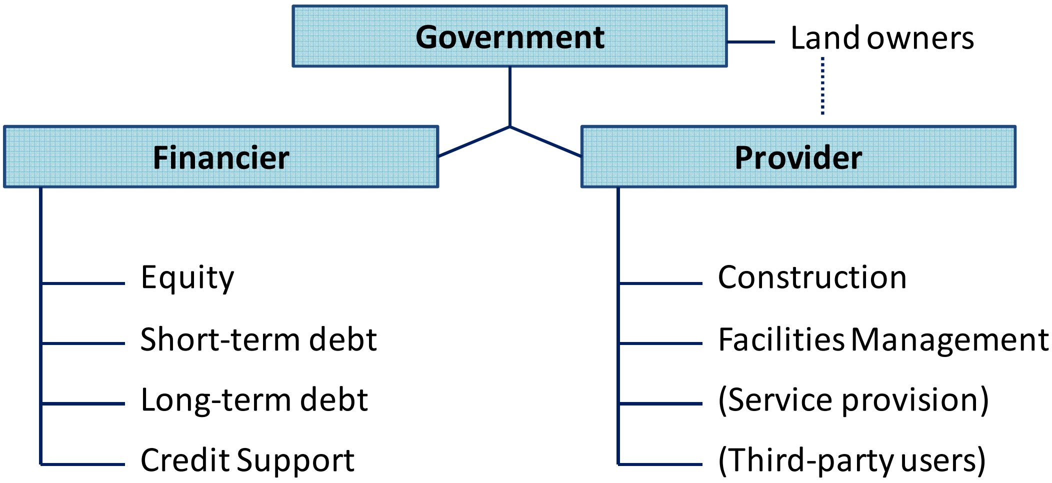


Figure 2: Relationships between the parties (Cooper et al. 2005)

The strength and make-up of the financial and commercial arrangements between the parties is contingent on the precise type of the arrangement involved. As can be seen in figure 2, arrangements like this look risky, due to the number of stakeholders involved. However, many of the individual parts are familiar and the risks are successfully managed. It is generally the integration of problems that are often intricate (Cooper et al. 2005).

Project financing has an enormous attractiveness when it does not impact significantly on the balance sheet or the solvency of the sponsoring entity or entities. Companies are receptive to commencing with projects that can be very highly leveraged or financed completely or considerably on their own merits (Nevitt and Fabozzi 2001).

The PPP seems to place an investment project “off balance sheet”. The PPP involves the creation of both assets and liabilities leading to a net position that is unaffected. This leads to contention, as having projects which can be placed off balance sheet may influence behaviour. There has been a movement to get projects “off balance sheet”, so that the size of the government’s budget deficit is limited (Sawyer 2005).

2.2.3 *Value for money (VFM) and Public sector comparator (PSC)*

Projects are procured by PPP to enhance value for money (VFM) for the taxpayer by inviting the private sector to handle public works projects (Heald and Geaughan. 1997). According to Grimsey and Lewis (2004) VFM is defined as the optimal arrangement of total life cycle costs, risks, completion time and quality so that public requirements can be met.

The public sector comparator (PSC) involves estimating the cost of using conventional public funds, which means how much it would cost the government to build the asset through public funding. This is then compared with how much it would cost to build it as a PPP project (Cheung, Chan and Kajewski 2009a). So, actually an up-front, traditional procurement payment is compared with a discounted PPP project.

Financing for the PPP is only approved if the cost of service delivery is less than that of the PSC. This practice ensures that the PPP financing will be chosen only if it delivers VFM (Quiggin 2004). It is simple to reveal that the PPP option provides better VFM by easy manipulation (Connolly et al. 2009). Sawyer (2005) raises two issues when comparing the PPP and PSC. First, there is an issue about the appropriate discount rate to use as it is sensitive. Second, an issue concerning the treatment of risk arises as it is in the judgement between the PSC and the PPP that risk measurement is problematic.

The strongest argument for the cost effectiveness of PPP has come from studies such as those done by Arthur Andersen and Enterprise LSE. The benefits delivered over conventional public sector procurement include an average cost savings of 17 per cent (Hodge and Greve 2007). The diagram in Figure 3 captures the authors’ thinking on how VFM is the basic rationale for PPP. Two complementary ideas are portrayed. First, it makes use of a PPP more certain than public financing because the public debt cost is lower than the private debt cost. Second, it is essential to find the most promising contract by optimising the risk- sharing (Cleland and Ireland 2008).

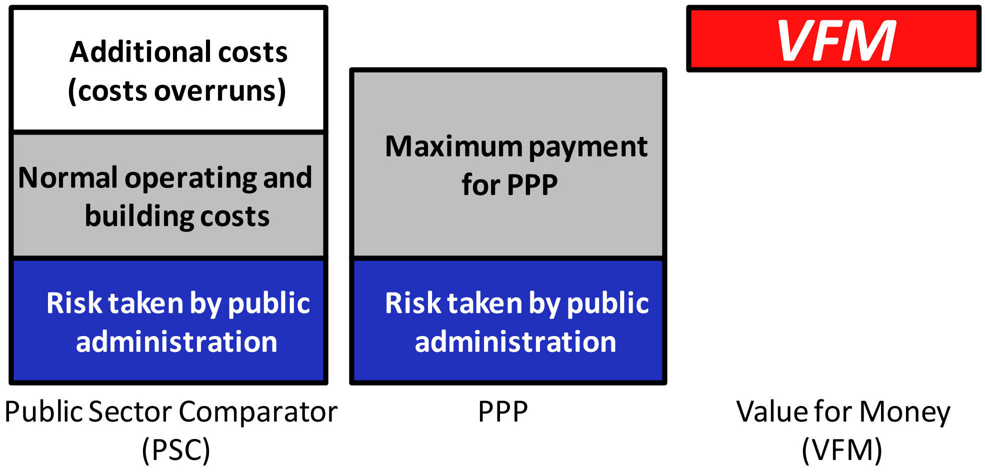


Figure 3: Superiority of the PPP adapted from Cleland and Ireland (2008)

Sometimes project specifications are more difficult to define, hence the costs incurred are also tricky to quantify and control. Clearly defined output-based specifications rather than input-based specification would assist the public sector in monitoring the private sector's performance. Moreover, the private party could also be more confident about reaching the project milestones, and better able to manage the tasks in order to enhance their profit margins. Output-based specifications can also enable government to use the PSC more successfully when quantifying whether or not VFM was achieved by procuring projects through PPPs (Cheung et al. 2009a).

2.2.4 *Special purpose vehicle (SPV)*

The purpose of the SPV is to minimise the risk associated with project execution and to generate profit (Dixon, Pottinger and Jordan 2005). It is a product of the incentives offered through the payment mechanism as well as from unitary payments which do not commence until the asset is operational (Connolly et al. 2009). If PPP contractors fail to meet the agreed standards they do not get paid and the purchaser can spend the money elsewhere to make improvements (Connolly et al. 2009).

PPPs usually involve the establishment of a special purpose vehicle/company in which the private investor becomes the principal shareholder. This legal entity is established to facilitate a transaction. It acts as a legal buffer between the originator or sponsor of the project and its backers (Moles and Terry 1997). The SPV is a limited company that is established for the sole purpose of delivering the PPP project. It includes companies from the winning consortium that represent, a construction contractor, facility management provider, investors and other specialist contractors (Dixon et al. 2005).

This model gives the investor (project sponsor) an opportunity to access funding on a non-recourse or limited recourse basis in which project lenders are granted full security only over the SPV's assets and shares owned by the shareholders. Therefore, the project lenders' security package would be ring-fenced to those assets and not extended to the project sponsor's or SPV's shareholders own assets (Mohamed and Wahab 2009).

Figure 4 depicts a typical SPV structure. Morris and Pinto (2007) point out that the SPV is at the centre with one or more of the project stakeholders as partners. Undoubtedly, the operator will be a partner. The two main contracts that allow the project to come to fruition are the concession agreement with the government and the off-take contract with the consumer of the project's outputs. Payment can be made to all of these parties or .payments can be delayed via equity in the SPV or by having payments converted into loans.

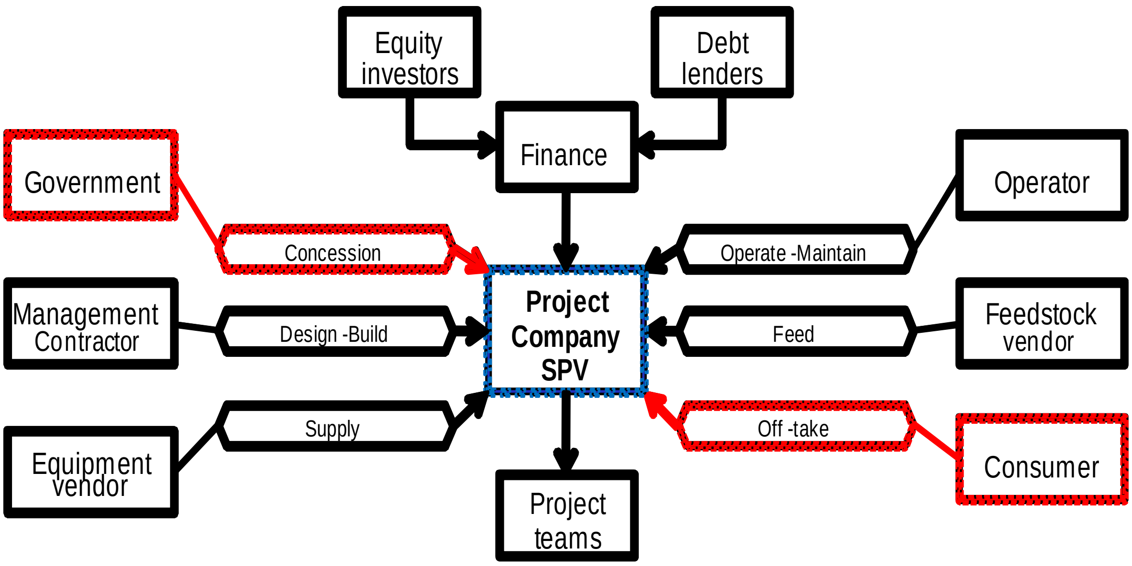


Figure 4: SPV Structure adapted from Morris and Pinto (2007)

2.2.5 *PPPs internationally*

United Kingdom

The Private Finance Initiative (PFI) is the principal model of PPPs in the UK (Akintoye, Beck and Hardcastle 2003; Allard and Trabant 2008). The UK's PFI was introduced in 1992 by the Conservative government that felt that the private sector could possibly supply better public services. The Labour government that took over from them became passionate advocates of PFI (Broadbent and Laughlin 2003; Gooijer 2007). Flinders (2005) and Li, Akintoye, Edwards and Hardcastle (2005c) found that PPPs had become an integral part of the Labour government's national strategy since 1 May 1997. The role government now plays is not that of supplier but is rather seen to be the procurer and regulator of services (Edwards and Shaoul 2003).

On the one hand, critics see PPPs as a means of getting more out of the taxpayers, as public fraud, a deception created by government; on the other hand, PPPs are seen as offering the best of both sectors (Hodge 2004; Marchington 2005).

A typical PPP takes the form of a private sector company contracting to design, build, finance and operate (DBFO) a capital project such as a school, prison or hospital. A consortium of private sector companies, generally consisting of a building firm, a finance company and a service provider, is used for bigger projects (Connolly et al. 2009). PFI was implemented in many sectors and took different forms, dependant on the respective project role (Allard and Trabant 2008). There are three main classifications that have emerged over time. Table 1 is adapted from the findings of the International Monetary Fund (2004).

Table 1: PPP Project Forms and Modalities

Form	Modality
Build-own-operate (BOO) Build-develop-operate (BDO) Design-construct-manage-finance (DCMF)	Form 1: These are modifications of design-build-finance-operate (DBFO) forms. The private sector designs, builds, owns, develops, operates and manages an asset with no obligation to transfer ownership to the government.
Buy-build-operate (BBO) Lease-develop-operate (LDO) Wrap-around addition (WAA)	Form 2: The private sector buys or leases an existing asset from the government, renovates, modernizes, and/or expands it, and then operates the asset, again with no obligation to transfer ownership back to the government.
Build-operate-transfer (BOT) Build-own-operate-transfer (BOOT) Build-rent-own-transfer (BROT) Build-lease-operate-transfer (BLOT) Build-transfer-operate (BTO)	Form 3: The private sector designs, builds and operates an asset and then transfers it to the government when the operating contract ends or at another precise time. After transfer the private sector may rent or lease the asset from the government.

Source: adapted from International Monetary Fund (2004)

Among the models in Table 1, BOT is perhaps the most popular (Liu and Cheah 2009). According to Abdel-Aziz and Russell (2001), the alternative forms such as BOOT, DBFO and BTO are used nearly as frequently.

Australia

In Victoria, Australia's leading PPP proponent, PPPs are known as Partnerships Victoria (PV) Projects (English and Guthrie 2003). There are potentially nine different PPP initiatives leading to heterogeneous implementations across Australia (English and Guthrie 2001). Cheung, Chan and Kajewski (2009b) conclude that the implementation of PPPs across Australia is state dependent. In 2001, a formal private infrastructure financing policy was established as Partnerships Victoria and applied to an extensive array of social and economic infrastructure projects (Regan 2009).

The adoption of PPPs in Australia can be roughly divided into two periods: pre- and post-2000 (English 2006) or classified as suggested by Duffield (2005a) as ‘first’ and ‘second’ generation initiatives. Partnerships Victoria was momentous in the development of Australian PPPs (Duffield 2005b; Quiggin 2005; English 2006). In 2008, the Australian Federal Government established Infrastructure Australia, to take care of the nation’s infrastructure in partnership with all the states, territories, local government authorities and the private sector. A national PPP framework was developed so that there would be consistency across the regions (Moncrief 2008).

Lyon (2006) stated that there are many completed PPP projects that could be used to assess whether these partnerships in general are indeed successful. Jefferies and McGeorge (2009) find that some of the major stakeholders view PPPs as high risk and low gain projects. Recently, there has been much controversy surrounding PPPs as they are seen to be a high risk game (Ferguson 2010).

The Australian government’s Advisory Board, Infrastructure Australia, did a study regarding allegations that the present PPP procedure initiates extravagant bid costs, delays contract award and detracts from foreign investment. The report recommended that a more thorough procedure be used in deciding whether a PPP model is essentially appropriate for a particular project or not (Thomas 2010).

USA

Osborne (2000) finds that the growth in the use of PPPs in key Organisation for Economic Co-operation and Development (OECD) countries like the USA, encourages their use in major, international and intergovernmental agencies such as United Nations Organisation (UNO). In the USA there has been a long history of public-private relationships and the outcomes of these associations have not always been favourable.

Startin, Baxter and Harding (2009) state that PPPs are governed by legislation that differs from state to state, leading to inconsistency and differences in agreements. Gribbons (2005) notes that the inadequacy of a centralised governmental approach to PPP at both national and local level is an impediment to maximising their benefit.

PPP arrangements are increasing as states set enabling legislation in position, as the public sector searches for convenient solutions and the private sector becomes increasingly attracted to the risk/return profile (Allison, Davis and Elliott 2007; Garvin and Bosso 2008; Siemiatycki 2010). The economic downturn, and in particular, the severe tightening of the credit markets has overshadowed constructive progress and conditions that are conducive for PPP success. The private sector continues to express a bullish approach to the US PPP market. As the credit markets start to relax, the essential constituents are in position for a progressively more robust programme of PPPs (Harder and Bennett 2009).

2.2.6 *PPPs in South Africa*

South Africa is a middle-income emerging market, with a multi-ethnic population of nearly 49 million, growing at about 1.7 per cent every year. The official unemployment rate is 22.9% (World Bank 2009). The economy has both developing and developed country characteristics with consequently severe disparities in citizens' rights, wealth and skills. It is typified as a sound and well-regulated financial sector and competitive commerce and industry (Quist, Certan and Dendura 2008). South Africa has a strong economy with the manufacturing, mining and investment sectors showing double-digit growth; thus seen as a robust market (Brunne 2009).

One of the government's primary objectives has been to deliver good quality basic services to historically lower priority areas (USAID 2005). The South

African government began investing in a variety of innovative approaches to service delivery that many other countries had refined and tested during the lengthy period of South Africa’s international isolation (Hlahla 1999).

Heymans and Spur (1999) state that, after the June 1999 elections, many municipalities in South Africa engaged in PPPs as a way of addressing the mounting and long-neglected crisis of basic service provision. PPPs were an effective vehicle for achieving these objectives (USAID 2005). Economic and social transformation has been complicated as the issue of service delivery goes beyond the privileged areas, which used to be the focus of service provision under apartheid administration, to a much wider base, mainly in outlying communities. These pressures are intensified as the expanded base comprised pre-dominantly low-income areas (Dohrman and Aiello 1999).

The National Treasury developed its own guidelines for PPPs (Sinanovic and Kumaranayake 2006). Treasury Regulation 16 of 2004, issued under the Public Finance Management Act 1989, sets out rules that oversee the development and implementation of a PPP contract (Irwin and Mokdad 2009).

