Investigating Aspects of Public Private Partnerships in Ireland

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"Facilities so vital to a nation's economy should be encouraged with incentives to attract investment in viable projects, priced according to supply and demand rather than politics."

(SAVAS, 2000: 237)

INTRODUCTION TO PUBLIC PRIVATE PARTNERSHIPS (PPPS)

A PPP can be defined as an agreement between the public sector and a private sector company to provide an asset or service that traditionally has been provided by a public authority. As Grout (1997) points out, the central feature of PPP projects is the obligation of the government to purchase, directly or indirectly, a flow of services over time rather than the capital asset that provides the services. In most cases, ownership of the facility is transferred to the government at the end of the agreed period at no extra cost. At date of transfer, the private sector consortium should have generated enough revenue to cover its initial investment and make a reasonable profit. A PPP recognises that both the public and private sectors receive certain advantages relative to the others in the performance of specific tasks. By allowing each sector to do what it does best, public services and infrastructure can be provided in the most economically efficient manner (Department of Finance, 2002). When popularised by the Conservative government in the UK over a decade ago, PPPs were initially viewed from a macro-economic perspective of providing additional public services (for example new hospitals) without increasing public sector borrowing. This was an important concern, given the EU Stability and Growth pact requirement, whereby the State is limited to an overall government borrowing limit of 3 per cent of Gross Domestic Product. In recent times, the debate on PPPs has focussed on a more micro concern of achieving value for money.

PPPs are relatively new in Ireland and, to date, have attracted little serious investigation. This is surprising, given the significant amounts of money involved and the rather poor performance of certain projects to date. Perhaps the most visible form of PPP in Ireland will be the operation of the public transport system, LUAS, which is seldom out of the news. Another example is the Kilcock-

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Kinnegad motor way, which is expected to reduce the travelling time from Dublin to Galway by about 30 minutes and is being built at a cost in excess of €500 million.

This pilot study, based on limited methodology, examines certain aspects of PPPs in Ireland and is divided into three main sections. The next section briefly outlines the origins of PPPs in Ireland. A section highlighting some of the important principles and issues of PPPs then follows. The subsequent section describes the research methodology in this study and presents the research findings together with a discussion thereon.

Origins of PPPs in Ireland

In Ireland, many of the aspects of PPPs were incorporated in the late 1980s with the building of two toll bridges in Dublin – the East Link and the West Link (Cullen, 2001). Subsequently, IBEC/CIF (1998a, 1998b) detailed the merits of PPPs as a means of investing in public infrastructure, as did a report by Farrell Grant Sparks et al. (1998). This latter report highlighted the fact that the climate for the introduction of PPPs was favourable but noted that PPPs were not to be considered as the complete solution for Ireland's infrastructure deficiencies. Rather, PPPs are to be seen as playing an additional or incremental role, which should not replace existing programmes or plans for exchequer capital spending (i.e. traditional procurement). The above reports were written when Ireland's significant "infrastructure gap" was obvious for many to witness and comment on.

Also significant is the fact that, from 2004, co-financing for Ireland's infrastructure from the EU Regional Development Fund will be sharply curtailed and this will have huge financial implications for Ireland. Perhaps not surprisingly, the development of PPPs is an important element of the National Development Plan 2000–2006 (1999). The Plan commits to using PPPs as a core mechanism to deliver on the infrastructure agenda and a total of €2.35 billion of private sector finance in PPP projects is specified and detailed below in Table 3.1, together with the proposed PPP investment as a percentage of total investment. It is important to note that the Department of Finance (2001) considers that the level of investment presented in the table is very much a minimum target.

Table 3.1: PPP Funding Targets

Category	PPP Investment €m	PPP Investment as % of Total Investment
National roads	1,270	23
Public transport	381	60
Water services	127	9
Waste management	571	69
Total	**2,349**	**28**

Source: *National Development Plan 2000–2006, (1999)*

Principles and Issues of PPPs

In theory, PPPs should be implemented when they create more benefits than costs for both private and public partners and produce a greater net benefit to taxpayers and society when compared to the traditional procurement method. This net benefit is reflected through the "value-for-money" concept. Value for money can be defined as the optimum combination of cost, quality, efficiency and effectiveness (Farrell Grant Sparks et al., 1998).

