

CIB2007-204

Public Private Partnerships: The Provision of Social Infrastructure in Australia

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ABSTRACT

Recent trends in the provision of infrastructure indicate that the private sector is playing an increasingly important role in the procurement process. Australian governments are turning to the private sector to form partnerships in the finance, construction, ownership and operation of social infrastructure projects. This has become a major challenge and the emergence of Public-Private Sector Partnerships (PPPs) provides a means for developing the infrastructure without directly impacting upon the government's budgetary constraints. Social infrastructure projects (schools, hospitals, prisons etc) are characterised as generally being smaller in scale than economic infrastructure projects (motorways, bridges, tunnels etc.). However, by their very nature, social infrastructure projects also tend to be complex, particularly in terms of ongoing involvement with the community. Thus private sector bidders for social infrastructure PPPs are often presented with a situation where operational complexity, including government policy toward the sharing of the business/revenue stream, is one of the key differences in whether PPPs are as attractive for social infrastructure compared with economic infrastructure. The paper discusses the additional costs likely to be incurred in the bidding process for social infrastructure PPPs. The results are presented from a Private Sector point of view.

Keywords: Australia; Bidding Costs; Infrastructure; PPPs; Risk.

1.1 INTRODUCTION

This paper describes a research project that is investigating the transaction costs of the bidding process for Public Private Partnership (PPPs). The Australian PPP market is rapidly mature and according to Duffield (2005), PPPs in Australia can now be defined to be in their second generation of the modern era. PPPs can be highly contentious and Curnow et al (2005) have argued that the current bidding costs for social PPP projects (such as schools and hospitals) are unsustainable which, if unresolved, will deter companies from entering into the PPP bidding process. Moreover, Sheil (2003) subscribes to the view that the use of the term PPP is a deliberate attempt to mislead the public into accepting what is, in effect, privatization by stealth. Although the overall aim of this research is concerned with minimizing the non-value added activities associated with the PPP bidding process, it is also useful to place this research in an historical context.

In terms of defining PPPs, Argy *et al* make the following useful distinctions between types of PPPs:

- hard economic infrastructure e.g. roads
- soft economic infrastructure e.g. financial institutions
- hard social infrastructure e.g. hospitals
- soft social infrastructure e.g. social security

1.2 AUSTRALIAN ORIGINS OF PPPs

Jefferies (2003); Jones (2003); Walker (2003); Jordan and Stillwell (2004); Duffield (2005); and Malone (2005) view PPPs as a natural progression from both the Build-Own-Operate (BOO) contracts such as the Gateway Motorway and Bridge in Brisbane (completed 1986) and the Build-Own-Operate-Transfer (BOOT) contracts such as the Sydney Harbour Tunnel (completed 1992) and Stadium Australia (completed 1999). Duffield (2005) has classified Australian PPPs into 'first' and 'second' generation and contends that the first generation of PPPs was primarily motivated by the public sector gaining access to private capital and the transfer of near full project risks whereas in the second generation of PPPs state governments sought to retain direct control of 'core services' and to involve the private sector in amongst other things, value for money outcomes (Yates and Sashegyi 2001).

1.3 SOCIAL PPPS

Curnow *et al.* (2005) argue for a broadening of the scope of work to make PPPs more attractive to the private sector and argue for a further transfer of risk to the private sector. Whilst not necessarily unique to social PPPs, these issues are more acute than for economic PPPs. According to Jefferies *et al.* (2006) if a comparison is made between a large teaching hospital as an example of a social PPP and a tollway as an example of an economic PPP then the contrast in terms of complexity of operation and interaction between the private sector operator and the users is quite marked. In the hospital situation staff costs will represent at least 90% of the total annual operating costs whereas in a tollway staff costs are minimal with the largest item of expenditure being on maintenance.

Whilst both types of PPP do carry a number of risks (to both the public and private sector) the risk potential over the operating period would appear to be greater in social PPPs than for economic PPPs although recent controversy surrounding the cross-city tunnel in Sydney (Farrelly 2005; Mitchell 2005; Salusinszky 2006; and Scott 2006) demonstrates that economic PPPs are not immune to political and sovereign risks. Problems also arise in predicting the operational life cycle of social PPPs, particularly hospitals where technological advances can mean that the future of health care and its demand on hospital buildings is largely unknown.

1.4 RISK

Tiong (1990) initiated much of the research into risk factors inherent in PPP projects. The focus of his research was the Build-Operate-Transfer (BOT) approach with literature frequently referring to his work, and in many cases finds its foundations on the technical, financial and political risk categories first described by him. Tiong (1995) considered the political category of risk to be the most significant and difficult to manage. Tam and Leung (1999) agreed with the assessment of 'political risk' as being the most difficult to deal with. In Australia one of the main objectives for adopting the PPP approach is to transfer risk which the public sector is unable to manage. (Webb and Pule, 2002). However, it would appear that some of the key historical issues relating to PPP risk factors have not been successfully managed. Current political risk within Australian social infrastructure PPP projects relates mainly to inefficient Government risk guidelines and risk transfer procedures that have led to unsustainably high bidding costs. This view is supported by Curnow *et al.* (2005).

