Building a Framework for Public Private Partnerships Research.

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PPPs worldwide have taken on increasing significance as a tool, which governments can use to develop infrastructure, and for the delivery of services. The purpose of this report is to provide a series of research questions that could be used as the basis for research into Public Private Partnerships (PPPs). From an extensive literature review, a model is developed identifying the key areas of investigation. This is important because, given the experience to date regarding the privatisation of government assets, public sector managers need to be aware of the failures and the success stories of particular PPP projects. This would inform government officials of any necessary reforms that need to be undertaken for future PPPs.

Field of Research: Public sector financial management, public sector governance, auditor general special reports.

1. Introduction

PPPs fall under the ambit of the privatisation of government infrastructure and related services, although there are several idiosyncrasies that need to be identified. The continuing blurring of what constitutes ‘public services’ and the constant debate regarding the ‘profit’ versus ‘service’ motives of the private and public sectors respectively, is set to continue Broadbent and Laughlin (2003). However, appropriately monitored and managed contracts under the auspices of PPPs may be able to minimise this dichotomy. Privatisation can be identified clearly where the government of the day decides to completely sell off a major asset.

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Given the minimal coverage in the literature to date regarding the efficacy of PPPs, this report establishes a number of parameters from which academics can conduct research into this public sector management strategy and, moreover, make policy recommendations to government based on those findings.

Outsourcing or contracting out can also be viewed as privatisation where a government agency divides its services into ‘core’ and ‘non-core’. Core services are retained and delivered by government personnel whereas non-core services are contracted out. Some examples of contracted out services include security, cleaning and maintenance, catering and information technology. PPPs however, deal with a private sector entity, usually set up as a special purpose vehicle (SPV), designing, financing and building an infrastructure asset of which they also provide ancillary services (Malone 2005). In return, the government commits to pay the private firm a revenue stream for the duration of the contract.

2. Literature review

The origin of PPPs is not clear, however, the UK Government made the first concerted push for the use of private sector financing of its infrastructure projects under the Private Finance Initiative (PFI) which was launched in the UK in 1992 (Lambert and Lapsley 2006). The Bracks Labor Government (Vic) introduced its Partnerships Victoria policy in 2000 and has made a number of advances on the PFI. These include determining that a project proceeds because of community needs rather than because the assessment was favourable towards the partnership method of financing. Moreover, accounting disclosure issues regarding debt are evaluated after rather than before the project is approved (Quiggin 2004).

It is argued that with PPPs the government is not contracting with the private sector to secure an asset, rather the government agency contracts to buy infrastructure (and related ancillary) services over the long term (Torres and Pina 2001). This is an important point because it has implications for whether assets and liabilities under the PPP model ought to be accounted for in the balance sheet of the government or the private company. The notion of the party best able to manage risks associated with the design and construction of an infrastructure asset is also integral to how PPPs operate.

PPPs are used worldwide and there use is increasing. Watson (2003) identifies two main reasons for its increased use. The first is for government to reduce debt and the second is to attain value-for-money (VFM) from these large projects. Lilley and De Giorgio (2004) identify VFM and the timely delivery of new infrastructure as the main reasons for its increased use. In Australia, in the ten years to 2000, approximately $72 billion of public assets were transferred to the private sector. This represents 12% of Australia’s infrastructure assets (Earl and Regan 2003, 528).
PPPs originally fell under the category of Build Own Operate (BOO) or Build Own operate and Transfer (BOOT) schemes. Strictly speaking, a PPP would involve the design, construction, finance, operation and maintenance of the infrastructure asset. These schemes allowed the private sector to build infrastructure under their ownership, operate the facility for a set period (usually several decades) and then transfer the asset back to the government at the end of the contract period.