Farlam (2005) stated that the National Treasury also issued a code of good practice for empowerment in PPPs in 2004. This is in line with the government’s goals of broad-based black economic empowerment (BEE). The National Treasury (2004) further shows their commitment to produce the optimal BEE results envisaged in the Code by structuring a tailor-made PPP facility between the National Treasury’s PPP Unit and the Development Bank of Southern Africa (DBSA) to considerably reduce the cost of capital for black shareholders in PPP projects and to assist prequalified black parties obtain independent legal and financial advice.

Due to the hosting of the 2010 FIFA World Cup event a great deal of attention has been given to the construction of stadiums, transportation development and tourism infrastructure. As South Africa has been groaning from under-investment for so many years, government is committed to rectifying that by spending close to R400 billion between 2006 and 2010 on upgrading road, air and other transport infrastructure (Geceiter 2006; Brunne 2009). Brunne (2009) further highlights that this World Cup experience appears to have encouraged further activity and scope for using Treasury's concept of PPP in other areas such as catering for conventions, sporting occasions, entertainment, tourism and the film industry.

The following table presents a current (May 2010) list of projects that have been signed as agreed contracts (National Treasury 2010).

Table 2: PPP Projects signed in terms of Treasury Regulation 16

Project and Government Institution	Contract Duration	Value to government	Net Present Value (NPV) of benefit to Government
Inkosi Albert Luthuli Hospital KwaZulu-Natal Department Health	15 years	R 4,5 billion	N/A
Eco-tourism Manyeleti 3 sites. Limpopo Department of Finance, Economic Affairs, Tourism	30 years	N/A	R 25 million cash
Universitas and Pelonomi Hospitals Free State Department Health	21 years	N/A	R 43 million cash, R 38 million in form of upgrade
Information Systems Department of Labour	10 years	R 1,5 billion	N/A
Chapman's Peak Drive toll road Western Cape Department of Transport	30 years	N/A	R 450 million in form of capital works and operation
State Vaccine Institute Department of Health	4 years	N/A	R15 million systems investment; and NPV value for money of R 60 million over current spend
Humansdorp District Hospital Eastern Cape Department of Health	20 years	R 18,9 million	R 15 million upgrade plus R 34 million cash
Fleet Management Eastern Cape Department of Transport	5 Years	R 553 million	N/A
Head Office Accommodation Department of Trade and Industry	25 Years	R 870 million	N/A
Cradle of Humankind Interpretation Centre Complex Gauteng Department of	10 years	N/A	R 39 million cash

Project and Government Institution	**Contract Duration**	**Value to government**	**Net Present Value (NPV) of benefit to Government**
Agriculture, Conservation, Environment and Land Affairs			
Gautrain Rapid Rail Link Gauteng Department of Public Transport, Roads and Works	20 years	N/A	Capital Value: R23,09 billion
National Fleet Management Department of Transport	5 years	R 213 million	R 919 million
Western Cape Rehabilitation Centre and Lentegeur Hospital	Facilities Management	R 38,685 million	R 334 million
Polokwane Hospital Renal Dialysis	10 years	R 88,35 million	N/A
Department of Education Serviced Head Office Accommodation	27 years	R 706 989 million	Capital Value: R 512 264 million
Eastern Cape Department of Health. Port Alfred and Settlers Hospital	17 years	N/A	Capital Value: R 168,6 million
Western Cape Nature Conservation Board (De Hoop)	30 years	N/A	Capital Value: R 40 million
Northern Cape Department of Transport, Roads and Public Works	5 Years	N/A	R 342 million
Department of International Relations and Co-operation	25 Years	R 126 million	Capital Value: R 1,4 billion
Western Cape Nature Conservation Board (Whale Trail)	20 years	N/A	Capital Value: R 29 million

Source: (National Treasury 2010)

2.3 Critical success factors of public-private partnerships

2.3.1 *Stable political and sound economic environment*

A stable political and economic environment is required for the successful functioning of a PPP. Political motivation and economic steadiness of the government for backing projects are imperatives. In fact, it can be claimed that a stable and supportive political climate is a precondition for a PPP project (Qiao, Wang, Tiong and Chan 2001). Furthermore, the internal and external conditions of a country must be observed as these will not only enable PPPs to be evaluated but the key factors affecting the PPP too can be identified so that the partnership can be properly effected and sustained (Tang, Shen and Cheng 2009).

The government is a key role player in easing political risks and establishing a positive social, economic and financial setting for PPP development (Zhang 2005c). PPP projects run well when the impact of these environmental factors are identified, especially when they relate to different types of PPPs (Tang et al. 2009).

Li et al. (2005b) did a questionnaire survey to examine the relative importance of CSFs in projects in the UK and concluded that economic aspects are most critical for the success of PPPs. This supports the importance of sound economic policy and a stable macro-economic environment. A stable macro-economic environment is where the market demonstrates realistic certainty and market risk is relatively low. Together these reduce the private investor's risks. The manipulation of economic policy levers to guarantee stable prices and to ensure a balanced budget, leading to the government developing and upholding a stable environment. Good macro-economic policy affects the integrity of a price regimen and trust in the currency exchange, which is important for foreign investors.

The following proposition is thus posited:

Proposition 1: A stable political and sound economic environment is a CSF for a PPP.

2.3.2 *Legal and regulatory framework*

Willing private sector participation in PPPs depends greatly on the conditions of the business environment. The government should create a legal and regulatory framework that is favourable for doing business and one that appeals to private investors (Pongsiri 2002; Zhang 2005b). These authors go on to state that regulation offers the private partner protection from expropriation, adjudication for commercial disagreements, respect for contract arrangements, lawful recovery of income and expenses relative to the risks taken. One of the benefits of a stable regulatory framework is that key partnerships work efficiently and existing resources align with broader policy aims. Jamali (2004), in researching PPPs in developing countries, proves that an adequate legal and regulatory framework is fundamental to decisions about PPPs.

Zhang (2005b) surveyed a number of worldwide expert opinions in order to determine CSFs for PPPs. In summarising and consolidating the findings, a suitable legal and regulatory framework to facilitate the establishment of a PPP was found to be important. It takes time to set up an effective PPP and then for it to yield results. The legal framework should be reorganised and restructured over time, incorporating the knowledge and skills gained from practical experience (Zhang 2005c, 2005b). Li et al. (2005b) conclude that a favourable legal framework is essential for establishing PPPs. An enabling and conducive legal and regulatory environment is the foundation of private sector involvement.

The government's administrative units involved in these partnerships act within the boundaries of the legal framework This institutional framework is required to assist PPPs and must be present at all the different echelons of government; that is, not only at central government but also at local government. The presence of plans, programmes, Acts and guidelines is most appreciated when a choice has to be made from a range of projects. The existence of these tools allows for the best value for taxpayer's money to be chosen (Abdel-Aziz 2007).

In their study Jong, Rui, Stead Yongchi and Bao (2010) found that many global reports detail a variety of vital requirements that should be adhered to so that PPPs can be successful. They discovered that high-ranking requirements are the existence of firm anti-collusion and antimonopoly legislation, private property regulation and laws facilitating government to comprehensibly make the most of a PPP. Also, all relevant assessments should be conducted for quality decision-making. The study concluded that the entire framework is weakened if the laws and Acts are not enforced and executed when needed.

In their studies of PPPs in developing countries, Merrifielda, Manchidib and Allenc (2002) found that South Africa had no clear legal framework and that existing legislation was not supportive of private sector participation. This led to struggles in soliciting private sector support. Also, the regulations in force did not provide for a process to accomplish adequate risk transfer and VFM as required by government.

The following proposition is therefore put forth:

Proposition 2: A favourable and enforceable legal and regularity framework is a CSF for a PPP.

2.3.3 *PPP unit*

In their research based on PPP frameworks in an international context (Fischer, Jungbecker and Alfen 2006) highlighted the impact of a PPP unit in achieving VFM. These authors deduced that the PPP unit's role is to function as a unique institution that determines appropriate PPP solutions by advocating governmental changes, supporting policy issues and advising on PPP projects. They argue that the unit is vital as it enforces state/corporate partnership relations by creating an appropriate legal environment and assisting with project support and consistent processes. Abdel-Aziz (2007:928) found in support of this and state that "special PPP units need to be available to be responsible for policy development, dissemination of PPP knowledge and implementation of PPPs".

According to these authors, a PPP unit realises more PPP projects. The institutional environment of a PPP consists of legal, financial, political and economic qualities which identify rules that guide efficient forms of governance in PPP projects. The PPP unit works to develop an institutional environment which enforces and stabilises transaction governance (Fischer et al. 2006; Hemming 2006).

These units also encourage transparency and accountability which are necessary for good governance in PPP projects. Good governance is important for the success of PPPs in terms of developing sound policies and in administrating projects (Hemming 2006; Fried 2008). Good governance is essential to attract private sector participation in public services delivery (Li et al. 2005b).

The UK experience with PFI/PPP has shown that the public sector's role in creating an effective PPP has emerged fragment by fragment as familiarity and practice has developed. The UK has been a pioneer leading the way in recognising, defining and implementing the partnerships. A PPP unit was established that was committed to providing guidance to departments or governments that were considering private-sector involvement in public service delivery (Allard and Trabant 2008; Takim et al. 2008). This unit would function as initiators and organisers between the private-sector and the local authorities within the framework of a PPP (Kyvelou and Karaiskou 2006).

The following proposition is therefore posited:

Proposition 3: The establishment of a designated PPP unit within government is a CSF for a PPP.

2.3.4 *Government and community support*

Political support is of major importance since a PPP can only be successful if there is dedication from the top leadership of a country. Politics has an intimate relationship with the creation and execution of public policy. Political influencers must encourage the PPP concept and really comprehend what the private sector can offer in public matters. A positive political approach towards the private sector actors involved in public projects would support the growth of PPPs. On the flip side, inadequate political support would pose an immense risk to PPP projects (Li et al. 2005b; Hemming 2006). There would be no expenditure approvals for PPPs without permanent political support (Choi and Jacobson 2008).

According to Tang et al. (2009), studies show that governmental guarantees or support cannot achieve the optimal balance between public and private interest. When the government bestows too much guarantee, the concessionaire gains benefit from the contract to the detriment of the public. This has raised questions about how to pursue a win–win situation to benefit the public sector, private sector as well as final general public users. However, if a concessionaire runs into debt it is important that good government relationships exist to keep their activities going (Jong et al. 2010).

The advocates of PPPs need to ensure that the general public understands the long-term implications and benefits of the project. This sort of support is central to ensuring the viability of a PPP (Yuan, Zeng, Skibniewski and Li 2009). The more that communities understand the need for developing a PPP, the greater will be the project's acceptance and support for them (Choi and Jacobson 2008). Zhang (2005b) states that suitable public relation strategies and activities are essential to win public understanding and support.

The following proposition is therefore made:

Proposition 4: Government and community support is a CSF for a PPP.

2.3.5 *Appropriate allocation of risk*

In research conducted by Li et al. (2005b) appropriate risk allocation and risk sharing ranked as the second most important factor for accomplishing PPP projects. This means apportioning each risk to the organisation best able to cope with it. The premise is that this shrinks individual risk premiums and the overall project cost, as the organisation itself is best able to mitigate a particular risk. Moreover, it should be able to accomplish this at the lowest price. A strategic approach to risk management methodology is therefore critical during project planning.

The transfer of risk is supported by authors such as Khan and Mushtaq (2009) and Jong et al. (2010) who propose that the solution to a successful PPP is the allocation of the project's risks between the public and private sectors based on each party's capability of managing the risk without obliterating the financial viability of the project. Hence, risk assessment and appropriate allocation of risk is an especially important success factor for PPPs. It is imperative to know the risk implications and risk allocation during the project (Choi and Jacobson 2008)

The allocation of risk between public and private sector partners remains crucial for the success of the PPP.

It appears that the crucial issue in PPPs is identifying a first-class risk management methodology as this affects performance and should be set up before the PPP project begins (Yuan et al. 2009). Jong et al. (2010) identify various types of risks such as market, capital market, political, project and technical risks. Efficient identification of these risks has been crucial in making projects financially profitable (Qiao et al. 2001).

The PPP is underlined by the risk transfer from the public to the private sector, with public sector clients maintaining merely a small number of risks which they are well equipped to handle (Mohamed and Wahab 2009; Forrer et al. 2010). If the parties involved in a PPP work together in a progressive manner, there must be agreement and understanding of project issues such as the risks. Sometimes a sharing of risks will be more suitable, as the risks necessitate joint management (Handley-Schachler 2003; Akintoye and Chinyio 2005; Dixon et al. 2005).

PPPs promote the SPV to deliver within budget and on time because of the incentives accessible through the payment instrument and also due to unitary payments not commencing until the asset is operational. Risk transfer is viewed to have paybacks following construction. If the SPV fails to achieve at an agreed standard, there is no payment and the purchaser can spend the funds elsewhere to make enhancements. The way this functions in practice hinges on the contractual agreement and the extent of enforcement (Connolly et al. 2009).

Abdel-Aziz (2007) and Sadka (2006) argue that the private sector is better placed to manage the certain risks than government. These include design risks, construction risks and the future operation and maintenance cost overruns. Government should be able to control risks such as regulations impacting the project or inflation risk which is an outcome of monetary policy. Demand risk is another major risk and the allocation of this is a matter of numerous deliberations. Governments must be in a position to bail the concessionaire out if the demand for the asset drops to a certain level as stated in the contractual agreement if the generated revenues are insufficient to pay the lenders.

The following proposition is derived:

Proposition 5: The appropriate allocation of risk is a CSF for a PPP.

2.3.6 *Reliable contractual agreements*

Having a contractual arrangement is a CSF for PPPs. Main considerations are the type of contract and the content which is, in turn, largely influenced by the recognition and classification of risks (Chua, Kog and Loh 1999; Zhang 2005b). Other concerns are realistic obligations and clear objectives, contracting party rights and responsibilities, sufficiency and transparency of plans and technical specifications, provision for a formal resolution process, as well as encouragement and incentives for the contracting parties. Contractual agreements consist of a concession agreement between the government and the concessionaire, a shareholder agreement, a construction contract, a finance agreement, an indemnity agreement, a supply agreement, an operation agreement, and an off-take agreement between the concessionaire and pertinent contracting parties (Zhang 2005b).

Tang et al. (2009) recommends the improvement of contractual agreements. Differences and disagreements about contractual terms are very common, hence the author emphasises that the project associates must make certain that the contractual language is effectual and that the contractual phrases conform to international principles.

The following proposition is put forth:

Proposition 6: A reliable contractual agreement is a CSF for a PPP.

2.3.7 *Selecting the right private partner*

Zhang (2005a) performed a statistical analysis based on responses to a worldwide survey in which experts completed a structured questionnaire. They found that selecting the right private sector party is a CSF. Moreover the author found that, in the selection process, the lowest tender was not automatically the best choice. It should be compulsory to give detailed consideration to all applicants and select the candidate with the best “package”. Most of the risks in a PPP are accepted as assumptions by the private sector partner, hence it is imperative for the private party to have the necessary skills, experience and resources to control these risks and offer quality and cost efficient facilities and services. According to Hemming (2006), apparently the most efficient way of locating a suitable private partner is through open requests from contractors. This would create the primary opportunity for fostering competition in a PPP context. Further studies by Zhang (2005c, 2005b) found that, despite the accepted norm that the number of tenders should be few in number so as to reduce industry costs, a competitive tendering process is an essential prerequisite to ensure realisation of the best offer.

In Li et al.’s (2005b) research a strong private consortium ranked first in the survey analysis that sought to identify CSFs. In the UK it is mostly the very large and well-known organisations that win PPP contracts. This implies that private organisations aspiring to participate in PPP markets have to investigate other participant’s strengths and weaknesses and, where fitting, form a consortium to optimise each other’s strengths. It is also envisaged that, in the early phases of a PPP project, sponsors should encourage all participants. Zhang (2009) states that the concessionaire has an important task in the successful growth and long-term running of the PPP.

The aim of partnering is to combine and complement capabilities to achieve effectiveness in realising specific common business goals (Qiao et al. 2001; Ruuska and Teigland 2009). The building of a common vision is essential to the initial stage of partnering and it is in this phase that better understanding occurs between the partners in the formation of their common goals (Choi and Jacobson 2008).

In their work, Li, Akintoye, Edwards and Hardcastle (2005a) discovered that, in choosing the right partner, the procurement process is critical for the public client and fundamental for the success of the project. Moreover, it should include a transparent and competitive set of procedures.

The need for transparency is so that corruption can be avoided, as this can be detrimental for both the public and private sectors (Zhang 2005b, 2005c). An efficient procurement process would pick the appropriate private sector party who is best able to fulfil the needs of the contract (Yuan et al. 2009), making the project performance more beneficial. Fischer et al. (2006) finds that critical aspects of PPP procurements require a proper legal establishment, a feasible procurement process, as well as an organised and accommodating authority.

The following proposition is thus posited:

Proposition 7: The selection of the right private partner is a CSF for a PPP.

2.3.8 *Commitment and trust*

Cheung et al. (2010) conducted a comprehensive study on implementing PPPs and found that commitment and trust was a CSF. Lasting commitment and trust is compulsory among partners for realising the synergies expected from a PPP (Jong et al. 2010). PPPs frequently experience lack of trust and commitment leading to failed achievement, (Khan and Mushtaq 2009), as success necessitates an atmosphere of mutual respect and trust. When this is present, both sides benefit.