Value-for-Money Drivers

The factors that determine whether a project delivers value for money will vary by type of project and by sector. The Department of Environment (2000a) specifies that value-for-money assessment comprises two key elements: monetary comparison and non-monetary comparison. Monetary comparison represents a comparison of the cost of the preferred PPP tender, with the cost of traditional public sector procurement expressed in terms of discounted cash flows over the life of the contract. Non-monetary comparison involves all the factors that are difficult to quantify in monetary terms, but their value to government and the wider public is significant. Examples include speed of project delivery, quality of service and security of supply.

An investigation of some 29 projects in the UK, undertaken as part of their Public Finance Initiative (PFI), identified 6 primary value-for-money drivers, which are reproduced below in Table 3.2 (with a maximum score of 18 and a minimum score of 1).

Table 3.2: Value-for-Money Drivers in the PFI

Response Category	Total Points	Average Score
Risk transfer	338	15.36
Output-based specification	267	12.14
Long-term nature of contracts	256	11.64
Performance measurements and incentives	250	11.36
Competition	232	10.35
Private sector management skills	220	10.00

Source: *Andersen et al. (2000) Value-for-Money Drivers in the PFI*

The principal evidence that value for money has been achieved is normally provided through the use of a Public Sector Comparator (PSC) (Farrell Grant Sparks et al., 1998). The (UK) Treasury Taskforce (1999) explains that the PSC must reflect not only certain procurement costs but also the risk that additional costs may arise. Thus, what distinguishes a PSC from an ordinary economic appraisal model is the identification and, where possible, quantification of the risks associated with the traditional public sector procurement of the project (Farrell Grant Sparks et al., 1998).

Definition of the PSC

In the UK, the Treasury Taskforce has issued a series of Technical Notes providing guidelines on PFI procurement. According to Technical Note 5 (Treasury Taskforce, 1999), the PSC can be defined as a hypothetical risk-adjusted costing, with the public sector as a supplier. This estimate is expressed in net present value terms and is based on the premise that the project is to be financed, owned and implemented by government.

Clearly, the calculation and application of the PSC can make a PPP project appear better or worse in terms of value for money (Blackwell, 2000). The PSC is, essentially, a discounted cash flow model. A fundamental principle of discounted cash flow analysis is that money spent now or in the near future carries a higher "present value" cost than money spent several years later. Therefore, the higher the discount rate applied, the lower the present value placed on expenditure in future years (Brealey and Myers, 2000). For evaluation purposes, the discount rate used may either be the nominal (or money) rate or the real rate of interest (i.e. adjusted for inflation). The money rate of interest is that which is quoted in the "market" and is the rate of interest with which most people are familiar. However, the *real* rate of interest is lower than the money rate of interest in an inflationary environment. As Clarke (1982) cautioned some time ago, the key to proper evaluation of long-term investment projects lies in utilising the proper discount rate and cash projections. One should either make cash flow projections in money terms and discount them using the money rate of interest or make cash flow projections in real terms and discount them with the real rate of interest.

Until recently, the UK Treasury Taskforce recommended a (real) rate of 6 per cent, which has been roundly criticised as too high. Gaffney et al. (1999) highlight that the viability of a PPP scheme is very sensitive to the discount rate that is used and Table 3.3 shows the varying effect of the discount rate on the results of an economic appraisal for a PFI project. The table shows that at 6 per cent, the PFI scheme is slightly cheaper than its public sector equivalent and is thus held to be better value for money. When the discount rate is reduced by only 0.5 per cent, the outcome of the appraisal is reversed and the public sector procurement is more attractive, and this continues to increase as the discount rate is reduced. Thus, economic advantage and value for money is, to a large extent, a product of the discount rate used.