PPPs allow for greater predictability of costs for the government and revenues for the private company since both of these are articulated in the contract. However, it can also be reasoned that by locking itself into such a long-term agreement, the government faces the risk of not being able to re-negotiate the contract if and when circumstances and needs change over time. There is a real need to comprehensively evaluate PPP projects, although there appears to be resistance because access to vital information must come from both partners; the government and the private sector entity (Spackman 2002).

The need for a structured framework.

Given the many facets of PPPs that can be investigated, it is important to develop a frame of reference so that both specific and general issues regarding the efficacy of PPPs are explored. Lambert and Lapsley (2006) use a four-paradigm framework to analyse how published research articles (from 1986 to 2005) on PPP’s and public sector budgeting have been categorised. Alternatively, the work of Hood (1991;1995) in highlighting the commercialisation of government via the ‘New Public Management’ offers another relevant framework. PPP’s used as a mechanism to acquire infrastructure offers unique opportunities for researchers to explore numerous levels of the PPP arrangement.

PPPs cover several of the discipline-based research with which we are accustomed to such a Law, Economics, Management, Political Science and Accounting. Although it is beyond the scope of this report to highlight in-depth, the range of research possibilities across these disciplines, some brief examples may allude to other possibilities. For example, a typical PPP would use a legal team to develop the contractual obligations of the government agency and the private sector consortium. In addition, there are important taxations implications regarding PPPs, which are still yet to be resolved. An important issue being the Commonwealth denying taxation deductions to the private company on the basis that it does not have control of the asset (Grimsey and Lewis 2002; Lehman and Tregoning 2004). Thus, there is a range of legal issues that could be investigated. From an international perspective, economic analysis of whether there are savings likely to be made from adopting PPPs would necessarily involve undertaking statistical analysis across various countries. Management scholars may be interested in the inter-play between the government and the private sector managers and analyse if and how this relationship differs from other contractual relationships the government has entered into with the private sector. Political scientists may take a critical thinking analysis of PPPs, to discuss the origins of this management tool and what has led to its increased use worldwide. Finally,
the accounting spectrum also offers a rich source of possibilities including changes to the types of internal and external reporting requirements as well as the regulatory regimes. This analysis is expanded on in the next section.

It is not being advocated that research on PPPs necessarily be monodisciplined based, in fact a multi-disciplined approach is preferred. This is because, a PPP project involves many managers, consultants and government officials keen to make sure that the key drivers of PPPs, namely value-for-money and the spreading of risk are attained. The influence of these interested parties means that they can affect other areas in the PPP tapestry, and thus, does not necessarily fit into one discipline area. What appears from the review of the literature is that the overriding feature of this research is that it is *contextual*. That is, the research is conducted within the bounds of a specific government policy, namely PPPs.

3. **Methodology**

The investigation uses a qualitative research approach and content analysis. In order to develop a matrix of possible PPP case studies for future research purposes, the current and future PPP projects were obtained from the websites of the respective government departments. Each government department has a separate *PPP* or *Infrastructure* unit and identification of the relevant project, the jurisdiction (that is, which state in Australia), and the responsible department was collated from these web-sites. To trace the private sector partner and the total cost of the PPP project, the National PPP Forum web-site was reviewed. According to the National PPP Forum:

> The Forum comprises members from all States, Territories and the Federal government. Members are working together to reduce bid costs, increase the level of consistency across jurisdictions and to share lessons learned to increase skills and knowledge in the public sector.

A content analysis of the various PPP projects was undertaken and a range of possible PPP case studies were identified based on the criteria of cost and nature of the project. A suitable spread of projects from $302 million to $3.7 billion was discovered for undertakings as diverse as a desalination plant to schools.

4. **Findings**

**Accounting Related Research**

A starting point for identifying research possibilities in the accounting discipline is demonstrated in figure one. This framework provides a more practical orientation to research questions as compared to those identified by Broadbent and Laughlin (2004). The first area that could be investigated is the *business case*. The purpose of the business case is to ensure that the project corresponds with government policy objectives, examines the financial impact to government and that the benefits of the project outweigh the costs.
The Business case

Two critical areas under the ‘Business Case’ phase are discussed; they are the Public Sector Comparator (PSC) and Risk Sharing.