PPPs can be very successful if the participants concentrate on mutual interests and have reputable trust. Trust is regarded as a precondition for coalition success and lack of trust is a chief cause for coalition failures (Trafford and Proctor 2006). Trust is relevant to the PPP market due to the long period the concession agreement takes. It also impacts on the project management competencies directly while having an indirect bearing on the project's efficiency (Smyth and Edkins 2007). The exchange of sensitive information requires strong mutual trust and trust is tricky to achieve. The basic dilemma is that trust can only be achieved through collaboration, which ultimately depends on trust. Hence, the exchange of information involving public and private partners typically only succeeds in a group with certain parties who have previously reached a certain degree of mutual trust (Cavelty and Suter 2009).

Each party is likely to make the best commitment in order to accomplish the specific agreed objectives through contributions in the PPP (Choi and Jacobson 2008). Commitment of all project parties is considered to be important and obligatory efforts should be undertaken to keep top management support which impacts on project performance (Jha and Iyer 2007). The dynamic involvement and contribution of the other key players are also crucial for project success (Chua et al. 1999).

According to Toor and Ogunlana (2008), commitment encompasses devotion, conscientiousness and perseverance from all parties involved in the PPP, and specifically from top management. These authors propose that commitment is the foundation of project success. Jha and Iyer (2007) conclude that it is commitment that will keep the parties involved motivated until project completion. This is important for maximising the potential of participants. The anticipated gains incorporate effectiveness, efficiency, innovation and constant enhancements of quality services (Chen and Chen 2007).

The following proposition is therefore put forward:

Proposition 8: Commitment and trust among the partners is a CSF for a PPP.

2.3.9 *Effective communication*

Chen and Chen (2007) conducted a study on various factors and their significance in relation to project success. These authors purport that effective communication ranked first as partnerships need knowledge. Upholding clear and open channels of communication between all project members was important. This facilitates dialogue of ideas, vision debates and solutions. The skill of conversation has always been seen as one of the most basic elemental skills and it would be fundamental to an effective PPP strategy too. Supporters of PPPs initiatives allege that it assists teams to be more inventive, original and therefore valuable (Ruuska and Teigland 2009).

Choi and Jacobson (2008) argue that the utilisation of effective, habitual and diverse communication channels can assist collaborative and innovative performance. If everyone in the PPP communicates then the likelihood of conflict and confrontation that can delay projects, will be minimised. Broadly effective and efficient communication has been measured very significant by academics for achieving improved results on projects. It is considered an area that can add value to the feedback process, enhance management practices and prevent complications from arising (Toor and Ogunlana 2008).

The PPP requires an awareness of communication to boost the participation of the private and public sectors so that all objectives are understood clearly (Christiansen 2007). Studies show that communication (Trafford and Proctor 2006) relates to the overall performance of parties. There is a theory that organisations will operate at a higher standard if communication is open and if decisions are reached in a participative way. It is clear that good communication cultivates an environment of unity and collaboration.

The following proposition is therefore made:

Proposition 9: Effective and extensive communication is a CSF for a PPP.

2.3.10 *Skills and experience*

Successful performance of PPPs requires the accessibility of varied expertise and proficiency in procurement, law and financial management. PPPs benefit from an improvement in project delivery performance when such skills are in place. This reduces the procurement time and transaction costs and regulates the procurement process (Abdel-Aziz 2007). Jong et al. (2010) affirm that a prerequisite for successful PPPs and possibly the avoidance of a project catastrophe is the choice of reliable, qualified, proficient, skilled, specialised and knowledgeable contractors.

Due to the varied duties of the concessionaire, numerous capabilities are necessary to achieve success in a PPP project (Zhang 2009). Competency allows the project members to make suitable decisions and it is an enabler for project success. Competent individuals have the ability to keep the project on schedule and on budget, which heightens the morale of the team (Jha and Iyer 2007).

Projects are exposed to uncertainties and risks and these obstacles are easier to surmount when the project team is competent. Each team member has a set skill enabling them to manage a specific area of the project. A competent individual will not leave any ambiguity in the project plan. Competency of the project team has been mentioned as a vital success factor in several studies (Toor and Ogunlana 2008). Ruuska and Teigland (2009) found that successful projects are those that are able to achieve collective competence. These authors describe it as the team achieving a common objective through collaborative effort to accommodate the multifaceted complexity characteristic of a project.

In most of their research studies Toor and Ogunlana (2008) found that the level of competency of the project manager was constantly highlighted. They propose that researchers have tended to stress how leadership abilities affect project outcomes. According to Ruuska and Teigland (2009), the project leader is experienced, knowledgeable and can converse on all levels of the project, which leads to a higher probability of successful completion of the project. The project manager has the ability to gain commitment from project members, ensure co-ordination among project members and have everyone contributing so as to improve the performance level in the direction of a successful project (Jha and Iyer 2007).

Based on the above discussion the following proposition is put forward:

Proposition 10: The skills and experience of the partners is a CSF for a PPP.

2.3.11 *Roles/responsibilities and stakeholder relationships*

Visibly distinguished and differentiated responsibilities and roles are imperative in maintaining the long-term alliance associated with PPP projects (Li et al. 2005b). This means that setting specific, realistic, measurable and tangible goals is vital. Once done with the project plans, participants can identify exactly what is required and within what time-frame (Toor and Ogunlana 2008). Hence the roles and responsibilities of each member should have a clear definition (Choi and Jacobson 2008), as this is an important factor for success in PPP (Croft 2005).

A PPP, by definition, requires completely clear sharing of responsibilities and roles (Cavelty and Suter 2009). Clarity in the separation of functional responsibilities of diverse governmental divisions is necessary for encouraging and easing private sector participation in the public sector (Zhang 2005c). Respect can be created through understanding each participant's roles and responsibilities. This must be used to assist in the development of shared objectives and a unified vision (Choi and Jacobson 2008).

While the parties involved in a PPP do not share a common organisational structure, there is always a public and private sector party to the relationship (Mohamed and Wahab 2009). One party is owned by the government or non-profit organisation (public) and the other is owned by an enterprise (private) (Zhang and Jia 2009). Moreover, Forrer et al. (2010) state that the relationship between the public and the private sector is long-term, rather than a once-off contract.

The relationships within the PPP are alleged to be critical to the project's success as feeble relationships simply open doors for disagreement and misunderstanding (Tang et al. 2009). For example, when conducting an industry wide survey study, (Chan, Chan and Ho 2003) found that enhanced relationships amongst project participants lead to largely important benefits being obtained from the use of partnering in PPPs.

The individuals or companies that either impact on or are impacted by the PPP development are commonly known as stakeholders. It is vital to incorporate their contribution in the project development phase (Cheung et al. 2009a). PPPs encourage stakeholder participation. Stakeholders' objectives vary, so it is essential to acknowledge stakeholder opinions and concerns to better enable the development of a project that will satisfy their requirements. A partnering attitude and not a confrontationist attitude will be beneficial to the project. Hence, attending to stakeholder inputs is fundamental to the success of PPP projects and the satisfaction of stakeholders needs is a subjective part of project success (El-Gohary, Osman and El-Diraby 2006; Pitt, Collins and Walls 2006; Jha and Iyer 2007; Choi and Jacobson 2008; Ruuska and Teigland 2009).

The contribution of various stakeholders assists project sponsors in building effective relationships between the public and private sectors, subcontractors, suppliers and the general public. The management of the relationship is necessary in order to secure a successful PPP. Relationships should be shaped before contracts are signed and should engage all the major stakeholders (Chen and Chen 2007). All stakeholders ought to entrust their finest resources to the PPP to realise VFM and deliver high performance. It seems many researchers maintain the outlook that, due to the long-term nature of the PPP, the contractual parties wish to co-operate and build high-quality relationships (Yuan et al. 2009).

Fischer et al. (2006) conclude that a fine relationship between public and private partners is considered to be essential for the success of the project. Smyth and Edkins (2007) conducted an investigation into the link between relationship management and project management in order to ascertain how crucial good relationships are to ensuring project success. The exploration of relationships as a way to provide service value and project value in PPPs was the central focus of their study. The authors recommend that planned deliberation as specified in proactive relationship management promotes a collaborative working environment that leads to new procurement conditions.

The following proposition is derived:

Proposition 11: The clear roles and responsibilities, as well as active management of all stakeholder relationships are a CSF for a PPP.

2.3.12 *Availability of a strong financial market*

One of the many recognised advantages of a PPP is the ability to raise additional finance (Ke et al. 2009). The budding approval of alternative project delivery Abdel-Aziz and Russell (2001) and finance techniques involving public and private sector partnerships implies that governments will be gradually faced with strategic choices about whether to use public or private mechanisms, or a combination of the two (Jefferies 2006). These alternative institutional arrangements and modes of delivery are being considered and experimented with. Approaches to these PPPs continue to be developed in order to draw the public and private sectors together (Li et al. 2005b; Jamali 2007; Takim et al. 2008). Supporters advise that using PPPs to bring private financing, competition and market forces into the government procurement process can lead to projects being completed in a more timely fashion than they would be if entirely paid for by governments (Siemiatycki 2010).

An important success factor is for the private sector to have easy access to financial markets. Since financial markets change constantly, close attentiveness is required to either accelerate or delay projects (Li et al. 2005b). In their work these authors found that easy accessibility to financial markets ranked third. The financial package should be vigilantly customised to meet the project characteristics. A good method would be to incorporate the lenders into the SPV. The standards of low financial service charges, low operational costs, long-term debt financing and reduced debt-servicing capability of a project's cash flows, make for an attractive financial package (Qiao et al. 2001).

The long concession periods can result in serious financial costs or failure of projects. The SPV uses no recourse or limited-recourse to finance which means a need for suitable financing methods. Thus, a sound revenue stream for the project is indispensable to its success as a PPP. Profitability denotes better potential of the concessionaire to conquer financial complications. Sound financial examination and meticulous analysis of important financial aspects are required (Zhang 2005b; Yuan et al. 2009). A survey by Salman, Skibniewski and Basha (2007) about financial feasibility of projects shows that return on investment (ROI) is the fifth most important factor out of twenty one factors.

Financiers insist on participating in the setting up the conditions of the commercial transaction and it is best to involve them upfront to avoid time delays. The payment arrangement must be formulated to protect the interests of both the public and private sectors. The general approach is to associate payment with service delivery. This guarantees that the concessionaire will constantly perk up performance and provide quality services (Zhang 2005c).

Some infrastructure projects are financed through tolls and tariffs, and this must be tested at the political and public levels. These costs need to be practical from the citizen's perspective but also satisfactorily reimburse the financiers. A major aim of government under budget constraints is to get private finance for building infrastructure. Understanding the purpose of private finance in PPPs is consequently a key component for the proper implementation of a PPP (Qiao et al. 2001; Abdel-Aziz 2007).

The following proposition is set forth:

Proposition 12: The availability and accessibility of strong financial markets is a CSF for a PPP.

2.3.13 *Economic viability and technical innovation*

Li et al. (2005b) found that a detailed and practical business case of benefits is a CSF from both the public and private sectors' points of view. A significant question is how uncertainty would be dealt with as everything is based on future projections. The objective of a PPP is to search for VFM, viability and feasibility in relation to the economy. The key to a winning PPP is to achieve the best value in a given set of economic conditions (Yuan et al. 2009). Watson (2003) recognises that the success for PPPs is VFM and project delivery on time. Hence, it is vital to make sure that projects are economically viable.

According to Zhang (2005b) economic viability depends on:

- Long-term needs for the products/services
- Investor interests in the project for adequate profit

- Long-term revenue streams that are appealing to lenders
- Long-term accessibility of suppliers for project sustainability
- Restricted rivalry from other projects

Governments try to establish the optimal contractual terms in a PPP so that they get the best value for each currency unit spent. Sometimes PPPs are not financially viable but they are of significant economic and political value and achieve environmental objectives. It is in these cases that government must be flexible and support the PPP to make it viable (Zhang 2005c; Abdel-Aziz 2007).

Innovation and learning are factors that positively contribute to the performance of PPPs. A creative practical solution for PPPs is offered by means of technical feasibility (Yuan et al. 2009). The long-term nature of the PPPs permits the contractor to allocate more resources to technical innovation and viable solutions. As the security of funds is guaranteed for years to come, the parties involved can experiment collectively and produce economies of scale (Jong et al. 2010). The correct level of investment can be placed in relation to performance outputs to create an environment that promotes gaining new knowledge, excellence and improved efficiency. The SPV must be willing to accept innovative technology and new management methods (Yuan et al. 2009).

Tiong (1996) stated that technical strength is an important success factor in competitive tendering for a PPP project. Technical appraisal involves the assessment of designs and planned services in an entire project life cycle situation. Procedures can be installed to reap the benefits and costs of possible technical solutions, mostly in the appraisal of unwanted or substitute technical proposals (Zhang 2005b). The SPV must demonstrate that the technical features of a proposal will meet all pertinent regulatory requirements (Li et al. 2005b).

The following proposition is thus posited:

Proposition 13: Economic viability and technical innovation is a CSF for a

PPP.

2.4 Conclusion of Literature Review

To summarise, the literature suggests that there are a number of CSFs researched in many industries in the context of implementing PPPs. The comprehensive list of CSFs identified is concerned with examining PPPs at a broad social or organisational level; the factors are also reflective of PPP drivers and requirements; and are relevant to the results of PPP projects and the control of the project processes. These CSFs are applicable from the stage of pre-implementation to the stage of post-transfer needs. All these factors must be considered as they affect the process, implementation and success of a PPP.

In the literature there is little evidence of academic research regarding the role of PPPs within the South African context. Though there is extensive literature regarding PPPs in developed markets, there is little to indicate what the theoretical consensus in the South African PPP market would be about the factors that play a role in ensuring a successful public-private partnership.

3 RESEARCH PROPOSITIONS

Based on the literature review, the following propositions are formulated and are the basis of the research:

Proposition 1: A stable political and sound economic environment is a CSF for a PPP (Li et al. 2005b; Qiao et al. 2001; Tang et al. 2009).

Proposition 2: A favourable and enforceable legal and regularity framework is a CSF for a PPP (Li et al. 2005b; Zhang 2005b, 2005c).

Proposition 3: The establishment of a designated PPP unit within government is a CSF for a PPP (Fischer et al. 2006; Hemming 2006; Takim et al. 2008).

Proposition 4: Government and community support is a CSF for a PPP (Li et al. 2005b; Tang et al. 2009).

Proposition 5: The appropriate allocation of risk is a CSF for a PPP (Jong et al. 2010; Li et al. 2005b; Yuan et al. 2009).

Proposition 6: A reliable contractual agreement is a CSF for a PPP (Tang et al. 2009; Zhang 2005b).

Proposition 7: The selection of the right private partner is a CSF for a PPP (Li et al. 2005b; Zhang 2005a, 2005b, 2005c).

Proposition 8: Commitment and trust among the partners is a CSF for a PPP (Cavelty and Suter 2009; Cheung et al. 2010; Jong et al. 2010).

Proposition 9: Effective and extensive communication is a CSF for a PPP (Chen and Chen 2007; Choi and Jacobson 2008; Trafford and Proctor 2006).

Proposition 10: The skills and experience of the partners is a CSF for a PPP (Jong et al. 2010; Ruuska and Teigland 2009; Toor and Ogunlana 2008).

Proposition 11: The clear roles and responsibilities, as well as active management of all stakeholder relationships are a CSF for a PPP (Fischer et al. 2006; Li et al. 2005b; Toor and Ogunlana 2008).

Proposition 12: The availability and accessibility of strong financial markets is a CSF for a PPP (Li et al. 2005b; Qiao et al. 2001; Zhang 2005b, 2005c).

Proposition 13: Economic viability and technical innovation is a CSF for a PPP (Li et al. 2005b; Zhang 2005b, 2005c).

4 RESEARCH METHODOLOGY

The research methodology section outlines the methods used to conduct this research. The literature concerning qualitative research approaches will be discussed, followed by a review of the research design and research instrument to be used. The population and sample group will be discussed, which is followed by an explanation of the data collection and data analysis techniques that will be employed. Lastly, this section will discuss issues of reliability and validity.

4.1 Research methodology

The qualitative research approach was the basis for investigating the propositions listed in Section 3. The qualitative approach to research is interested in understanding people's perceptions of the world (Bell 2005), and one of the key reasons for conducting qualitative research in this case is that the study was exploratory and descriptive in nature.

Qualitative research makes use of several data collection methods that are interactive and humanistic in nature. Some of these methods require the active participation by individuals identified in a sample as well as needing to accommodate the researcher's sensitivity to the respondents in a particular way. Qualitative procedures make use of open-ended data, based on people's experiences. The researcher then needs to develop a theory from this data, based on outcomes and literature that supports the data. Qualitative research tends to work with smaller sample sizes and is based on the perspectives and interpretation of both the researcher and respondents (Creswell 2009).

Interviewed respondents were encouraged to discuss their perspectives openly and liberally, in order to effectively address the propositions posited. Respondents had the opportunity to respond in detail, thereby allowing a multiplicity of views to emerge from the research. This approach is recommended in the literature (Creswell 2009). The researcher has sought the different perspectives of the individuals identified in Table 3.