Table 3.3: Varying Effects of Discount Rates

Discount Rate (%)	Public Sector Option (£000s)	Private Financing Initiative (PFI) (£000s)	Economic Advantage of PFI (£000s)
6.0	174,337	172,663	1,704
5.5	185,803	186,692	(889)
5.0	198,884	202,043	(3,159)

Source: *Gaffney, Pollock, Price and Shaoul (1999)*

Criticisms of the PSC

Vickers and Pollock (2000) contend that the economic appraisal methodology used in the PSC contains at least two disputable components: discounting and the costing of risk transfer. As discussed in the previous section, use of the 6 per cent discount rate is considered at the higher end of the scale. As a result, Gaffney et al. (1999) argue that the underlying economic analysis is biased towards highlighting the economic advantage of private finance. Although all projects have to pass the PSC test, it may be in the interests of government or a local authority to make sure the figures favour the PFI. An interesting and recent development in the UK is the reduction of the discount rate. This should make PFI schemes, in general, less attractive and many will fail to show value for money.

With respect to the second component, the costing of risk is potentially subjective, as the value for transferred risk cannot be factually determined (Institute of Fiscal Studies, 2002). As Vickers and Pollock (2000) note, risk transfer valuations are contentious. Analysing the Andersen et al. report, *Value-for-Money Drivers in the PFI* (2000), risk transfer valuations accounted for 60 per cent of forecast cost savings. Gaffney et al. (1999) also reflect on risk transfer and in particular the discount rate of 6 per cent. In their opinion, there are several problems with the risk adjustment carried out in the appraisal of PFI schemes. Throughout the PFI appraisal, all costs are "risk adjusted". Yet, the discount rate applied already takes account of an element of risk, as it is set at a level that is deemed by the Treasury to be higher than a risk-free interest rate. Thus, it is argued that the cost of risk is effectively counted twice.

In addition, the problem with the value-for-money test in its present form is that it uses the same discount rate to ascertain the present value of both cost and revenue streams. This is not appropriate if the risks of both the cost and revenue streams are the same, which is unlikely. Grout (1997) recommends that the cost stream should use a lower discount rate than the revenue stream. Further, he highlights two reasons why the private sector firm will bear more risk than the PSC indicates. Firstly, the company runs the risk of large costs if it is unable to finish the project on time. If a project is supposed to deliver services for 25 years and comes on stream 5 years late, then the contract does not extend the process by five years but only pays out for 20 years. The private sector loses more than 20 per cent of the value since the years that receive no payment are the initial years, those with the highest present value. Secondly, under a PFI arrangement, any future uncertainty regarding the costs of providing a public service are borne by the private firm, effectively insuring the State against future increases to input costs. However, some project contracts may not specify this.

In summary, there is a growing body of opinion that PSCs are not robust enough by themselves to guarantee value for money. While a PSC can play a part in judging value, a single-figure computation should not be relied upon (Public Finance, 2002).

Research Methodology, Findings and Discussion

In view of the relatively recent introduction of PPP in Ireland, a combination of a mail survey and a semi-structured interview is used to gain greater understanding of the PSC and its role in the PPP process. The mail survey was used in this study to provide an understanding of how the private sector perceived and applied the PSC through representing public sector interests in PPP projects. The mail survey was addressed to each of the five (Irish) accountancy firms, which advised the public sector on PPP projects in Ireland. The questionnaires were mailed in July 2002 and four responses were received. (The very small sample size and research methodology represent serious limitations for this study but, nevertheless, important insights were obtained and this was the objective of this pilot study). The questionnaire used in this study contained sixteen questions and was five pages in length.

In addition, a single in-depth interview was conducted, jointly, with a finance specialist and a programme manager from the PPP unit, within the Department of Finance. The interviewees were contacted prior to the interview to explain the purpose and nature of the research. They consequently entered the interview with a sense of openness and understanding. A mixture of open and probing questions was used during the interview that lasted between 40 and 50 minutes. The interview was not recorded. While this may constitute a further limitation of the research, it provided a friendly and relaxed atmosphere that facilitated the free flow of discussion.

Research Findings

Due to confidentiality, the accountancy firms surveyed are not identified, nor will reference be drawn to the particular projects that the firms have used for the basis of their answers. Results of the survey are presented under the following headings: general information, value-for-money drivers, the PSC/discount rate and the role of the Department of Finance.

General Information

In a relatively short period, the accountancy firms have acquired extensive experience with respect to work carried out for the public sector in PPPs. Respondents were asked whether the current economic climate (summer 2002), characterised by funding constraints, would provide an increased opportunity for PPP procurement in Ireland. There was 100 per cent agreement that this would be the case.