Public Sector Comparator:
The PSC is a hypothetical model of what it would cost to deliver the infrastructure asset and services under the traditional government procurement method (Grimsey and Lewis 2005). This is then compared with bids from the private sector to evaluate any value-for-money benefits accruing from using the PPP mechanism. The PSC must include all the direct and indirect costs associated with constructing the infrastructure asset and delivering any related ancillary services. It is expected that there would be considerable reliance on the reliability of the department or agency’s accounting information system to deliver these estimates. This process of arriving at a raw PSC figure can be perplexing due to unavailability of ‘hard’ numbers and the process of providing estimates over the long-term (20-30 years). This would necessarily involve a large resource commitment given that the PSC figure arrived at, would determine to a large extent whether the government will achieve VFM and hence whether the project would proceed under the PPP policy framework. Problems of identifying and allocating indirect costs and differences in costing methodologies across government departments exacerbate this problem (Watson 2003).
A possible research question with respect to the PSC:

- What problems were encountered in developing the raw public sector comparator and how were they resolved?

**Risk Sharing:**
With PPPs, the government allocates risks such as design, construction, ownership and operation of the infrastructure asset to the private sector. The notion of risks is significant on two fronts. First, PPP policy at its inception, was developed because it could be used to transfer particular risks to particular stakeholders, of whom, the government and the private sector entity are the key recipients. However, the question of risks is also intrinsically linked to if, and how, PPPs are reported in the financial statements of the government and/or the private sector entity (Heald 2003). The latter is discussed under the heading accounting and accountability.

Risk transfer lies at the core of PPP policy (Hodge 2004). The nature and measurement of risks are important because they will ultimately be used in the calculation of the PSC (Broadbent Gill and Laughlin 2003). It is presumed that those entities which are better able to manage (at lower cost) particular risks ought to be responsible for them (DTF 2001, p.55). Hence, in the past under traditional procurement methods governments had to contend with the risk of significant cost over-runs for large infrastructure projects. This risk is now mitigated under PPPs as the private sector partner assumes this risk. The government also assumes a risk in that the financial stability of the private partner may falter and the government would be expected to continue to provide the services to the public. This occurred in Victoria where the private railway franchisees threatened to walk away because their profit expectations were not being met (Davidson 2006, p.11).

There are potentially additional risks in a project that are not so easily identified, others which are shared between the government and the private partner and other risks which may or may not occur through the life of the project. The work of Edwards and Shaoul (2003, p. 414) suggests that the concept of risk transfer is problematic and that the risks may also be borne by others not party to the contract. It is therefore imperative that the question of risk and risk transfers features as part of the development of the business case. For this reason, the following research question is proposed:

- How were the risks associated with this PPP project identified and quantified?

Although detailed guidelines regarding the adoption of PPPs and the notion of risks have been produced, there are still areas of uncertainty and assumptions made that require further investigation (DTF 2001, 2003). For example, there is no one acceptable method for valuing certain risk-transfers, indirect costs of the government agency and competitive neutrality adjustments.
Accounting and Accountability

In the case of PPPs accounting practice has been ahead of the law. The accounting standard setters were simply not ready for the rapid uptake of PPPs by governments resulting in questionable accounting reporting techniques. AAS17 Leases has been utilised to account for PPPs, however, it was never the intention of this standard to deal specifically with PPPs, hence it is less than adequate (Maguire and Malinovitch 2004).