Certain assumptions are embedded in qualitative research and were considered throughout the research process. The following qualitative paradigm assumptions inform this research (Creswell, 1994 cited by Hussey and Hussey, 1997):

- Ontological: What is the nature of reality? “Reality is subjective and multiple”.
- Epistemological: What is the relationship of the researcher to that researched? The “researchers interacts with that being researched”.
- Axiological: What is the role of values? The research is “values-laden and biased”.
- Rhetorical: What is the language of the research? The language of the research is “informal, evolving decisions, personal voice”.
- Methodological: What is the process of research? The process is that of “emerging design – categories identified during the research process, context-bound patterns, theories developed for understanding”.

4.2 Research design

The research design comes from the strategy that is developed by a researcher in order to address a research problem by defining the procedures for sampling, data collection and analyses (Leedy and Ormrod 2001).

The researcher formulated two general interview questions with thirteen prompts based on the research propositions that emerged from the literature review. These prompts were used to gain the opinion of respondents on the validity of these possible propositions if they did not spontaneously mention and discuss the particular issue when question 1 was asked. Refer to Key Interview Questionnaire – prompt sheet (Appendix A).

4.3 Population and sample

4.3.1 *Population*

The population for this research consisted exclusively of stakeholders at senior or executive level who were associated with South African PPPs (Table 3).

4.3.2 *Sample and sampling method*

The sample design was “purposive” (Walker, 1985:30), which is appropriate for this study in that the nature of the sample design was such that the researcher purposefully and deliberately selected a few respondents with the required experience into the research being investigated (Creswell 2009). After the commencement of interviews with initially identified respondents, the snowball sampling method was introduced. In snowball sampling, the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these respondents to establish contacts with others who fulfil the research criteria (Bryman and Bell 2007). The researcher then approached these individuals and requested their participation in the study. This method proved very useful in gaining access to experts in the PPP market.

As all the respondents were professionally positioned at senior management level or higher, a certain level of accuracy in the data collected was assured. Three groups of stakeholders were approached to participate in the study:

- Group 1: G (Government officials)
- Group 2: B (Bankers)
- Group 3: O (Others in the private sector)

This sample of experts was chosen for this study as they are involved in and have hands-on experience and knowledge of the factors that are critical for a successful PPP. The researcher intended that the initial target sample be 15 people, with five individuals from each group. The snowballing method was so effective, that 20 interviews were conducted over a four week period. This sample mix ensured adequate representation of different business perspectives and expertise. The split was: eight from government, six from banks and six from other private companies.

The bankers were identified to participate in the study because of their knowledge of the capital requirements of the PPP market. They are the lenders of finance and the sample was drawn from various banking institutions. Some bias will have been introduced due to the manner in which the bankers from different institutions obtain their information. The researcher attempted to reduce this by selecting respondents from several institutions. However, there was some bias in the sample selection owing to the fact that the individual had to be willing to participate in the study.

A sample of government officials was included in the study because of their role as regulators, advocating and supporting policy changes and assisting in the state/corporate relationships. The initial sample from this group was selected after attending a PPP foundation course held by the South African National Treasury. There was also bias in this sample selection as the person concerned had to agree to being interviewed and sharing information.

The researcher chose to include a diverse group of other in this study who were lawyers, private equity investors, consultants and construction companies who are involved in leading a deal or advising on a deal for a PPP.

Table 3 presents the respondents, their respective organisations, designations and grouping.

Table 3: List of respondents

Name	Designation	Institution/Company	Grouping
Karen Breytenbach	Senior Project Advisor	PPP Unit, Department: National Treasury	Government
Kogan Pillay	Director: Business Development	PPP Unit, Department: National Treasury	Government
Will Bautista	Project Advisor Finance	PPP Unit, Department: National Treasury	Government
Elsa Strydom	Senior Project	PPP Unit, Department:	Government

Name	Designation	Institution/Company	Grouping
	Advisor	National Treasury	
Bernice Africa	Chief Director: Property and Facilities Management	Department: International Relations and Cooperation	Government
Jean-Pierre Labuschagne	PPP Project Officer	Department: Rural Development and Land Reform	Government
Enriko Fourie	Senior Project Manager: PPP	Industrial Development Corporation (IDC)	Government
Nkanyi Mayatula	Senior Project Manager: PPP	Industrial Development Corporation (IDC)	Government
Ziyaad Sarang	Director; Project Finance: Head of Infrastructure	Standard Bank: Corporate and Investment Banking	Banker
Brett Botha	Lead Principal: Infrastructure	Nedbank Capital: Infrastructure, Energy and Telecommunications	Banker
Robert Gecelter	Consultant, Project and Infrastructure Finance	Investec Bank : Capital Markets	Banker
Alastair Herbertson	Consultant, Project and Infrastructure Finance	Investec Bank : Capital Markets	Banker
Colin King	Consultant: Project Finance	Absa: Corporate and Business Bank Specialised Funding Solutions	Banker
James Price	Investment Banker	Rand Merchant Bank (RMB): Investment Banking Infrastructure Finance	Banker
Brigette Baillie	Partner	Webber Wentzel Attorneys	Other
Zintle Mjali	Director	Fredericks and Mjali Incorporated	Other
Reg Max	Associate Director	Price Waterhouse Coopers (PWC): Corporate Finance	Other
David Johnson	Chief Investment Officer (CIO)	J&J Group	Other
Derek R. Ash	Managing Director	Botjheng Water	Other
John Lotz	Projects Director	Group Five: Investment and Concessions	Other

4.4 The research instrument

The research instrument (Appendix A) used was the key interview questionnaire with the thirteen propositions documented and an opportunity to record any other relevant information

4.5 Data collection

Leedy and Ormrod (2001) describe an interview as being similar to an informal conversation with a respondent, where the interviewee is allowed to do most of the talking with the interviewer listening for important information that will assist in answering the research question. Interviews can contribute immensely important information to a study by creating a platform for the researcher to ask questions related to facts, behaviours (present and past) as well as the perceptions, beliefs, feelings and motives of individuals (Welman and Kruger 2001). The advantages and limitations of the interview method are given in Table 4.

Table 4: Advantages and limitations of the interview method of data collection

Advantages	Limitations
Interviews are useful when respondents cannot be observed directly in their natural setting	Interviews supply indirect information which has been filtered through the perceptions of the respondents
Respondents are able to provide historical information that would not be observed by the researcher	Interviews provide data in a designated place rather than in the natural setting
Allows the researcher control over the line of questioning and can bring respondents back on topic if they	The presence of the researcher may introduce bias into the responses of the respondents

Advantages	Limitations
deviate	
	Individuals are not equally articulate and perceptive

Source: (Creswell 2009:179)

The researcher used the semi-structured interview to collect the data. This consisted of a few unstructured and generally open-ended questions intended to obtain the views and opinions of the respondents in the study as suggested in the literature (Creswell 2009). One of the advantages of semi-structured interviews over completely structured interviews, is that the researcher can vary the sequence in which the questions are asked and this type of questioning also gives the interviewer the liberty to ask further questions in reaction to significant responses (Bell 2005; Willig 2008). So, although most respondents were asked the same questions, the researcher had flexibility in the formulation of the interview; for example, the order in which the researcher introduced different topics varied from one individual to another and was controlled by the manner in which the interview developed.

The benefit of this type of design is that it is easy to build a rapport with the respondent. Respondents generally become very talkative, thereby allowing plenty of time to explore in depth issues. In addition, if there are complex questions, this can be explained so that respondents fully understand what is required of them (Willig 2008). In this study, these attributes were experienced as valid.

The face-to-face interviews took place at a venue decided on by the respondents. This ensured that the meeting place was suitable and convenient for the respondents, as well as being more likely to allow respondents to feel at ease when talking to the researcher. The researcher recorded the information gathered during the interview process through handwritten notes and sometimes recorded the conversations using a dictaphone (provided the respondents granted permission) (Welman and Kruger 2001). The notes, together with the recordings, were used in the analysis and interpretation phase of the study. Four of the 20 interviews were not recorded and so the researcher relied on handwritten notes for the purpose of data interpretation.

4.6 Data analysis and interpretation

The analysis and interpretation of the data collected during the interviews with the respondents took the form of content analysis. “Content analysis is a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases” (Leedy and Ormrod 2001:155). This method is appropriate for the analyses of data collected from books, newspapers, transcripts of interviews and other forms of human communication. The researcher considers content analysis to be the most appropriate method for this study because the data analysed included handwritten notes and transcripts of the interviews that occurred between the researcher and the respondents involved in the study.

A description of the method of content analysis undertaken by the researcher followed that advocated by Leedy and Ormrod (2001):

- The transcripts and handwritten notes collected during all the interviews constitute the body of data that was used in the content analysis phase of the research.

- The identification of common themes in the data collected from the interviews was the central task in the content analysis. The responses from each of the respondents were organised into categories that were related to the research propositions formulated from the literature review. An additional category was also used for reasons identified by the respondents but not identified in the literature review. The researcher then evaluated each of these responses for validity as well as noting any additional detail offered regarding the critical success factors of PPP.

- The data was the integrated and synthesised.

A rigorous grading system was used to rate the propositions, based on the fact that respondents agreed in principle with the propositions as extracted from the literature reviewed. However, there were different levels of agreement from the respondents. The researcher used subjective interpretation, to allocate a high level of agreement (H), medium agreement (M) and, low level of agreement (L), for each proposition from each respondent's answers. These results are presented in section 5.

4.6.1 *Role of the Researcher*

In qualitative research the aptitude of the researcher to analyse and interpret the body of data collected for a particular study is believed to be vital for the understanding of the social phenomenon under investigation. Creswell (2009) considers the researcher to be a key instrument as it is the qualitative researchers who are the ones that actually gather the data. The researcher's role as interviewer may have introduced bias into the research and the interpretation of the data collected during the study could be misguided. An objective explanation of the role of the researcher in this case is given below.

- Where the clarification of certain responses was necessary, the researcher may have introduced bias by asking additional questions other than the prompts included in Appendix A when wanting ensure accurate recording of the response during the interview. The researcher used the transcripts of the interviews as primary data wherever possible in an effort to reduce the bias that may have been introduced during the summarising of the responses while taking notes.

- Some degree of prejudice may have been introduced in the content analysis phase of the study where the researcher used her discretion to analyse the data to determine what information would best provide an answer or explanation for the propositions.

4.7 Validity and reliability

Validity is defined as “the design of research to provide credible conclusion whether the evidence which the research offers, can bear the weight of the interpretation that is put on it” Sapsford and Jupp in Bell (2005:117). Simply put, it is whether with the integrity of the conclusions that are generated from the research represents a good approximation to the true conclusion (Bryman and Bell 2007). In qualitative research the term verification is used instead of validity and is described as the “accuracy, meaningfulness and credibility” of the research project as a whole (Leedy and Ormrod, 2001:103).

Qualitative reliability would come about when “the researcher’s approach is consistent across different researchers and different projects” (Creswell 2009:190). To endorse this researcher’s concern about the reliability of the data collected for this research, comments follow on this study’s approach to the credibility, transferability and dependability of the research, which, according to Creswell (2009) are the equivalent qualitative research terms for internal validity, external validity and reliability, respectively.

4.7.1 *Credibility*

The credibility of a study reflects the extent to which the research design and the data collected have enabled the researcher to construct valuable and appropriate conclusions concerning the research (Leedy and Ormrod 2001).

The researcher established credibility in the study by interviewing groups of people who have different perspectives on PPPs and their levels of success. The government officials would have been more likely to have been directly involved in the choice of a PPP going to market, whereas the bankers would view this decision-making process from an external lending perspective. The ‘other’ group may also have knowledge about the formation of the consortium and dealings with PPPs as they come to market. The researcher sought convergence of the perceptions and experiences of the respondents interviewed from each of these groups.

Potential researcher bias was recorded in the research methodology section of this report. The researcher commented on biases and prejudices that may have shaped the interpretation and approach to the study, thereby supporting the credibility of the research (Creswell 2009).

4.7.2 *Transferability*

Transferability refers to the extent to which conclusions drawn from a qualitative approach to research can be generalised or transferred to other contexts or settings (Creswell 2009). In this work the researcher made use of comprehensively detailed descriptions, including a description of the respondent groups and the setting of the study. This could enable readers to transfer the information documented in this research report to other contexts, thereby determining whether the conclusions of the study are transferable because of the shared qualities.

4.7.3 *Dependability*

Dependability is comparable to reliability in that it is “the consistency with which a measuring instrument yields a certain result when the entity being measured hasn’t changed” (Leedy and Ormrod, 2005:29). The personal biases and perceptions of both the researcher and respondents may influence the interpretation of the data (Leedy and Ormrod 2001). In order to increase the reliability of the research, the aim of the study and topic of discussion were clearly communicated to the respondents. All interviews were conducted in person by the researcher who also made sure they were systematically run.

Due to the nature of this investigation, accessibility and availability of specific respondents was necessary. The sampling process was purposive, and not random and representative. The reliability of the study was maintained through the calibre of the respondents selected. Respondents were selected based on their in-depth knowledge and experience of the PPP market and to the research problem defined in this study. Reliability was assured with an accurate and standardised research instrument.

5 PRESENTATION AND INTEPRETATION OF RESULTS

5.1 Introduction

The findings of the research are presented in this section. The analysis of data obtained using Appendix A will be discussed. The results are presented according to the structure of the propositions laid out in Section 3.

For the purpose of anonymity the identities of the respondents have been concealed and their names replaced with codes that will be used in this section. The codes B, G and O will be used to represent the bankers, government and the ‘other’ group who participated in the study, respectively.

Figure 5 contains the summary of the responses collected from each of the participants. The responses have been divided into three graphs representing the three groups of respondents included in the study. Thereafter, a detailed presentation of each proposition will follow.

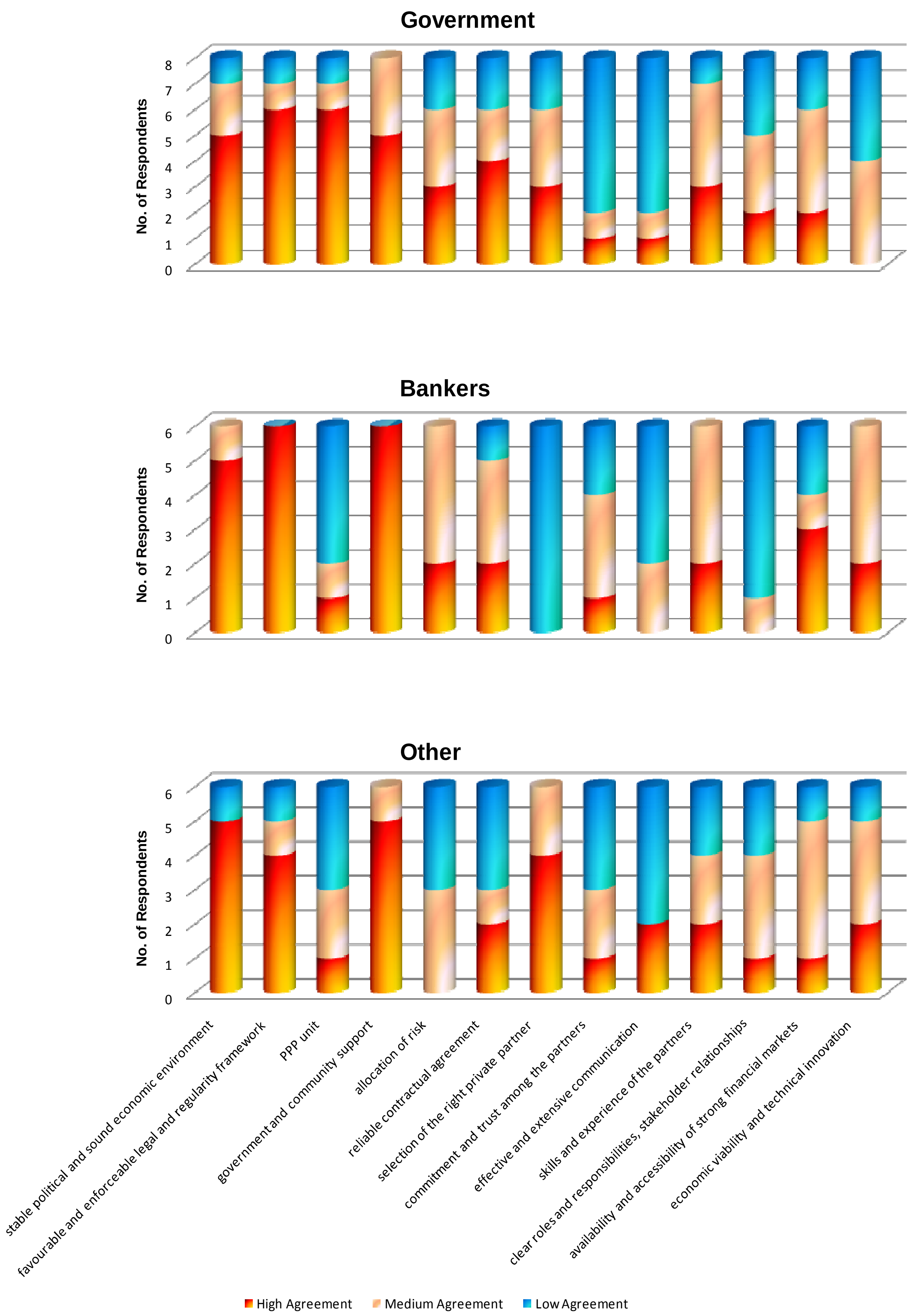


Figure 5: Summary of the responses collected from respondents during the study

5.2 Stable political and sound economic environment

The overall agreement level by the respondents for a stable political and sound economic environment is presented below, included are the responses that have been divided into the three groups of respondents included in the study. (See Table 5 and Figure 6). The overall response agreement of 75% towards high agreement of this proposition indicates that this is extremely important overall.