When asked of the barriers to the successful implementation of PPP projects in Ireland, varied responses were received. However, three of the professional accountancy firms specifically mentioned the following as the principal barriers: project delay in the procurement department, delay in government approval and a serious lack of deal flow. The over-expectation of risk transfer and high bid costs were mentioned as being important barriers.

Value-for-Money Drivers

Table 3.4 identifies the six main perceived "value-for-money drivers" of PPPs in Ireland from the point of view of the respondents. The questionnaire contained nine "value-for-money drivers" and nine points were awarded for a ranking of one, eight points for a ranking of two and so on. The scores and rankings are summarised in Table 3.2 and they are consistent with the previously mentioned UK report (Andersen et al., 2000).

Table 3.4: Drivers of Value for Money in PPPs

Response Category	Total Points	Average Score
Risk transfer	34	8.50
Output-based specification	32	8.00
Competition	27	6.75
Innovation	26	6.50
Private sector management skills	21	5.25
Long-term nature of contracts	14	3.50

PSC/Discount Rate

All the responding accountancy firms indicated that PSCs had been used in their project appraisals. As can be seen from Table 3.5, the discount rates used in the PSC are different between accountancy firms. This was partly due, in the opinion of respondents, to the absence of clear guidelines from the Department. The discount rates are not identified with the accountancy firms for reasons of confidentiality.

Table 3.5: Real and Nominal Rates for the PSC

Accountancy Firm	Real Rate %	Inflation %	Nominal Rate %
A (Pre Dept of Finance)	5	3.0	8.15
A (Dept of Finance new requirement)	–	2.0	5.38
B	6	2.5	8.65
C	3.73	2.0	5.80
D	3.73	2.0	5.80

With respect to Firm A, a 5 per cent real rate was being used before the Department of Finance issued a recommendation and subsequently it used a nominal rate of 5.38 per cent – based on a 30-year government borrowing rate. Firm B would use a real rate of 6 per cent, based on their experience with the PFI in the UK. The decision of both firms C and D to use a 5.8 per cent nominal rate was prompted by the Department of Finance. Interestingly, all the firms used personnel from their associated UK offices to aid in the identification and application of the discount rate. This may highlight the

usefulness of international links to professional accountancy firms when advising on potential government contracts.

Three out of the four accountancy firms believe that the discount rates used in the PSCs are too low. It is important to note that a high discount rate favours the PPP process, i.e. using the private sector. The accountancy firms surveyed would like to see PPP projects develop in this country and their collective expertise and experience tells them the rates used by the Department of Finance are too low and effectively discriminate against PPPs in favour of the traditional procurement method of public sector provision. The respondents argued that, while the rates suggested by the Department of Finance are an accurate reflection of public sector borrowing, they are not an accurate reflection of the cost to the private sector of the project. There is also controversy with respect to the forecast inflation rate currently being used by the Department of Finance. The Department currently requires a rate of 2 per cent to be used for inflation in PPP project appraisals. Two of the accountancy firms believe that the current inflation rate being used is not an accurate reflection of price increases and another firm believes that the issue of inflation may require further examination in the future. However, it was stated that, for political reasons, the Department could not be seen to use any other rate, as this would imply that they are not adhering to European Central Bank (ECB) targets. Perhaps not surprisingly, the officials of the Department disagreed with that assessment. They pointed out that the inflation forecasts were contained in the Irish update to the Stability and Growth Pact. In addition, PPP projects are long term and therefore all assumptions are based on projected long-term outcomes. The Department officials saw no reason why Ireland should sustain a rate of inflation that differs materially from the ECB target rate.

Both interviewees from the PPP unit agreed that the PSC is a prerequisite for all projects where government funds are to be used. However, it was not to be considered as comprising the "pass or fail" threshold. When asked how much weight is attached to the benefits of non-monetary terms, for example early delivery of project, it was noted that "some" consideration would be given to these non-financial elements.