One of the most significant accounting issues in the context of PPPs, is ‘off-balance’ sheet financing, whereby the government does not record any increase in debt or asset levels for the required infrastructure (Walker 2003; Baker 2003). This is because the private consortium owns the asset and makes this available to the government over the long-term; being the contract period. Conversely which partner recognises the infrastructure asset and how that asset is to be valued is also an area of contention (Officer 2004). Although it may be argued that the balance-sheet treatment does not drive PPP projects, nevertheless, the government is undertaking long-term projects which will expose the current and future generations to risks that need to be appropriately recorded and reported (Maguire and Malinovitch 2004).

Governments in general have been keen to minimise debt levels and operate budget surpluses; both of which develop a sense that the government is a prudent economic manager. A possible research question under this category is:

- What are the external accounting reporting implications of PPPs?

A second source of concern is the notion of accountability. PPPs can be structured whereby the private consortium simply produces an infrastructure asset and then passes it on to government. However, governments are increasingly making use of the private sector for not only producing the asset but also for providing ancillary services, maintenance of the asset and direct service delivery to users. In a broad sense being held accountable suggests being able to justify one’s actions. In the case of government it can be argued that they continue to be accountable for the delivery of services to the voting public. However, the private sector is governed by different regulatory mechanisms such as the Corporations Act (2001) and if it is a listed company, then, the Australian Stock Exchange Listing requirements and continuous disclosure provisions. In Victoria, the government’s main reporting obligations are contained in the Financial Management Act 1994.

The private sector in general, would advocate less rather than more transparency in terms of disclosing cost sensitive information relating to their PPP bid. The term ‘commercial-in-confidence’ is used to designate information, which must not be made available to the public, as it would put the private sector party at a competitive disadvantage. Watson (2003) notes that the freedom of information acts do not override commercial-in-confidence agreements and there is the perception that the PPP bidding process would
not be as competitive because few private sector entities would become involved in a process where they would be obliged to ‘open up their books’. It is typical that PPP contracts are not available to the general public, only the contract process and the level of savings expected from facilitating a PPP project is generally announced (Newberry 2004). What makes evaluating PPPs more complex, is there long-term nature, in that, it could take decades to assess whether the expected benefits from this arrangement have been realised. A possible research question under this section could be:

- *How are notions such as public accountability and commercial –in-confidence applied in PPP projects?*

State and Commonwealth Auditor Generals’ will continue to have a role in scrutinising PPP contracts to report to parliament whether, and to what extent, notions of efficiency, effectiveness and VFM have been achieved (English and Guthrie 2003). Watson (2004) goes further and argues that public accounts committees must also play a role to ensure that the PPP policy is being implemented as intended.

**Contract management**

Contextually, the management of contracts under a PPP arrangement is different to say, a government agency simply contracting out security services. This is because under PPPs there is just one contract for the construction of the facility *and* for the service agreement, which can include, for example, security, maintenance, cleaning and catering. This process is known as the ‘bundling’ of services. Thus, it is often the case that the private sector consortium establishes a Special Purpose Vehicle (SPV) to facilitate the design, financing, construction and maintenance of the asset (Grimsey and Lewis 2004).

The crucial area of contract management is entered into once the construction phase is completed. This operational phase of the PPP is critical because it involves the transformation from project inception to project delivery of outputs. Contract management requires appropriate management systems to be put in place as well as a mechanism for their audit. Both the government agency and the private sector entity have an interest in ensuring that the contract specifications are being adhered to. User dissatisfaction, unfavourable audit reports and a possible voter backlash are the possible costs that government could face in the event that the contract specifications are not met. Non-compliance of the contract from the private sector’s perspective, could ultimately mean that penalties are imposed, reduced periodic payments are made or the government refuses to pay the periodic payments completely as set out in the contract.

This could have serious cash-flow implications for the private sector entity. The Latrobe Regional Hospital (LRH) in Victoria is an example of a failed BOO, where the underestimation of numerous costs by the private operator (Latrobe Regional Hospital Pty. Ltd.) and a failure to understand how
hospitals in Victoria were funded resulted in serious financial problems (English 2004). LRH Pty. Ltd. was finally de-registered and the State Government has now assumed total control over the LRH.