Table 5: Summary of views of respondents on a stable political and sound economic environment

Agreement Levels	**Overall Response Agreement Percent**	**Response Count**
High Agreement (H)	75%	15
Medium Agreement (M)	15%	3
Low Agreement (L)	10%	2
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	63%	5
Medium Agreement (M)	25%	2
Low Agreement (L)	13%	1
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	83%	5
Medium Agreement (M)	17%	1
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	83%	5
Medium Agreement (M)	0%	0
Low Agreement (L)	17%	1

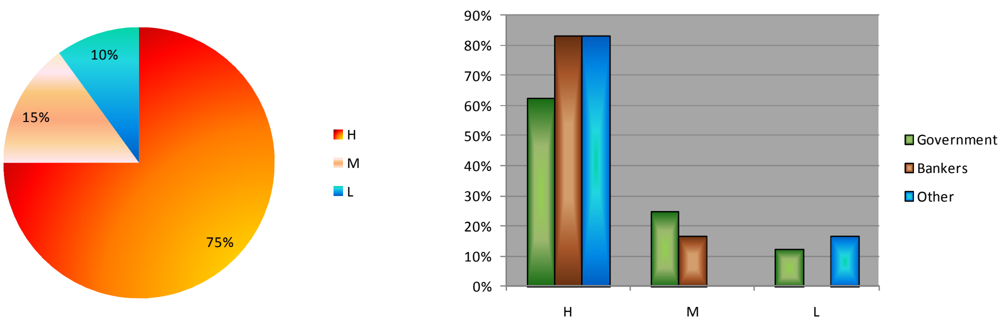


Figure 6: Summary of views of respondents on a stable political and sound economic environment

Several respondents mentioned that a stable macro-environment provides investor confidence and it is important for the private sector to invest. It makes funding the PPP easier and more executable, as well as influencing the cost of structuring the deal. This is supported by the research done by Li et al. (2005b) in which they state that a stable macro-environment ensures favourable conditions for the functioning of a PPP and enables the private sector to operate with confidence.

Among the respondents, there was a general agreement from government that the private sector requires a stable business environment. G2 highlighted that the private sector will not invest in an environment that is not stable or if it maybe does, then the cost of the PPP will be extremely high and the pertinent question then becomes the issue of the PPP being value for money. G7 remarked that a stable business environment is important for the private sector, as banks cannot operate in an unstable environment. G8 made a very good point that a "stable environment is important because people want to know consistently what's going on; it also makes it easier to forecast in terms of what the interest rate is, as PPPs are ninety per cent debt financed. An unstable impact on a PPP means varying or expensive interest rates, ninety per cent debt funded project implications makes them expensive. The basis points and interest rates make a huge difference".

B5 gave examples of how an unstable political environment affects a PPP. "A few years ago, the PPP for toll roads in Kenya was impacted as the country went through political turmoil. The ability of projects to raise long-term funding in the market became difficult as all financial institutions became unsettled. The funding becomes short-term as lenders will not lend long-term as they do not have an indication of stability. International funders withdraw their support for the country where there is instability or don't have a strong government. In Zimbabwe, PPPs cannot raise funding in the international markets because of the political turmoil there. In Zimbabwe the situation is so bad; you cannot even have political risk mitigation. PPPs will not happen there". However, the banker went on to state that one could do transactions by mitigating political risk by taking out political risk insurance or partial risk insurance from the World Bank or other institutions. B6 commented that even though political risk insurance becomes available where the political situation is not optimal, the project project requires a different form of structuring and lending is difficult. The cost of banking the deal is higher and the interest increases.

A particular interesting point, raised by G2; G3; G4; G8 and O6 was that in South Africa the electoral process delays hinder or stifle the PPP process. It seems that the projects get turned around with the new incoming change of government. All of the above respondents agreed that there should be long-term planning by government and not a new agenda every 5 years. However, O6 mentioned that not only do elections affect PPPs in South Africa; in Slovakia the PPP for toll roads was affected by their elections, as the new government was opposed to the toll roads. A change in political leadership or the lack of leadership changes a PPP.

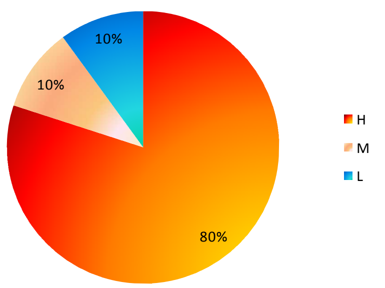
The responses indicate that a stable political and sound economic environment is a significantly important factor. Therefore, this proposition holds true in the South African PPP environment.

5.3 Legal and regulatory framework

The overall agreement level by the respondents for a favourable and enforceable legal and regularity framework is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 6 and Figure 7). The overall response agreement of 80% towards high agreement of this factor indicates that this is extremely important overall. All the bankers interviewed highly agreed with this proposition.

Table 6: Summary of views of respondents on a legal and regulatory framework

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	80%	16
Medium Agreement (M)	10%	2
Low Agreement (L)	10%	2
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	75%	6
Medium Agreement (M)	13%	1
Low Agreement (L)	13%	1
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	100%	6
Medium Agreement (M)	0%	0
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	67%	4
Medium Agreement (M)	17%	1
Low Agreement (L)	17%	1



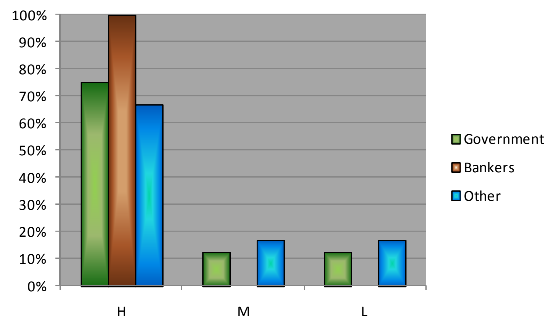


Figure 7: Summary of views of respondents on a legal and regulatory framework

An enabling and conducive legal and regulatory environment is the foundation of private sector involvement (Li et al. 2005b). The majority of government respondents agreed that the legal and regulatory framework, in South Africa is well developed. G2 stated that Treasury Regulation 16 issued under the Public Finance Management Act (PFMA), regulates the government and the process of how to do a PPP contract. The guidelines and standardised contracts are very important as this informs everyone on how to prepare the necessary requirements. G5 and G6 agree that by setting out procedures, government derives value and ensures an even more level playing field so everyone knows exactly what is expected. G6 commented that “everyone knows the rules and plays according to them” and “it is critical to have a regulated environment”.

In contrast to the above, G4 found that there is too much standardisation and that “one size does not fit all” as there are different sectors that are involved. The respondent argues that there is “too much red tape and bureaucracy in South Africa”. O3 agrees with this statement and comments that the PPP framework is full of red tape and is so constraining that the private party has little room to manoeuvre. Both respondents felt that there should be changes to the framework. This viewpoint corresponds to the sentiments expressed by Zhang (2005b; 2005c) who finds that effective PPPs take time to set up and then time to yield results, hence the framework should be reorganised and restructured over time with the knowledge and skills gained from practical experience.

All bankers agreed that a PPP that has an enabling legislative framework in place has an advantage, as the lender will know there are legal grounds for entering into PPP. There is a framework to ensure that a PPP is tendered and evaluated through a valid process. This process is in place in South Africa through the PFMA. The PFMA governs the legislative environment. If there is no legislative framework it is difficult for the private sector, especially lenders, to take a longer term view on government fulfilling its obligations. B5 found that “as a CSF there must be an enabling environment within that legislation and this is the first thing”. B6 reinforces the above comment, “you have got to have a legislative framework that allows PPPs to take place, South Africa is a good example”. Their views are in line with evidence as recorded in the literature review, in which it was stated that government should create a legal and regulatory framework and that regulation offers the private partner protection (Jamali 2004; Pongsiri 2002; Zhang 2005b).

Abdel-Aziz (2007) mentions that an institutional framework is required to assist PPPs. Moreover it should be available at different levels of government; that is, not only at central government but also at local government. O4 stated that "regulation 16 which sets out how PPPs are to be done is good, unfortunately there are a number of areas in the legislation that are not clear, and at the municipal level it is even less clear". This respondent felt that "at the municipal level legislation is not empowering legislation; pieces of legislation say that if you have the power to do a PPP, this is how you do it, it does not say we empower you to do a PPP". Three government respondents also felt that, at the municipal level, PPP implementation is difficult and legislation hindered municipalities. However, they did state that there is a government initiative to streamline the Act in this regard.

The responses indicate that a favourable and enforceable legal and regulatory framework is a fundamental factor in establishing a PPP. Therefore, this proposition holds true in the South African PPP environment.

5.4 PPP unit

The overall agreement level by the respondents for an established designated PPP unit within government is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 7 and Figure 8). There are varying levels of agreement with this factor, government having the highest agreement level and the private sector having the lowest agreement level with this proposition.

Table 7: Summary of views of respondents on the PPP unit

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	40%	8
Medium Agreement (M)	20%	4
Low Agreement (L)	40%	8
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	75%	6
Medium Agreement (M)	13%	1
Low Agreement (L)	13%	1
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	17%	1
Low Agreement (L)	67%	4
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	33%	2
Low Agreement (L)	50%	3

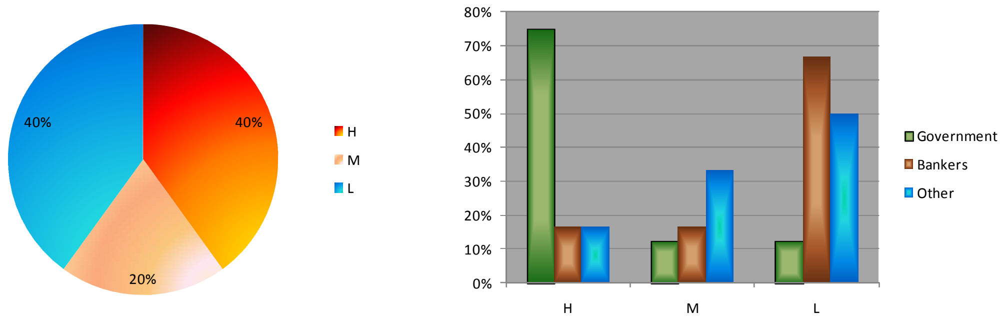


Figure 8: Summary of views of respondents on the PPP unit

Fischer, Jungbecker and Alfen (2006) deduced that the PPP unit's role is to function as a unique institution that determines appropriate PPP solutions by advocating governmental changes, supporting policy issues and advising on PPP projects. They argue that the unit is vital as it enforces state/corporate partnerships. G5 shows consensus with the literature by stating that the goal of a PPP unit is to develop regulatory frameworks, provide technical assistance at all levels of government and provide regulatory oversight. It is a mechanism to interact with the private sector. PPPs are complex projects and a PPP central unit is required, suggests G2. This, respondent G2 also maintains that a bigger unit in South Africa with more depth of skills would lead to more successful PPPs. G3 agrees with this: South Africa “requires a bigger unit with more depth of skills. PPP is a complex project, require understanding of the deals”. Three bankers also, commented that the unit should be bigger and have a bigger team, as currently there are only a few senior people who are overstretched and work under immense pressure.

B5 found in favour of the PPP unit, and stated that “yes, it is important, as there is someone within government to promote PPPs because these are complex transactions and without a champion for PPPs in government, departments will revert to the easiest route: let’s just go to tender this and not worry about the whole life cycle, not worry about VFM”. The banker also stated that South Africa “needs a unit within government to fight the cause and promote PPPs to assist in implementing these complex transactions”.

The responses highlight the varying reasons for the existence of an established designated PPP unit. Therefore, this proposition holds true in the South African PPP environment.

5.5 Government and community support

The overall agreement level by the respondents for government and community is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 8 and Figure 9). The overall response agreement of an overwhelming 80% towards high agreement on this factor indicates that this is extremely important overall. All the bankers interviewed highly agreed with this proposition. Low levels of agreement were absent regarding this proposition, thereby showing the critical importance of government support.

Table 8: Summary of views of respondents on government and community support

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	80%	16
Medium Agreement (M)	20%	4
Low Agreement (L)	0%	0
Total:		**20**
	Agreement by Groups	
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	63%	5
Medium Agreement (M)	38%	3
Low Agreement (L)	0%	0
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	100%	6
Medium Agreement (M)	0%	0
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	83%	5
Medium Agreement (M)	17%	1
Low Agreement (L)	0%	0

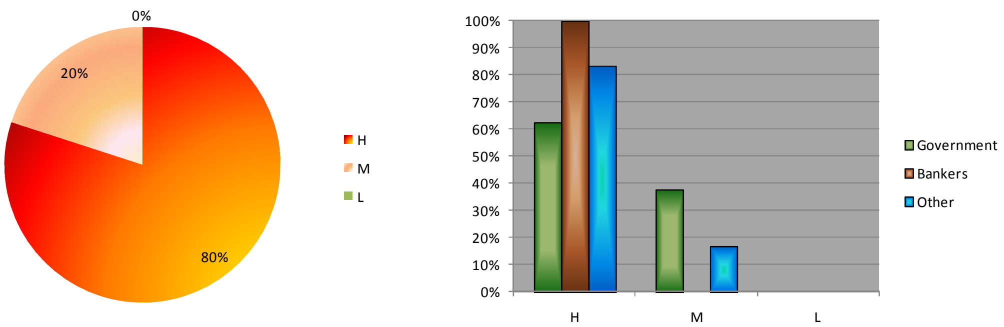


Figure 9: Summary of views of respondents on government and community support

Political support is of major importance since a PPP can only be successful if there is dedication from top leadership. Politics has an intimate relationship with the creation and execution of public policy (Li et al. 2005b; Hemming 2006). All bankers interviewed for the purpose of this study agreed that political support is extremely important. B5 said that if there is no political will, deals will not happen. The respondent believed that there must be a framework for formulating a PPP, but a critical requirement is the political will to execute the PPPs, otherwise deals will not get anywhere. B3 and B4 highlighted that political buy-in at all levels of government is absolutely crucial. Their comments were that it is critical that decision makers buy-in to the process, especially the director-general of a department and the Ministry in which that particular PPP falls.

Several respondents found that political support for PPPs is not the same in the South African government and have given examples. G8 claims that “PPPs have always had political support, almost every single State of the Nation Address has mentioned PPP at the presidential level; in practice though, the whip has not been cracked in Cabinet sufficiently to drive it as an instrument of policy”. An example given from many respondents is the prisons and the health sector PPP. G8; B4 and O4 highlighted the point that these are departments within the same government; however, views about PPPs in these departments differ, hence political will appears to be inconsistent. The unanswered question from these respondents is: how can there be different opinions from the same government?

One government respondent stated that PPP is only driven at national level and cannot be forced down to municipalities. The suggestion was a “good marketing campaign” to change attitudes further down in government. This is linked to the literature as Zhang (2005b) found that suitable public relation strategies and activities are essential to win public understanding and support.

The General public support is central to ensuring the viability of a PPP (Yuan, Zeng, Skibniewski and Li 2009). G2 confirmed the findings of the literature view and highlighted that community support was found to be important depending on the type of PPP and whom it impacts. An example was given of an accommodation PPP where the community was not involved, hence their support was irrelevant. It was suggested that community participation is particularly important in PPPs where water, schools and hospitals are concerned. This is also in line with what B2 advised that on a project by project basis community support is critical. An example given was that of a PPP in Glasgow, United Kingdom, where schools were built. The community did not accept this monolith of a building and they used to drive golf balls through the windows. G6 believes that community opinions are not carrying the weight they should be in decisions concerning PPPs. This respondent stated that “political opinions weigh heavier than community opinions; this is ironic, as community money is being spent”.

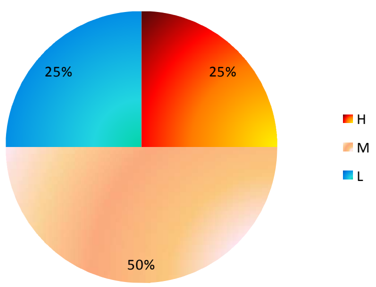
The responses clearly show the conclusive importance of government and community support. Therefore, this proposition holds true in the South African PPP environment.

5.6 Appropriate allocation of risk

The overall agreement level by the respondents for an appropriate allocation of risk is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 9 and Figure 10). There are varying levels of agreement to this proposition, with an even split overall between high and low agreement levels of 25% and an overall medium agreement level of 50%.