It was noted during the course of the interview that the Department of Finance intends to introduce a range of rates to be used in the construction of a PSC. These rates will depend on the exact type of project and how many years the PPP is procured over. This, they explained, was the reason why the results of the mail survey indicated varying discount rates in the PSC. However, it is important to stress here that, in order to facilitate the development of PPPs, these discount rates should be agreed and known in advance. It is understandable that the private sector requires an adequate return for their proposed investment. If the required return is too high then the bids submitted would be higher than the traditional cost and the project would not advance. If this is discovered only when the relevant government body is evaluating the bids, it is likely to lead to frustration on the part of the bidders. Bidders will have already expended vast sums of money in the bid process only to discover that the project clearly was

not feasible for PPP! Certainly, this issue is worthy of future investigation and clarification.

Role of the Department of Finance

The Department of Finance was criticised by the professional accountancy firms in relation to "deal flow" and the length of time taken to approve projects. Whether this criticism reflects only on the PPP unit in the Department of Finance is questionable. The PPP unit rejects the criticism of lack of deal flow outright. They explain that project proposals are not the focus of the Department of Finance, as responsibility for this rests with each individual department. One of the accountancy firms was of the opinion that the lack of training and education resources available to public sector bodies has resulted in this lack of deal flow.

The officials from the PPP unit maintain that PPPs are only at the pilot stage and as such the number of projects involved is quite small. In the opinion of the interviewees, this facilitates the learning process and is in line with Goodbody's (2002) long-term view of establishing the required structures that will help ensure increased deal flow in the future.

Limitations of Research

It is important to highlight the limitations of the methodology. Since PPPs are at a relatively early stage of development in Ireland, the population of "professional advisors" is small. In effect, only five professional accountancy firms have extensive experience of advising public sector bodies on PPPs in Ireland and four responded to this survey. A single interview with PPP unit officials can at best provide initial insights to a very complex and important PPP process. In addition, the preliminary inferences that can be drawn from this pilot study must be viewed in the context that they represent perceptions at a particular moment in time. It clearly would have been preferable to conduct some type of longitudinal study but the nature of the research process precluded this.

Summary and Conclusion

It is anticipated that PPP will play an ever-increasing role in infrastructure procurement in Ireland over the next few years. Public finances are under strain and PPPs can be an attractive financing alternative, provided they can be shown to deliver value for money. Notwithstanding the apparent appetite for PPPs in this country, there appears to be a serious question mark over the availability of PPP projects, i.e. deal flow.

The value-for-money drivers identified in the mail survey follow a similar pattern to that of their UK counterpart with "risk transfer" and "output-based specification" ranking in both as the number one and two respectively.

Despite some obvious flaws, the PSC is an important tool in demonstrating value for money in a PPP project. Yet, this research clearly shows that the professional accountancy firms who represent public sector bodies are unhappy

with the Department's requirements regarding the discount rates in PSCs. This study does not suggest an appropriate value for the discount rate. Rather, it merely highlights the contention that exists between the Department and the professional accountancy firms surveyed and acknowledges that the choice of a "fair" discount rate could be an area of future investigation.

The fact that the Department appears to favour "low" discount rates may restrict the widespread implementation of PPPs in Ireland. If this is so, then additional budgetary pressures will come to bear on the public sector's finances as traditionally procured spending on essential infrastructure projects increases in future years. In recent months, calls for greater transparency and clarity have been made by prominent individuals in this country to remove some of the obstacles to assessing PPPs true merits and benefits to the taxpayer. Critical details of PPP deals, such as the margins on investment return, the exact scale of committed private sector revenue and tax incentives, are not revealed to the public on the grounds of "commercial sensitivity", according to the PPP unit in the Department of Finance. In the UK, there is anecdotal evidence that PPP deals can produce margins of 10 per cent on construction contracts – more than twice the industry average. Certainly, the financial evaluation process associated with PPP needs more exploration and debate; otherwise, such projects may be decided on spurious arithmetical calculations that may further political rather than economic aims.

Future research could investigate the accuracy or otherwise of the financial data submitted as a crucial part of the PPP bid process, together with an investigation of their adherence to project time scales. However, it may be easier to demonstrate adherence to time scales and projected cost in relation to a PPP project than to prove the more important principle of "value for money". Thus, in some ways, it is ironic that PPPs may be the only way to deliver the kind of vast infrastructure improvements needed by our economy!

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