One component of contract management is the development of performance reports. The reporting and monitoring system required ought to be set out in the contract, however, the implementation of these needs to be scrutinised to ensure that the objectives of these reporting systems are being met.

A possible research question for this phase could be:

- *How effective were the reporting and monitoring systems used during the operational phase of this PPP project?*

This question deals with the extent to which the reporting systems met their objectives. This is essential because it confirms whether or not the private sector partner is performing according to the pre-set criteria.

**Possible case studies**

Given the possible research questions posed in the previous section, the next step would be to decide what would be the most appropriate research method to conduct an investigation into PPPs. Research questions are what drive the research method to be used. It can be argued that the research questions developed in the previous section lend themselves to the case study approach. Case studies normally make use of documentation (both internal and externally available), observations in the ‘setting’ and interviews of which they can be structured or unstructured.

Whilst the limitations of case-based research have received much attention in the literature, the contributions that case-based research have made to accounting thought have at times been treated with contempt. It is argued that the apparent distaste for certain research methods lies not in the inherent limitations that a research method possesses (and all methods have limitations), but that confusion exists amongst researchers because of the failure to understand the *objective* of a particular research method. Suffice to state here that survey-based research is aimed at making generalisations across the sample population, whereas the objective of case-study research is to develop or modify a theory and/or provide the researcher with a basis for developing new or improved research questions.

There are persuasive reasons for conducting case-based research in the context of PPPs. One of the main reasons for the conflicting evidence regarding the overall benefits or costs of PPPs is that generalisability of the empirical results is difficult to obtain because the outcomes generated from entering into PPP contracts are specific to time, function, location and how they were managed. To complicate results further, because decisions regarding the selection of bidders involve, at times, quite a substantial degree of *professional judgement* (such as applying various weightings to qualitative and quantitative criteria) then the *management* of PPPs would influence
whether the strategy was successful, rather than making claims that PPPs itself causes failure or successes. The sort of relationship that has developed between the government and the private sector entity would also have a bearing on whether strict performance of the contract would be applied, or whether there would be some flexibility provided by either party for mitigating circumstances. Hence, according to Babbie (1992, p.285)

One of the key strengths of field research is the comprehensiveness of perspective it gives the researcher. By going directly to the social phenomenon under study and observing it as completely as possible, you can develop a deeper and fuller understanding of it.

Multiple case studies of PPP projects would also be advantageous because they are analogous to multiple experiments where a replication logic is followed rather than a sampling logic. That is, multiple case studies are used for comparative as well as replication purposes. Comparisons can be made across the individual cases as a whole or when comparing individual units of analysis. This type of analysis provides an insight as to why certain procedures or observations were reported in one, a few or all the cases under investigation. Comparisons are also made to judge whether certain PPP projects were shown to be successful while others were unsuccessful, which will eventually lead to policy recommendations being made.
Table 1 Matrix of Potential PPP Case Studies