Table 9: Summary of views of respondents on appropriate allocation of risk

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	25%	5
Medium Agreement (M)	50%	10
Low Agreement (L)	25%	5
Total:		**20**
	Agreement by Groups	
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	38%	3
Medium Agreement (M)	38%	3
Low Agreement (L)	25%	2
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	67%	4
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	0%	0
Medium Agreement (M)	50%	3
Low Agreement (L)	50%	3



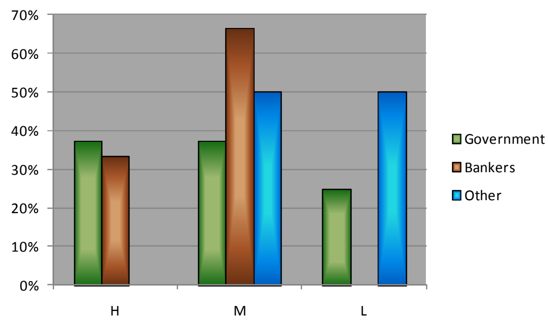


Figure 10: Summary of views of respondents on appropriate allocation of risk

Yuan et al. (2009) stated that a first-class risk management methodology is crucial in PPPs. Abdel-Aziz (2007) and Sadka (2006) argue that the private sector is better placed to manage design risks, construction risks and the future operation and maintenance cost overruns. In an opinion supporting the research findings, the respondent G5 commented that a detailed risk management methodology exists for all sectors as generic risks cut across all sectors, such as design risk and maintenance risk, and these must sit with the private sector.

The overall sentiment expressed by the respondents was that there is a risk management methodology that can be used by all PPPs. The risk matrix is well developed and important. However, there is great contention as to the allocation and transfer of risks between the private and public sector and which party must manage or control which risks.

A comment from B5 proposes that during negotiations government must always understand that the private sector cannot take on all risks. “A successful PPP is a PPP in which risk is identified and passes onto the party best able to manage that risk”. In agreement, B3 believes that the subtle difference is that government tries to “transfer risk” not “allocate risk”. Hence, transfer is just a blanket, here’s a risk, manage it and price it, whereas risk allocation is about who is best placed to manage, mitigate and avoid risk. So, in essence the implication is that risk needs to be seen more along the lines of risk allocation than risk transfer. This is in line with the literature where Khan and Mushtaq (2009) and Jong et al. (2010) suggest that a successful PPP is the allocation of the project’s risks based on each party’s capability of managing the risk without obliterating the financial viability of the project.

Most respondents felt that government tries to pass too much risk on to the private sector which leads to higher pricing, thereby neither making the deals viable nor bankable. O4 believes that “government does not want to have any risks; all they want is to write a cheque every month as the unitary fee; they don’t have to worry about anything else”. Two opposing views from two different groups were heard: G7 stated that “private sector does not understand risk very well” and O3 stated “public sector does not understand risk”. Both respondents believed that the other party was too risk averse. These statements link to the work of Li et al. (2005b) who found that the overall costs of the project shrink as the organisation is the best place in which to mitigate a particular risk and here it should be able to be handled at the lowest price.

The responses highlight the contention of this proposition between the different groups, hence showing its importance. The treasury regulations state that PPPs must obtain the appropriate allocation of risk. Therefore, this proposition holds true in the South African PPP environment.

5.7 Reliable contractual agreements

The overall agreement level by the respondents concerning a reliable contractual agreement is given below according to the three groups of respondents included in the study. (See Table 10 and Figure 11). The overall high agreement levels were at 40% predominantly from the government group, with the remaining 60% split evenly between bankers and other.

Table 10: Summary of views of respondents regarding reliable contractual agreements

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	40%	8
Medium Agreement (M)	30%	6
Low Agreement (L)	30%	6
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	50%	4
Medium Agreement (M)	25%	2
Low Agreement (L)	25%	2
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	50%	3
Low Agreement (L)	17%	1
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	17%	1
Low Agreement (L)	50%	3

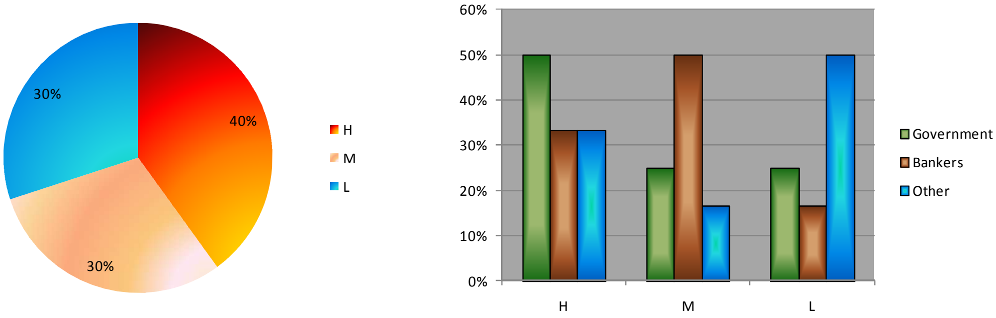


Figure 11: Summary of views of respondents regarding reliable contractual agreements

Most of the views from the group ‘other’ and the bankers were that there are good local and international lawyers, a good legal system exists and proven frameworks are in place. Generally respondents from these groups did not have much detail to add to this proposition. As mentioned, this is taken for granted, it exists. An important point from B6, “these deals are highly geared, you take minimum or no security, rely one hundred per cent on the contractual framework”. This emphasises the importance of reliable contracts which too links in with comments in the literature made by Tang et al. (2009).

G3 specifies that there must be one person who has overall responsibility for contracts and that the risk allocation is enshrined in the contracts. The respondent confirms that contracts are the backbone of the structure that is set up for a PPP. There are many contracts and they are very intricate to manage. G2 and G6 believe that contracts are critical and it is imperative to have the best legal advice. They also state that the risks agreed upon are taken care of in the contracts. This finding is in line with the observation that a main consideration is the contract type and the content which is influenced by the recognition and classification of risks (Chua, Kog and Loh 1999; Zhang 2005b).

A very interesting point was made by G8 about the contractual agreement “hope you never have to use it, if you have to use it, know you have a problem”. The respondent also found that a great deal of time is spent negotiating for the worst case scenario which, although crucial, has to kept in check. There is considerable pressure to reduce the time taken to prepare contract document.

In the responses there appears to be a tendency to highlight the importance of contracts as being an integral part of a PPP deal. Therefore, this proposition holds true in the South African PPP environment.

5.8 Selecting the right private partner

The overall agreement level by the respondents for the selection of the right private partner is presented below, included are the responses that have been divided into the three groups of respondents included in the study. (See Table 11 and Figure 12). The entire bankers' group barely agreed with this proposition, making this the largest overall low agreement level of 40%.

Table 11: Summary of views of respondents on selecting the right private partner

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	35%	7
Medium Agreement (M)	25%	5
Low Agreement (L)	40%	8
Total:		**20**
	Agreement by Groups	
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	38%	3
Medium Agreement (M)	38%	3
Low Agreement (L)	25%	2
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	0%	0
Medium Agreement (M)	0%	0
Low Agreement (L)	100%	6
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	67%	4
Medium Agreement (M)	33%	2
Low Agreement (L)	0%	0

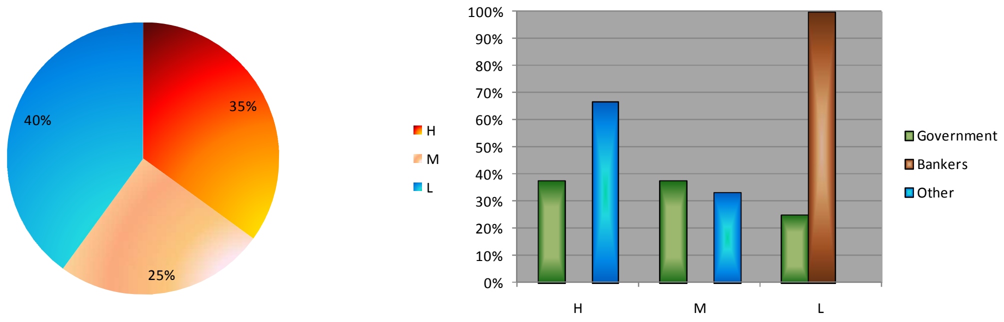


Figure 12: Summary of views of respondents on selecting the right private partner

G1; G6 and O1 indicated that the private partner needs to have the right level of skills to do the work, as well as experience in managing risks. The track record of the private partner is very important. If the private partner messes up once, they can forget about doing business again. The reputation of the private partner is also considered and the partners must have confidence in each other. These are long-term contracts and a breakdown in service is expensive, so the wrong partner cannot be chosen as it would not be conducive for service delivery. A comment made by O6 was that “the policy is to select the best in the field based on track record and experience”. These views are highlighted in the literature by Zhang (2005a) where the findings show that it is imperative for the private party to have the necessary skills, experience and resources to control these risks and offer quality and cost-efficient facilities and services.

Another significant theme mentioned by G1 was that of a transparent and competitive tender process. The respondent emphasised that this was critical. This links up to the literature where it is stated that the procurement process should include a transparent and competitive set of procedures. According to comments made in the literature, open requests foster competition and a competitive tendering process realises the best offer (Li, Akintoye, Edwards and Hardcastle 2005a; Hemming 2006; Zhang 2005b, 2005c).

A common theme mentioned by G7; O2 and O4 is that there is a good procurement process in the existing PPP framework. However, it was noted that the process is long and is based on initiating the PPP, engaging in feasibility studies. Moreover there are many treasury approvals to go through. These respondents also felt strongly that the negotiations phase is far too extensive and lengthy. This is in line with the literature where PPP procurements require a proper legal establishment and a feasible and efficient procurement process (Fischer et al 2006; Yuan et al. 2009).

Although no conclusive evidence can be presented by the researcher for the low agreement levels by the bankers for this proposition, it can be speculated that this is due to the bankers being the funders of the consortiums and they are not always involved in the formation of the consortiums. However, it was clearly stated by B5 “we view ourselves as a partner with a PPP, we are not just a funder; we are there for the longest term and would like to be a partner in the decision-making done by the consortium. We usually bring people to the consortium; we are intrinsic part of the consortium; funding is the biggest element in terms of the cash contribution of the project; hence we want to influence how consortium is structured, we view ourselves as partners in the process”.

The responses lay emphasis on the use of an established process for the selection of the right private partner. Therefore, this proposition holds true in the South African PPP environment.

5.9 Commitment and trust

The overall agreement level by the respondents for commitment and trust among the partners is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 12 and Figure 13). The overall response agreement of 55% towards low agreement of this proposition indicates that this is less important overall.

Table 12: Summary of views of respondents on commitment and trust

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	15%	3
Medium Agreement (M)	30%	6
Low Agreement (L)	55%	11
Total:		**20**
	Agreement by Groups	
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	13%	1
Medium Agreement (M)	13%	1
Low Agreement (L)	75%	6
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	50%	3
Low Agreement (L)	33%	2
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	33%	2
Low Agreement (L)	50%	3

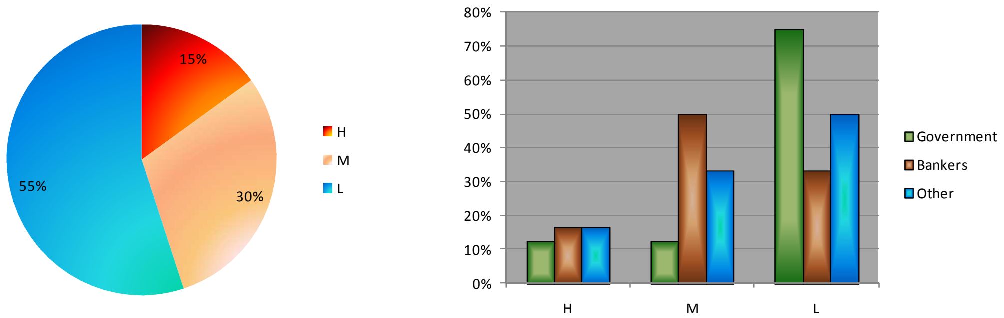


Figure 13: Summary of views of respondents on commitment and trust

Trust is relevant to the PPP market due to the long period of the concession agreement (Smyth and Edkins 2007). The basic dilemma is that trust can only be achieved through collaboration, which subsequently depends on trust (Cavelty and Suter 2009). These themes from the literature can be found in the responses.

G1 found through experience that things always go wrong and that is why there are legal agreements that uphold promises. G2 believed that trust must develop over time and through relationships. There must be trust between the public and private sector, so that everyone believes they are getting the best deal for all. G4 highlighted that if there is no trust the relationships suffer and working together becomes difficult. The statement “going into bed together” was used to describe the level of trust required. G6 found that if there is no trust the “smallest problem becomes a mountain”. The contracts do provide for dispute resolution, although that is not the answer to the issues that arise. Hence, if there are many disputes, it is more likely that the PPP will be terminated. The respondent suggested that if there is no trust there will be no “sense from the partners working together, indicating it will be a difficult marriage for twenty five years”.

Every party is likely to make the best commitment to accomplish the specific agreed objectives through contributions to the PPP (Choi and Jacobson 2008). According to Toor and Ogunlana (2008), commitment encompasses devotion conscientiousness, and perseverance from all parties involved in the PPP. B6 alluded to the above idea by saying that although it is taken for granted that “documents must be watertight and non-negotiable amongst all lenders”; the reality is that the issue comes back to how do the counterparties behave when there is a debate? Do the lawyers come out or are solutions found? It was proposed that flexibility on issues shows the commitment of the parties to find a solution, rather than going back to legal agreements. O4 was convinced that commitment from both sectors is definitely vital for a successful PPP.

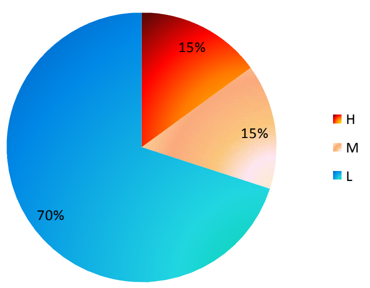
It can be concluded from the responses that commitment and trust are important in a PPP. Therefore, this proposition holds true in the South African PPP environment.

5.10 Effective communication

The overall agreement level by the respondents for effective and extensive communication is presented below, included are the responses that have been divided into the three groups of respondents included in the study. (See table 13 and figure 14). The overall response agreement of 70% towards low agreement of this proposition indicates that this is less important overall.

Table 13: Summary of views of respondents on effective communication

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	15%	3
Medium Agreement (M)	15%	3
Low Agreement (L)	70%	14
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	13%	1
Medium Agreement (M)	13%	1
Low Agreement (L)	75%	6
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	0%	0
Medium Agreement (M)	33%	2
Low Agreement (L)	67%	4
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	0%	0
Low Agreement (L)	67%	4



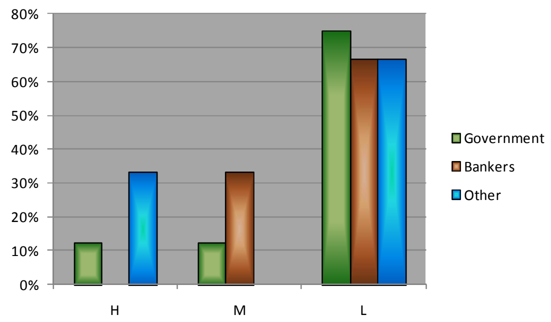


Figure 14: Summary of views of respondents on effective communication

Chen and Chen (2007) purport that effective communication ranked first due to partnerships necessitating knowledge and upholding clear and open channels of communication between all project members. This facilitates the dialogue of ideas, visions and solutions. Supporters allege that it assists teams to be more inventive, original and valuable (Ruuska and Teigland 2009).

G2; G3; G4; G5 and G7 agreed in principle to having open lines of communication, so that problems could be resolved as these are partnerships.

Most of the feedback from the respondents was that there are tools in place for communication to take place. Some examples are: the PPP contracts stipulate weekly, monthly and annual status reports; a help desk would be set up to identify and solve issues that occur; there also has to be a free flow of information between the government departments and the private sector, where monthly meetings are held.

In contrast to the above, O6 found, through experience, that communication does not happen well as these are mega projects, and even though there are formal communication lines, the real situation on the ground is not reported.

Not a single respondent from the banker's group highly agreed with this proposition. B5 highlighted that communication is very dependent on the partners in the consortium and government departments. The respondent believed that some consortia have taken the view that every party must be kept at arm's length, hence in the past the respondent had withdrawn from a PPP because of the consortia trying to keep lenders away from the project. "Some consortia and some government departments forget that last 'P' stand for 'partnerships' and communication is the first thing that suffers; they must view people in the organisation as part of the partnership, then communication lines will be more fluid, make life easier, issues surface sooner and addressed quicker". B6 mentioned that there is a massive amount of work that is required in getting the documents drafted well and there must be very good communication between legal, technical and financial streams.

O4 has found through experience that communication seems to happen on each side of the table in the grouping, so the private sector members will be communicating with each other and government representatives with each other. There is not very good communication across the table, between government and private sector, because they come with different perspectives. "Private sector thinking is business-orientated whereas government thinking is representative of the government's stance - they talk past each other a huge amount". Sometimes there is late intervention by people who should have made their comments known earlier, which is a very big frustration and causes delays.

An example given was that of provincial government doing something and the national department getting involved later as opposed to being involved earlier.

A number of the above comments appeared in the literature review referring to the fact that the utilisation of effective communication channels can assist collaborative and innovative performance. If everyone communicates in the PPP then the likelihood of conflict and confrontation that delay and add to the costs will be minimised. It is considered an area that can enhance management practice and prevent complications from arising (Choi and Jacobson 2008; Christiansen 2007; Trafford and Proctor 2006). According to the research by Toor and Ogunlana (2008), communication presents two sides of one picture. On the one hand all other parties should communicate with the client properly to avoid any uncertainty regarding their requirements and their needs. On the other hand, the client should be responsive to the needs of project participants.