The fundamental principal of risk management is that risks should be proportionally allocated to the individual or group on the basis of the ability to carry that risk. Whilst this concept is easily grasped as an abstraction it is much more difficult to translate into practice. Managing for the future and identifying risks is crucial for project success.

The finance of PPPs involves thorough scrutiny, particularly by the financiers. This ensures that all risks associated with PPPs are not left unchecked. This involves the thorough analysis of risks, their consequences and likelihood of occurrence. Most financiers are risk averse, and often aim to ensure all benefits of a project are carefully balanced with the management of risks. Therefore, risk management by financial institutions assumes very high importance in PPP risks (Hardcastle et al, 2005).

According to Curnow et al (2005) the impact of PPPs on the economy at large is likely to be considerable over the next decade. Whilst bidding is an essential component of the PPP process in ensuring both a competitive and corruption resistant environment, it is in essence a non-value added feature of the overall process. A recent PPP, Melbourne City Link, incurred bidding costs of \$24 million at financial close.

1.5 RESEARCH APPROACH

A comprehensive review of related literature and industry reports was used to generate a list of major challenges facing the Australian construction PPP industry. Industry Partners, made up of three construction contractors representing a substantial sector of PPP contractors in Australia, then nominated 1-2 experts from senior management to participate in interviews. A semi-structured interview process focused on key themes and a compilation of case studies consisting of current major PPP infrastructure projects was established. Qualitative data was analysed using a combination of content analysis and grounded theory to group the findings. The research findings will be validated as an on-going process via Industry Workshops.

Our research addresses two quite distinct questions. The first question is whether the cost-to-bid ratio is higher for social PPPs than economic PPPs and, if so, does this act as a deterrent to potential bidders? The second question addresses the issue of how bidders for social PPPs identify risks, and how these are built into the bid price. It is important to distinguish between the two questions as problems can and do arise when the cost of bidding is confused with the bid price. There are difficult methodological issues associated with both questions.

1.5.1 The Cost of Bidding

According to Hughes et al (2006) there is a desperate need for robust data in respect to tendering costs and complexity of the data collection places significant hurdles in the way of those who wish to undertake research in this area. Our own research is still at the data collection stage and the data has yet to be finalized and analysed. However we are beginning to

appreciate the aptness of their term 'impressionistic estimating'. In addition to the difficulties associated in accurately allocating costs to a specific tender bid there is the added dimension of the commercially sensitive nature of the data surrounding PPP bidding and also the extended nature of the commercial relationships of a PPP consortium.

1.5.2 Bid Price

As previously discussed one of the primary objectives of this research is to explore how PPP consortiums allocate the costs of risks, opportunities and success factors in their bid price. Whilst a good deal of research has been conducted in the risk management field in terms of the risk analysis part of the process, it would appear that often there is a mismatch between theory and practice. A survey of 123 respondent Australian companies and organisations by Yates and Sashegyi (2001) found that for many large projects formal risk assessments were not undertaken and risks were not being allocated to the party best able to manage the risk,

Whilst the above findings are not specific to PPPs they are generally indicative of the problems of risk allocation in major project and certainly come to the fore when a project fails to live up to stakeholder expectations.

1.6 PRELIMINARY RESULTS

The following initial findings were identified during the first rounds of data collection, i.e. workshops and interviews with key stakeholders in the PPP bidding process. These stages helped to identify the characteristics of social PPP projects in Australia; map the development of these projects and identify some of the reasons for the high bidding costs and inappropriate risk allocation. These findings provide the foundations for the remainder of data collection and in particular the identification of the risk management process.

1.6.1 Characteristics of Social PPP Projects

Respondents generally agreed that social infrastructure projects (schools, hospitals) are characterised as being smaller in scale than economic infrastructure projects (motorways, bridges, tunnels etc.). Social infrastructure projects also tend to be complex, particularly in terms of ongoing involvement with the community and private sector bidders for social infrastructure PPP projects are often presented with a situation where the financial rewards are less and the operational demands are more complex than for economic PPP projects.

Current social infrastructure projects in Australia are not true partnerships and there is a clear need to reduce their 'tokenism'. The Public Sector needs to make PPPs more attractive to the Private Sector and clarify the identification of risk in order to transfer more responsibility to the Private Sector. This issue is supported by other recent industry criticism of PPPs concerning the 'narrowness' of the scope of work that is offered to the private sector.