<table>
<thead>
<tr>
<th>PPP Project</th>
<th>Jurisdiction</th>
<th>Department</th>
<th>Private Partner</th>
<th>Sector</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victorian Desalination Plant</td>
<td>Vic</td>
<td>Sustainability and Environment</td>
<td>Aquasure</td>
<td></td>
<td>3.5b</td>
</tr>
<tr>
<td>Royal Children’s Hospital</td>
<td>Vic</td>
<td>Human Services</td>
<td>Children’s Health Partnership Consortium</td>
<td></td>
<td>968m</td>
</tr>
<tr>
<td>East Link</td>
<td>Vic</td>
<td>Transport</td>
<td>Connect East</td>
<td></td>
<td>2.5b</td>
</tr>
<tr>
<td>Education Works – New Schools</td>
<td>SA</td>
<td>Educations and Children’s Services</td>
<td>Shortlisted as;</td>
<td>1. Axiom Education SA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2. Pinnacle Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3. Plenary Education</td>
<td></td>
</tr>
<tr>
<td>New Royal Adelaide Hospital</td>
<td>SA</td>
<td>SA Health</td>
<td>Decision in 2009</td>
<td></td>
<td>1.7b</td>
</tr>
<tr>
<td>Clem Jones Tunnel (Clem 7)</td>
<td>Qld</td>
<td>Brisbane City Council</td>
<td>River city Motorway Group</td>
<td></td>
<td>2.0b</td>
</tr>
<tr>
<td>Southbank Education &amp; Training Precinct</td>
<td>Qld</td>
<td>Department of Education and Training</td>
<td>Axiom Education Queensland</td>
<td></td>
<td>550m</td>
</tr>
<tr>
<td>Airport Link and Northern Busway</td>
<td>Qld</td>
<td>Department of Infrastructure and Planning</td>
<td>City North Infrastructure Pty Ltd</td>
<td></td>
<td>3.7b</td>
</tr>
<tr>
<td>CBD Courts project</td>
<td>WA</td>
<td>Department of the Attorney General</td>
<td>Western Liberty Group</td>
<td></td>
<td>400m</td>
</tr>
<tr>
<td>Australasia Railway Project</td>
<td>NT</td>
<td>Australasian Railway Corporation</td>
<td>Asia Pacific Transport Pty. Ltd.</td>
<td></td>
<td>1.3b</td>
</tr>
<tr>
<td>Darwin Waterfront Development</td>
<td>NT</td>
<td>Darwin Waterfront Corporation</td>
<td>Toga Group of Companies &amp; Darwin Cove Consortium</td>
<td></td>
<td>1.1b</td>
</tr>
<tr>
<td>Head Quarters Joint Operations Command Project</td>
<td>ACT</td>
<td>Department of Defence</td>
<td>Praeco Pty Ltd now Infrastructure Management Fund (IMF)</td>
<td></td>
<td>1.4b</td>
</tr>
<tr>
<td>Single leap Phase 1 Accommodation</td>
<td>ACT</td>
<td>Department of Defence</td>
<td>Plenary Group Consortium</td>
<td></td>
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</tr>
<tr>
<td>Westlink Western Sydney orbital</td>
<td>NSW</td>
<td>Roads &amp; Traffic Authority</td>
<td>Westlink Motorway consortium</td>
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</tr>
<tr>
<td>Long Bay Prison and Forensic Hospitals</td>
<td>NSW</td>
<td>NSW Health, Corrections Health Service, Department of Corrective Services</td>
<td>PPP Solutions consortium</td>
<td></td>
<td>302m</td>
</tr>
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</table>
5. Summary and Conclusions

This report has demonstrated a possible route that researchers may take to advance their knowledge on another public sector management tool known as PPPs. There is currently a dearth of empirical research studies investigating the efficacy of PPPs. This may in some part be associated with a lack of desire by government agencies to 'open their books' to academic researchers for fear of any negative findings and consequences. Alternatively, the private sector may also be reluctant to expose any weaknesses in their systems as this also could jeopardize future contracts with governments. This will remain a challenge for academics.

Governments have signalled their intention to investigate the possibility of using PPP policy for infrastructure assets that are particularly politically sensitive such as schools. The then Treasurer of Victoria Mr. John Brumby stated that:

There is a place for PPPs in schools; we haven’t used them to date because traditional procurement has done the job very successfully. We will be using traditional procurement in this budget but that is not to say at some stage in the future we may not use PPPs (Dowling 2006: 6).

Researchers may need to draw attention to government managers of the benefits of this type of research. For example, the research questions are not esoteric and yet they offer a balance between theoretical validity and practical usefulness. Knowledge regarding these research questions could inform government managers of the need to make policy adjustments to the PPP model or that on a more practical level, technical adjustments may be warranted to ensure that the concepts of value-for-money and public interest objectives are met.

References