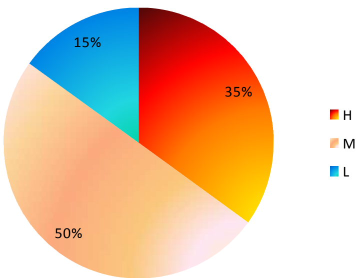
It can be concluded from the various responses that effective and extensive communication definitely impacts on a PPP. Therefore, this proposition holds true in the South African PPP environment.

5.11 Skills and experience

The overall agreement level by the respondents for skills and experience of the partners is presented below. Included are the responses that have been divided into the three groups of respondents included in the study (See Table 14 and Figure 15). There is an overall response agreement of 50% towards medium agreement, whereas in the group ‘other’ the responses were evenly split between high, medium and low agreement.

Table 14: Summary of views of respondents on skills and experience

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	35%	7
Medium Agreement (M)	50%	10
Low Agreement (L)	15%	3
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	38%	3
Medium Agreement (M)	50%	4
Low Agreement (L)	13%	1
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	67%	4
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	33%	2
Low Agreement (L)	33%	2



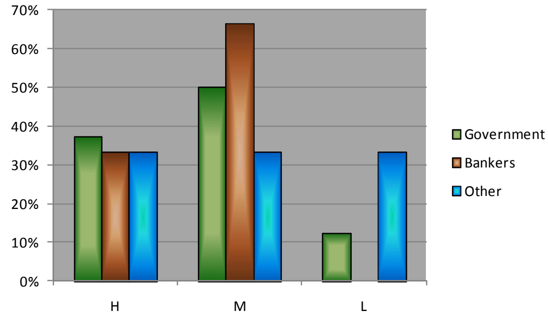


Figure 15: Summary of views of respondents on skills and experience

In their work Toor and Ogunlana (2008) found that in most research studies the competency of the project manager was constantly highlighted. According to Ruuska and Teigland (2009), the project leader is experienced and knowledgeable which leads to a higher probability of successful completion of the project. The project manager should have the ability to enlist commitment from project members, ensure co-ordination among project members and have everyone contributing so as to improve the performance level in the direction of a successful project (Jha and Iyer 2007). The findings highlighted by the respondents align well with the literature reviewed.

According to G6 the project officers must be skilled in their own function and are supposed to be experts. They must know how to drive a project in the face of obstacles. This person can make or break a project. The project officer needs to be the champion of the project and must engage others for them to see its value. G7 felt that the project manager role must be a full-time position. Project managers must be strong, be logical and have planning capabilities, equipped with a comprehensive team that is knowledgeable and has skills. B6 agrees that a strong project manager to drive the PPP is a requirement, someone who is committed and passionate with the right skills to get buy-in from all different departments.

O4 believes that “the process itself is not at fault, the people are at fault, the process is a good process. National Treasury built a very good process and Regulation 16 is supposed to protect the country. The problem is where the delays come in, as the decisions can sit on someone’s desk for six months; they need to make a decision. The problem is that people are doing this as part of their day job, have their existing job and the PPP job on top of that, also not enough support around them”. This is in line with what is recorded in the literature which states that competency allows the project members to make suitable decisions and is an enabler for project success. Competent individuals have the ability to keep the project on time and on budget, which heightens the morale of the team (Jha and Iyer 2007). The respondent was very passionate about the topic of skills and believes that “in South Africa there is no skills base, the United Kingdom does PPP with ease, the USA does PPP with ease, in Australia there is ease of doing PPPs. Korea rolled out ten PPPs in two years”. The point was that PPPs is an accepted way of developing infrastructure around the world, and they seem to work easily around the world and in South Africa they do not seem to work easily due to the lack of skills.

The central theme from several respondents was mainly about capacity constraints. There is a capacity issue on both sides as the private and public sector are both under pressure. The capacity is split between so many projects and the deals are struggling. The private sector sometimes struggles to function within the bounds of regulations. The private sector also experiences a skills shortage. An example given by G2 is that “foreign affairs PPP happened four to six months late, if you have a private sector ready for these deals that really should not happen”. There is a requirement for capacity to implement PPPs. Hence, if the capacity changes, than more people understanding the deals, more advisors, quicker decision-making lead to a greater success rate.

However, the bankers and ‘other’ groups felt that the capacity issue was only on the side of government. B3 stated that, “there is a shortage of skills in the market and it is very easy for these transactions to collapse because someone does not understand what’s happening or does not understand exactly how to implement the project. Even with the greatest commitment and will by politicians, the process that can take six months or eighteen months - if you don’t do the right things at the right time you have to go back to the start to do it again; you get bumped back and lose credibility on the project quite quickly”.

The banker, B1; B3; B4 believed that there is a shortage of skills in the public sector. Setting up a PPP is a very specialised process and the government struggles with their ability to hire someone for a once-off transaction as the person would not be utilised after the PPP and would be redundant after completion of the contract. The public sector struggles to get skilled project advisors and project managers. The bankers believed that lenders have the skills and expertise, are adequately motivated in that if there is no performance, they will be penalised. That they will receive just reward is appropriate incentive for task completion. B6 concurred with the others in this group, “the skills are there in the private sector: lawyers, engineers, accountants, financial advisors, banks and construction companies”. The government finds it difficult to attract and retain high level commercial people, from a money and career path point of view. It is challenging for government.

The group of ‘other’ also believed there were capacity constraints at government level. O1 and O2 views were that Treasury should transfer skills to the municipalities. O4 and O6 very strongly expressed the view that there is no depth of experience because so few PPPs are done and it would get better if there were more PPPs in the market. Then skills could be developed, on condition that there was commitment to do about ten PPPs a year.

The responses revealed the vast contrasting perceptions and opinions from the different groups on the need for skills and experience, clearly showing that the factor is important. Therefore, this proposition holds true in the South African PPP environment.

5.12 Roles/responsibilities and stakeholder relationships

The overall agreement level by the respondents for regarding roles and responsibilities, as well as active management of all stakeholder relationships is presented below, included are the responses that have been divided into the three groups of respondents included in the study. (See table 15 and figure 16). There is an overall response agreement of 50% towards low agreement, of this proposition indicates that this is less important overall.

Table 15: Summary of views of respondents on roles/responsibilities and stakeholder relationships

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	15%	3
Medium Agreement (M)	35%	7
Low Agreement (L)	50%	10
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	25%	2
Medium Agreement (M)	38%	3
Low Agreement (L)	38%	3
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	0%	0
Medium Agreement (M)	17%	1
Low Agreement (L)	83%	5
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	50%	3
Low Agreement (L)	33%	2

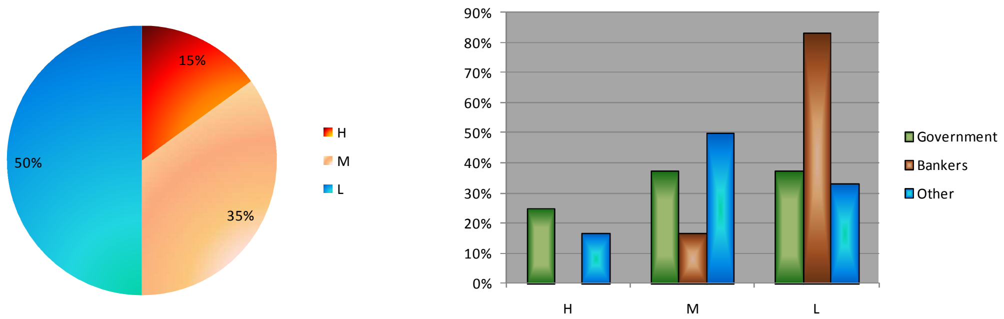


Figure 16: Summary of views of respondents on roles/responsibilities and stakeholder relationships

G2 stated that "building up the relationship between the department and private sector is very important; if not in existence; the chances of a failure are much higher". This sentiment is shared by G8, who suggested that the relationships cannot be managed through contracts as "everyone in the PPP is there for the long haul". B1 finds in agreement with the above sentiment by believing that partnering is important and that these are real dependent relationships.

Different parties have different goals but everyone must compromise. For example, one company might want to charge too much causing a good relationship to break down. There must be a sound partnership ethos as broken relationships lead to failure.

These points are highlighted in the literature. Mohamed and Wahab (2009), Zhang and Jia (2009) and Forrer et al. (2010) state that parties involved in a PPP do not share a common organisational structure and there is always a public and a private sector party to the relationship. The relationships are long-term, rather than just a once-off contract. Chan, Chan and Ho (2003) found that enhanced relationships amongst project participants lead to significant benefits in PPPs. The relationships within the PPP are alleged to be critical to the project's success as feeble relationships simply open doors for disagreements and misunderstandings (Tang et al. 2009).

G7 found that there must be clarity on roles, "project manager is like a mother, make sure everyone stays in their roles, know their positions". B6 highlighted it is important to make sure that role players know what to do and by when. This point is mentioned in the literature as it is stated that each member should have a clear definition of roles and responsibilities (Choi and Jacobson 2008), as this is an important factor for success in PPP (Croft 2005).

However, even though several respondents agreed in theory that there must be distinct and differentiated responsibilities and roles, in practice there are many problems with this. O4 observed that very often there are many of arguments, as to who bears the responsibility or role, particularly in more complex PPPs. B2 describes South Africa as not being where the Australian or UK operators are, in this regard. Facilities managers should be leading the projects as they are going to be there for the full 20-30 years. However, they are not strong from a human resources point of view and financially they almost just go along for the ride. "The journey is driven by the construction companies, we think that's wrong, should be the other way around, by facilities managers". B3 found that "it's a bit inefficient because we bankers do more than we should, not being aware of exactly who should be doing what, everyone ends up doing something twice. We as bankers get far more involved in these projects than a developed market bank would, just because we have to, because the consortium might not be developing it in a bankable way. In a developed market, the consortium knows exactly how to structure a transaction, so the roles and responsibilities in South Africa are not as understood by the people that are in them as how they should be understood”.

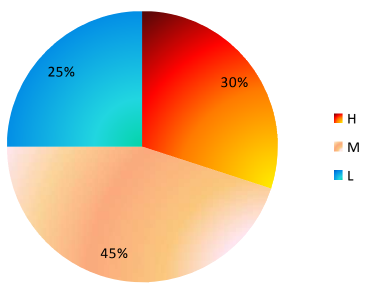
In the responses, the correlation between viewpoints expressed about the need for clear roles and responsibilities and active management of all stakeholder relationships should to be considered when implementing a PPP. Therefore, this proposition holds true in the South African PPP environment.

5.13 Availability of a strong financial market

The overall agreement level by the respondents regarding availability of and accessibility to strong financial markets is presented below, included are the responses that have been divided into the three groups of respondents. (See table 16 and figure 17). The overall response agreement levels vary between high agreements at 30% to low agreement at 25%, where most respondents are to be found at the medium agreement level of 45%.

Table 16: Summary of views of respondents on the availability of a strong financial market

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	30%	6
Medium Agreement (M)	45%	9
Low Agreement (L)	25%	5
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	25%	2
Medium Agreement (M)	50%	4
Low Agreement (L)	25%	2
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	50%	3
Medium Agreement (M)	17%	1
Low Agreement (L)	33%	2
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	17%	1
Medium Agreement (M)	67%	4
Low Agreement (L)	17%	1



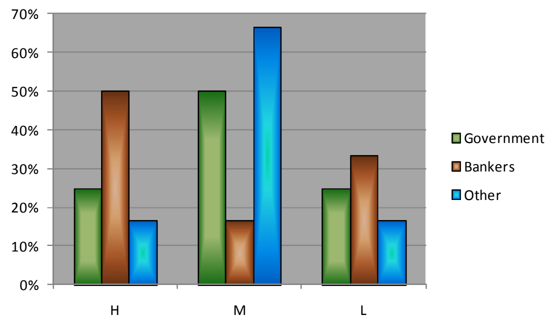


Figure 17: Summary of views of respondents on the availability of a strong financial market

An important success factor is that the private sector has easy accessibility to financial markets. Since financial markets change constantly, close attentiveness is required to either accelerate or delay projects (Li et al. 2005b). A range of answers came from the respondents during the interview process. O2; O4; G3 and G4 found in their experience, that funding is taken for granted in South Africa and that institutions are willing to lend. A strong local market exists. All banks want to give long-term loans and there is no real competition between the banks. All the lending rates are more or less the same. G5 said that South Africa is fortunate as it is rarely exposed to fluctuating foreign exchange rates as all PPPs funded in Rands. Other African countries do not have the luxury of long-term loans and have to go to the International Monetary Fund and the World Bank.

Supporters advise that using PPPs to bring private financing, competition and market forces into the government procurement process can lead to projects being completed in a more timely fashion than they would be if entirely paid for by governments (Siemiatycki 2010). G2 finds that “banks are like a club, no real competition: good competition as far as the technical and the Black Economic Empowerment (BEE) components are concerned - there is a lot of competition in those areas which can be seen in the bids, but when it comes to loans, it is almost the same. You find that there are more or less the same margins - banks have a very nice comfortable position in South Africa”. This makes the process flawed also it is difficult to bring in foreign banks because they have to bid in the local currency, which is not profitable for them in the long-term. G5 and O6 concur with this and go on to state that in the United Kingdom there are about thirty banks bidding in the process. Trying to create competitive bidding terms in South Africa would introduce debt competition.

B1 and G8 highlighted that the world financial crisis is a current (2010) issue that has impacted on the long-term funding of PPPs and caused a bit of wobble by making debt expensive and changing how deals are financed. The government did not want to be locked into long-term fixed rate funding, which is quite expensive. Therefore, all PPPs have to rethink funding terms of projects.

B5 and B2 propose that the capital markets in South Africa are the most developed relative to other emerging markets and Africa. During the credit crisis, there were challenges, so, even though long-term funding was available, it was expensive. B5 stated that “the ability to raise financing is a success factor for South Africa”. B6 commented that the government takes too much for granted as there are well developed debt and capital markets and this is a massive asset to the country. The banks have to be very prudent due to the implications of the rules and regulations that have to be followed. This is where some of the negotiations become quite difficult because banks/lenders have to be fairly strict on certain issues of pricing to protect the balance sheet, protect returns and protect defaults. The feeling is that government does not like banks because they feel banks are risk averse - almost as if the banks are obstructive to the process, which is not necessarily true. “Most of the banks are very interested in this market, committed to the market but it has to be on a commercially viable and legally acceptable basis”.

The above banker’s views are in line with assertions in the literature that long concession periods can result in serious financial costs which, in turn, necessitates suitable financing methods. Profitability denotes better potential of the concessionaire to conquer financial complications. Sound financial examination and other important financial aspects are required to be analysed meticulously (Zhang 2005b; Yuan et al. 2009). A survey by Salman, Skibniewski and Basha (2007) about financial feasibility of projects shows that return on investment (ROI) is the fifth most important factor out of twenty one factors.

In the survey done by Li et al. (2005b) easy access to an available financial market ranked third. Once again, no conclusive evidence can be presented by the researcher for the varying levels of agreement, but it can be speculated that the proposition did not have as high an agreement level as in South Africa. There is an adequate local financial market, but, stated by several respondents, it may be taken for granted.

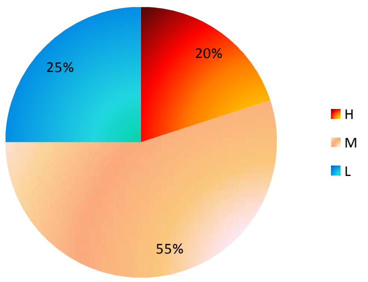
The responses indicate the importance of an available strong financial market. Therefore, this proposition holds true in the South African PPP environment.

5.14 Economic viability and technical innovation

The overall agreement level by the respondents for economic viability and technical innovation is presented below, included are the responses that have been divided into the three groups of respondents included in the study (See Table 17 and Figure 18). The overall response agreement level vary between high agreement at 20% to low agreement at 25%, where the majority of the respondents are located at the medium agreement level of 55%.

Table 17: Summary of views of respondents on economic viability and technical innovation

Agreement Levels	Overall Response Agreement Percent	Response Count
High Agreement (H)	20%	4
Medium Agreement (M)	55%	11
Low Agreement (L)	25%	5
Total:		**20**
Agreement by Groups		
Government - Response Agreement Percentage		**Response Count**
High Agreement (H)	0%	0
Medium Agreement (M)	50%	4
Low Agreement (L)	50%	4
Bankers - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	67%	4
Low Agreement (L)	0%	0
Other - Response Agreement Percentage		**Response Count**
High Agreement (H)	33%	2
Medium Agreement (M)	50%	3
Low Agreement (L)	17%	1



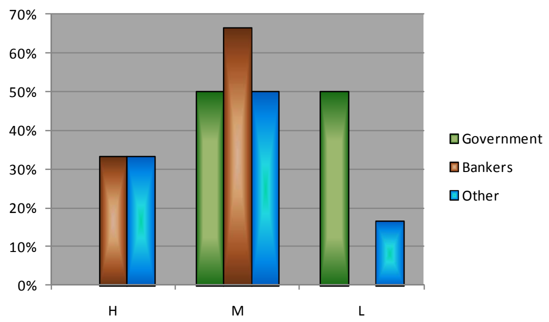


Figure 18: Summary of views of respondents on economic viability and technical innovation

B6 and G1 believe that a PPP is a good procurement method, as it takes the full cycle costs over the life of the assets. The PSC financial model (section 2.2.3) is used and is always cheaper than other methods. PPPs must increase efficiency and provide better service delivery without loss of jobs. G3 is in agreement with this and stated that "Explode a country in terms of development".