1.6.2 High Bid Costs

PPP project costs relating to finance, building design, construction, maintenance and waste management amount to less than 15% of the total life cycle cost of the enterprise. As a result, the private sector may be deterred by the high transaction costs of PPPs, which offer only a marginal increase in scope of business opportunity. This is in stark contrast to opportunities that are available in the much lower cost-to-bid ratio of more traditional procurement models or in economic PPP projects where the revenue stream from the likes of a freeway toll has a substantial and clearly defined internal rate of return. Governments are looking for significant increases in efficiency through the PPP process, but no matter how well the 15% of the enterprise available to the private sector is organised, it is not going to make up for inefficient management in the remaining 85%.

1.6.3 Risk

Despite the dissatisfaction expressed regarding high costs, legal fees and associated costs of expert advice, there was general acceptance that this was an integral part of risk mitigation. Furthermore, one representative from an equity provider claimed the issue of legal costs tended to be exaggerated by the construction industry, anecdotally citing that legal costs were proportionately higher with smaller projects, and hence attracted more criticism. A number of participants supported the view that a Public Sector Comparator (PSC) is an approximation. Inevitably this is based on past experiences of costs, not always reflective of current costs or the cost of transferring risk to the private sector. Interview respondents also argued for an increased transfer of risk to the private sector. Current Government perception of PPPs are unfortunately based around a 'private funding for public infrastructure' model. PPPs are a shift of risk (responsibility), not funding, and they should motivate all parties to take responsibility for their actions and delivery, making projects more accountable and measurable.

1.6.4 Development of Australian PPP Projects

The following table (Table 1) is our summation of key events in the development of PPPs in Australia from the 1980's and illustrates the first and the second generation divide.

Table 1: Key Events & Initiatives in the Development of PPPs in Australia

1980's	1990's 1ST GENERATION OF PPP'S	2001 to date 2ND GENERATION PPP's
1980's Pressure due to poor balance of trades, excessive high debt, government borrowing limit capped by loans council, poor fiscal management - Aust. Gov. seeks alternative methods for development without further reducing credit ratings	1990's Victoria gives lead with privatisation, outsourcing and BOO & BOOT Projects	2001: PPP manual 'Partnerships Victoria' released. Queensland 'Public Private Partnership (PPP) Policy' released in September 2001

<p>1980-90's Australia governments embrace economic liberalism in order to improve efficiencies</p>	<p>1996: National Competition Policy, supported by Competition Principles Agreement endorsed by all Australian governments.</p>	<p>2002: NSW Government publishes a 'State Infrastructure Strategic Plan'; SA Government releases PPP Policy & establish PPP Unit in Treasury. WA releases 'Partnerships for Growth' as the Policies and Guidelines for PPPs</p>
<p>1983: Australian dollar floated on international money markets - first step to deregulating the national economy</p>	<p>1990's Corporate liberalism emerges in government. An ideological shift towards government playing more of a managerial role. A number of privatizations & outsourcing take place across Australia.</p>	<p>2002: Intergenerational report released with the Budget papers (Treasury 2002) warned that net government spending will need to rise by 5% of GDP by 2041-42 to fund the same standard of services & level of benefits.</p>

<p>1987: NY stock market crash - ripple effect in Aust. ends the speculation boom that had followed the deregulation of the economy.</p>	<p>2000: Airport Link Company collapses six months after Sydney's airport rail link is opened, becoming one of Australia's first PPP projects to fail.</p>	<p>2003: National PPP Forum held; VIC 'Fitzgerald' review; NSW 'Parry Inquiry' recommends public debt used only when all other funding options have been fully explored.</p>
<p>1988: NSW first documented formal procedures & controls governing private sector participation.</p>	<p>2000: TAS. Government releases a policy statement, and guidelines, on private sector participation in the provision of public infrastructure</p>	<p>2005: Local Governments propose to use PPPs for urban revitalisation projects, such as Parramatta, Liverpool in NSW.</p>
		<p>2006: NSW Parliamentary Inquiry into Cross City Tunnel & PPPs. NSW & VIC announce continued use of PPPs as well as increase use of public debt to meet infrastructure shortfall.</p>

1.7 CONCLUSION

A PPP consortium is a temporary organisation with a complex network of stakeholders with competing goals and objectives. The interview process has identified that the private sector views social infrastructure PPPs as more complex with relatively higher bid costs than economic PPP models. Another common theme identified the difficulty in developing a true partnership between the public and the private sector in bidding environments as they are frequently adversarial.

An inaccurate PSC in results in the Public Sector reducing the project scope before increasing the budget. A PSC, or indeed any estimate,

is just that, an approximation and are based on past experiences and not reflective of current costs or the cost of transferring risk to the private sector. The private sector is increasingly deterred by the high transaction costs of social infrastructure PPPs as they offer only a marginal increase in business opportunity. This is in stark contrast to the opportunities that are available in the much lower cost-to-bid ratio of Design and Construct contracts or even in economic PPP projects (where there is a clearly defined revenue stream from the likes of a tollway).

The next stage of the work is to analyse specific figures relating to bid-cost data and continue with the identification of risk management techniques during the bidding stage of social infrastructure PPPs.

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