G8 stated that VFM (section 2.2.3) is a slightly grey area. The respondent found that VFM tries to quantify as much as possible whereas part of the VFM is a qualitative assessment and one tries to limit this as much as possible. O1 believes that PPP needs to be economically viable. The above comments highlighted by survey participants aligns well with evidence from the literature reviewed, noting and revealing that value for money (VFM), viability, feasibility and economic viability is seen as being important for success in a PPP (Yuan et al. 2009; Watson 2003).

Li et al. (2005b) found that a detailed and practical business case of benefits is a CSF from both the public and private sectors points of view. O6 found through experience that there must be mutual benefit to both parties: it is fundamental that the public sector sees the advantage and benefit, and that the private sector sees the benefit and assesses it as a viable and good project. O4 observed that “government is not good at maintaining their assets; not good at keeping things running on an ongoing basis, and this is where the private sector is good”. There is debate as to what core functions should be contracted out by government. The private sector imposes a discipline on employees that the government does not. An example would be that teacher absenteeism that happens in public schools would never be tolerated in private schools. It is a shocking state of affairs. If private schools ran government schools, discipline would be imposed. “The discipline that the private sector brings to business enterprise is invaluable for South Africa, at least till we have a culture of responsibility” within society at large.

There is very little alignment with the literature on technical innovation. The literature finds that PPPs lend themselves to innovative technology and new management methods (Jong et al. 2010; Yuan et al. 2009). The reason given by G7 and B2 why this is not so in South Africa, is that there are not enough PPPs in the market –“not enough churn in the market - so how do you become innovative?" O4 expressed a response in this way: "there is a mantra, *let someone else do it*; it is too risky and there is no technical innovation".

This proposition is the reason for doing PPPs in South Africa. The Treasury regulations state PPPs must be affordable and offer value for money (VFM). Therefore, this proposition holds true in the South African PPP environment.

5.15 Other factors

Respondents were asked if there were any other issues or points not discussed during the interview that they felt were relevant for a PPP, specifically if applicable to the South African situation.

Some of the recurring concerns that could be seen as significant factors that the respondents identified were:

- Black Economic Empowerment (BEE)
- Transaction flow of PPPs to market
- Corruption

G2 commented that "BEE makes a PPP in South Africa unique - more than anywhere else in the world, we are more aggressive to get BEE going". Many government respondents believed that BEE does frustrate foreigners at times, however, if one wants to do business in South Africa one must comply.

A number of bankers believed that BEE makes it complicated for the private sector to bid as it is very complex and a difficult issue to achieve when engaging in long-term deals. Government is very specific about what it wants in a BEE, which adds to transaction costs. However, B5 and B6 commented that DBSA has come to the party with National Treasury, because they have developed funding instruments to make the BEE participation much easier. Involving BEE companies is a success factor because BEE companies do not usually have financial resources to bid on these big transactions, nor do they have equity requirements to fund large PPPs, so DBSA will put up performance bonds.

O6 finds, through experience, that BEE is unique and positively viewed in South Africa. However, in practice it is difficult to meet the criteria as sometimes no one in the market who qualifies. An example given was that of female facilities managers who were required on a deal and there was no expertise in the market. Hence, they appointed a female from the construction sector and brought her on board.

Generally, respondents indicated that their companies adopted a ‘no tolerance’ approach to corruption. In a PPP it is difficult to be corrupt, this is ruled out. A government employee would be fired if found to be involved in fraudulent dealings. Since the PPP market is “small, everyone knows everyone”. Law firms would be able to tell one of its staff members was serving as a director in a private party contract. G1 stated that the tender process is transparent. In contrast, O5 admitted that there could be corruption in some sense. In negotiating concession contracts, terms of risk are subjective and counterparties can be easily swayed.

Almost all the respondents complained that bringing the PPPs to the market is too slow a process. B5 stated that there are “lots of promises of transactions; the private sector is always willing to do transactions but the deal flow from government has been very slow, absolutely slow”. In agreement with this, B4 found that there is a long list of PPP deals but only 1-2% of those deals come to market. “That is big problem for the private sector; we would like to see lots of deals, we would like to ensure we are part of the government service delivery objective and certainly we have good frameworks, good capital markets, good sophisticated sponsors, funders willing to fund, deals just not coming to the market fast enough”.

O3 mentioned that in other countries deals coming to market are very successful. Further comments were that in Europe ninety per cent of the PPPs get to the market whereas in South Africa it is less than ten per cent. The respondent wondered whether South Africa is serious about PPPs or just talking about them. The general belief amongst this group of respondents is that the “planning is flawed - plan less talk more”.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This final chapter of the report summarises the key findings from the discussion of all the propositions dealt with in this research endeavour to culminate in an overall conclusion for the study. A few recommendations of interest to public-private partnership (PPP) professionals within the South African market, based on the outcomes of the research, are then presented.

Suggestions for future research topics will be offered as related to items of interest that fell outside the scope of this research, or which show potential for further in-depth investigation into the success factors of PPPs which are becoming increasingly important and require ongoing consideration.

6.2 Conclusions of the study

This research identified thirteen critical success factors (CSFs) in developed markets through a review of available literature and aimed to ascertain whether these factors would be present in the South African PPP market. In order to meet this aim, the researcher conducted semi-structured interviews with experts in the PPP market. The findings confirm that there is a positive agreement between the three groups of people, government officials, bankers and a diverse group of other professionals who were interviewed on the relative importance of these thirteen CSFs, even though the order of ranking of importance differed.

Formal ranking was not part of the methodology. The more highly prioritised factors were identified according to the views of experienced professionals which were rated on three-point scale of importance as perceived by the researcher. This helps clarify what the highly prioritised factors are.

Three factors emerge as being the most important for a successful South African PPP. These are a favourable and enforceable legal and regularity framework (1st), government and community support (2nd) and a stable political and sound economic environment (3rd). Thereafter, in descending order of importance, the success of a PPP depended on a reliable contractual agreement (4th), the establishment of a designated PPP unit within government (5th), the skills and experience of the partners (6th), the selection of the right private sector partner (7th), the availability and accessibility of strong financial markets (8th), the appropriate allocation of risk (9th), economic viability and technical innovation (10th). Three factors were regarded as less important for a South African PPP. These are the "soft" CSFs: clear roles and responsibilities and active management of all stakeholder relationships (11th), commitment and trust among the partners (12th), and effective and extensive communication (13th).

The findings of this work in terms of levels of importance generally differ with the conclusions of previous related research in developed countries. The top three factors in South Africa were ranked differently compared to the eighteen CSFs in the Li et al. (2005b) survey. In their survey, a stable macro-economic environment which is equivalent to a stable political and sound economic environment ranked fifteenth. A favourable legal framework ranked ninth. The government and community support were spilt, with political support and social support being ranked eleventh and eighteenth, respectively. In Zhang's (2005b) studies all of the above three factors were sub-factors that fell into one aspect called a favourable investment environment. This was ranked fifth out of five CSFs aspects.

The appropriate allocation of risk ranked second in both Li et al. (2005b) and Zhang (2005b) work, whereas in South Africa it was ninth. Economic viability being tenth in South Africa was first in Zhang (2005b) studies. An available financial market ranked third in the Li et al. (2005b) survey whereas in South Africa it was eighth. Commitment and responsibility ranked fourth out of eighteen factors whereas in South Africa, it was amongst the lowest three. The differences in ranking could be attributed to the fact that PPPs have been used as a key tool of public policy in the surveyed countries for a far longer period when compared to South Africa. Hence it could be said that the difficulties and challenges that South Africa faces are different, as we are not at the same level of economic development as compared to the developed countries in terms of PPPs and our focus is on different issues. An example would be the financial markets, this was not ranked at the top as South Africa has strong financial markets and getting funding may be easier here than elsewhere. It may be concluded that this is taken for granted in South Africa.

Other factors not identified in the literature review were revealed by a number of respondents during the interview phase of the study. These included facilitation of BEE deals, transaction flow of PPPs to market and corruption. All three are considered important factors as they affect PPPs in South Africa markedly and require consideration, depending on the PPP deal.

The findings from the government group have almost the same high agreement levels for the CSFs of stable political and sound economic environment, legal and regulatory environment and the establishment of a PPP unit in government. These factors can be seen as defining the legal, economic and political role that the South African government plays in the PPP market. The findings of this research, in investigating the relative importance of the allocation of risk, reliable contractual agreements, the selection of the right private sector partner and how consistently these levels of agreement are felt across these factors, concluded that there is a high degree of understanding amongst the respondents in the government group. The government group also perceived CSFs of commitment, trust and communication in exactly the same way. (See figure 5).

A variety of opinions were obtained from the three groups on the establishment of a PPP unit. It was deemed to be important to government but not to the banker and the 'other' groups. In summary, these opinions generally seemed to conclude this is not an intentional difference of opinion, as much as a difference in the differing perspectives of the working realities faced by government, bankers and other professionals.

All bankers viewed the legal and regulatory environment, government and community support with high agreement levels thereby showing these as significantly important. It can be concluded that the reason for this is that the bankers require a framework for the process so that they understand what is required, as well as protection so that obligations are fulfilled. All bankers viewed the selection of the right private partner with low agreement levels, showing that this is less important to this group. However, the 'other' group had a difference of opinion on this CSF, as none of them viewed this at a low agreement level. A notable outcome of this could be that the 'other' group is directly responsible for the formation of the consortium whereas the bankers are the funders of these consortiums (See figure 5).

The findings from the 'other' group identified investigating skills and experience, roles and responsibilities, stakeholder relationships, availability of financial markets, economic viability and technical innovation as showing almost consistent agreement levels, thereby demonstrating consensus amongst these respondents. (See figure 5).

The agreement analysis shows that there is a clear consensus in the ranking of the top three CSFs between respondents from both the private sector and public sector. The differing opinions on the less important CSFs are seen to be largely due to differences of exposure levels to implementing PPPs as well as to depending on the PPP deals worked on and were not seen by any of the respondents as representing significantly different viewpoints.

6.3 Recommendations

This research is significant to PPPs in South Africa as they seek to improve their effectiveness and efficiencies by understanding the success factors of PPP projects. On the basis of the findings of this research, the complexity of the issues raised do not allow for a clear-cut solution. However, the following recommendations set out below are proposed by the researcher to professionals in the industry:

- The government needs to come together as one voice that is from national level to municipal level. In essence, there needs to be a direct link between the strategy from National Treasury to the municipalities, so that all politicians within the same government reach consensus, hence there will be understanding, assistance and support for the enablement of the desired strategic objectives.
- The researcher experienced many comments on how slow the process of PPPs coming to market is. Some areas for improvement are the following. The endless negotiations and legal complexities often impede the PPP progress. It should be noted that negotiations beyond an optimal point increase project costs. The high transaction costs are a key feature of long-term PPP contracts. Incompetent advisors increase project costs and delay the procurement process. Reviews could be conducted to identify obstacles and make specific recommendations to streamline the PPP process to ensure its robustness.
- It is highly recommended to have standardisation of documents to reduce costs. Nevertheless, it is important to remember that having a one size fits all approach can be very stifling as PPPs are unique and every deal is different. There needs to be flexibility for changes.
- The comments that allude to corruption need to be addressed. The government could develop new codes of conduct and take effective measures to prevent corruption. An example would be to have an independent commission monitor the project procurement process against corruption.

6.4 Suggestions for further research

The researcher realised that each factor that was identified and discussed in this research, was merely the tip of the iceberg. It was not possible to go into the level of detail that exists for each proposition within the scope of this study. Hence, each factor on its own applied to South Africa could be a potential research topic.

Further research could extend to investigating certain industries/sectors that have done PPP transactions in South Africa or an analysis of a focused case study. This could be in transport, office accommodation, health care, eco-tourism, social development and correctional services.

The study reveals that municipalities are having problems implementing PPPs for various reasons. To further investigate this topic, a potential research question could be: *factors that impede public-private partnerships in municipal service delivery.*

PPPs have very complex funding arrangements and the credit crises have impacted the traditional long-term debt funding structures. In further investigating funding structures, potential research topics could be: *investigating various shorter funding structures for public-private partnerships; funding mechanisms available to PPPs and the advantages and disadvantages associated with each mechanism.*

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APPENDIX A - QUESTIONNAIRE

Key Interview Questions - Prompt Sheet

1. In general, what do you think are the critical success factors of PPPs in South Africa?

   - Prompt: Stable political and sound economic environment
   - Prompt: Favourable and enforceable legal and regularity framework
   - Prompt: PPP unit
   - Prompt: Government and community support
   - Prompt: Allocation of risk
   - Prompt: Reliable contractual agreements
   - Prompt: Selection of the right private partner
   - Prompt: Commitment and trust
   - Prompt: Communication
   - Prompt: Skills and experience
   - Prompt: Roles and responsibilities; stakeholder relationships
   - Prompt: Availability and accessibility of strong financial markets
   - Prompt: Economic viability and technical innovation

2. Is there anything else of relevance to PPPs that has not been identified / mentioned in this interview, that you feel is pertinent to the South African PPP environment?

APPENDIX B - CONSISTENCY MATRIX

Table 18: Consistency matrix

Research problem: CSF of PPPs in SA			
Propositions	**Source of theory**	**Source of data**	**Analysis**
A stable political and sound economic environment is a CSF for a PPP.	Qiao et al. (2001); Tang et al. (2009); Zhang (2005c); Li et al. (2005b)	Respondents in semi-structured interviews	Content Analysis
A favourable and enforceable legal and regularity framework is a CSF for a PPP.	Pongsiri (2002); Zhang (2005b,c); Li et al. (2005a); Jong et al. (2010)	Respondents in semi-structured interviews	Content Analysis
The establishment of a designated PPP unit within government is a CSF for a PPP.	Fischer et al. (2006); Hemming (2006); Li et al. (2005b)	Respondents in semi-structured interviews	Content Analysis
Government and community support is a CSF for a PPP.	Li et al. (2005b); Tang et al. (2009);Jong et al. (2010); Choi and Jacobson (2008); Hemming (2006)	Respondents in semi-structured interviews	Content Analysis

Research problem: CSF of PPPs in SA			
Propositions	**Source of theory**	**Source of data**	**Analysis**
The appropriate allocation of risk is a CSF for a PPP.	Li et al. (2005b); Jong et al. (2010); Khan and Mushtaq (2009); Mohamed and Wahab 2009; Forrer et al. 2010; Qiao et al. (2001); Handley-Schachler (2003); Akintoye and Chinyio (2005); Dixon et al. (2005); Connolly et al. (2009)	Respondents in semi-structured interviews	Content Analysis
A reliable contractual agreement is a CSF for a PPP.	Zhang (2005b); Tang et al. (2009);	Respondents in semi-structured interviews	Content Analysis
The selection of the right private partner is a CSF for a PPP.	Zhang (2005a,b,c); Tang et al. (2009); Li et al. (2005a,b); Zhang (2009); Choi and Jacobson (2008); Qiao et al. (2001)	Respondents in semi-structured interviews	Content Analysis
Commitment and trust among the partners is a CSF for a PPP.	Cheung et al. (2010); Jong et al. (2010); Choi and Jacobson (2008); Khan and Mushtaq (2009); Chen and Chen(2007); Toor and Ogunlana (2008); Jha and Iyer(2007); Cavelty and Suter (2009); Smyth and Edkins (2007); Trafford and Proctor (2006)	Respondents in semi-structured interviews	Content Analysis

Research problem: CSF of PPPs in SA			
Propositions	**Source of theory**	**Source of data**	**Analysis**
Effective and extensive communication is a CSF for a PPP.	Chen and Chen(2007); Choi and Jacobson (2008); Ruuska and Teigland (2009); Toor and Ogunlana(2008); Trafford and Proctor (2006)	Respondents in semi-structured interviews	Content Analysis
The skills and experience of the partners is a CSF for a PPP.	Abdel-Aziz (2007); Jong et al. (2010); Jha and Iyer(2007); Zhang (2009); Toor and Ogunlana(2008); Jha and Iyer(2007); Ruuska and Teigland (2009)	Respondents in semi-structured interviews	Content Analysis
The clear roles and responsibilities, as well as active management of all stakeholder relationships are a CSF for a PPP.	Toor and Ogunlana(2008); Choi and Jacobson (2008); Cavelty and Suter (2009); Zhang (2005c); Tang et al. (2009); Li et al. (2005b);Chan et al. (2003); Cheung et al. (2009a); Jha and Iyer(2007); Ruuska and Teigland (2009); Chen and Chen(2007); Yuen et al. (2009); Fischer et al. (2006); Smyth and Edkins (2007)	Respondents in semi-structured interviews	Content Analysis
The availability and accessibility of strong financial markets is a CSF for a PPP.	Li et al. (2005b); Qiao et al. (2001); Zhang (2005b,c); Yuan et al. (2009);	Respondents in semi-structured interviews	Content Analysis

Research problem: CSF of PPPs in SA			
Propositions	**Source of theory**	**Source of data**	**Analysis**
The economic viability and technical innovation is a CSF for a PPP.	Li et al. (2005b); Yuan et al. (2009); Zhang (2005b,c); Abdel-Aziz (2007);Jong et al. (2010)	Respondents in semi-structured interviews	Content Analysis