

Public-Private Partnerships in Ireland: A Review of the Experience

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Abstract

In July 2012 the Irish government announced a stimulus plan for the beleaguered economy. The plan to spend €2.25 billion on capital projects is largely based on the use of public-private partnerships (PPP) to procure new infrastructure and services. This signals a renewed wave of PPP procurement that originally commenced in 1999 and to date has resulted in in over €6 billion of investment in infrastructure and public services in sectors such as transport, health, education and water services. It is ironic that the planned expansion of PPP procurement in Ireland is occurring at a time when PPP activity levels have fallen worldwide. Moreover, the UK which is the world leader in PPP procurement has recently announced a major re-vamp of its Private Finance Initiative due to “widespread concern that the public sector has not been getting value for money and taxpayers have not been getting a fair deal now and over the longer term” (HM Treasury, 2012: 1). In this context this article reviews the international experience with PPP and examines the public policy objectives commonly ascribed to the model. It then turns to the Irish case and traces the origins of the country’s engagement with PPP and the extent of procurement under PPP to date. It assesses the extent to which these objectives have been met and concludes that there is no strong evidence to suggest that PPP has delivered better value for money for taxpayers. PPP has been used to keep capital investment ‘off-balance sheet’ but what is bought now must be paid for later so the net exchequer position is not necessarily improved. Finally the paper reviews some important governance issues around PPP and highlights significant shortcomings in terms of the accountability and overall legitimacy of the PPP model.

Paper presented to the *Nevin Economic Research Institute*, Dublin, January 23rd 2013.

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Introduction

In July 2012 the Irish government announced a stimulus plan in the effort to revive the fortunes of the beleaguered economy. The plan to spend €2.25 billion on capital projects involves leveraging €1.4 billion from non-Exchequer sources to finance a number of public-private partnerships (PPP). This stimulus plan illustrates the ongoing enthusiasm of successive Irish governments to adopt the PPP model for procuring capital projects and related public services. Since 1999, PPPs have been used for the procurement of infrastructure such as roads, schools, courts and water treatment plants. The extent to which Irish governments have engaged with the PPP model has been such that Ireland has been described as having one of the world's most mature PPP markets (Deloitte, 2006) and ranks among the small but growing number of countries where PPP procurement is being adopted as a significant element of overall public capital investment.

It is ironic, that the decision to expand the use of PPP in Ireland comes at a time when, in international terms, there is widespread disenchantment with the PPP experience. In the UK, which is the world leader in terms of the scale PPP activity, the government recently announced a major reform of PPP due to "widespread concern that the public sector has not been getting value for money and taxpayers have not been getting a fair deal now and over the longer term" (HM Treasury, 2012: 1).

It is striking that despite the fact that there has been an extensive level of PPP procurement for over a decade, the Irish experience with PPP has not been the subject of an 'official' wide-ranging review and/or in-depth critical analysis along the lines witnessed in the UK. There are some examples of independent academic research on PPP but there is still a dearth of available information that sheds light on whether PPP delivers infrastructure and public services efficiently and equitably. Where evidence has been gathered, it largely reveals that PPP has not necessarily achieved the public policy goals set by those responsible for its design and implementation, (e.g. Hearne, 2012, Bissett, 2008, Reeves, 2008, Comptroller and Auditor General, 2004)). However, there is little, if any, public recognition of these issues by policy makers (public representatives and civil servants). It is fair to say that the adoption of PPP, which essentially privatises the delivery of infrastructure and some public services, in areas including health and education, has received a relatively easy ride in terms of public scrutiny. In this context, this paper seeks to shed some light on the Irish PPP experience to date. It reviews the international experience with PPP and examines the public policy objectives commonly ascribed to the model. It then turns to the Irish case and traces the origins of the country's engagement with PPP and the extent of procurement under PPP to date. It proceeds to assess the extent to which these objectives have been met and concludes with a discussion of issues that require consideration given the government's stated intention to expand usage of PPP.

PPP Worldwide

Cooperation between the public and private sectors is nothing new but in recent years the label PPP has been commonly applied to a host of different forms of cooperation. Hodge and Greve (2007, 2009) illustrate this point by describing five different 'families of such partnerships' (2009: 33).

These include institutional cooperation for joint production and risk sharing (such as the Netherlands Port Authority) and urban renewal and downtown development (such as in the USA where a range of local economic development and urban renewal measures are pursued). The focus in this paper is on PPPs for the procurement of physical infrastructure and asset-based services. Such agreements are typically characterized by:

(a) A long term contractual agreement between the public sector client and a private contractor. The contract period generally ranges between 20-30 years;

(b) An integrated model of procurement whereby the private contractor generally contracts for all or most elements of the project life cycle. Typical PPP arrangements therefore include the design, construction and operation of the asset (for example, road or school). In addition, PPP arrangements commonly include a finance element whereby the private contractor finances the project and recoups the investment over the life of the contract. A range of different acronyms have been adopted to describe such PPPs. These include DBO (Design, Build, Operate), DBFO (Design, Build, Finance and Operate) and concession PPPs with the precise label applied depending on the exact roles and distribution of risks between the public and private sectors.

(c) A significant degree of risk sharing between parties to the contract. This is a key characteristic that distinguishes the PPP model from traditional procurement models where most risks reside with the public sector.

(d) A move from providing bidders with detailed input specifications to basing procurement on the basis of more open output specifications in order to encourage innovation and creative solutions from contractors.

In international terms, the adoption of infrastructure PPPs has intensified over the last twenty years. This has been attributable to a number of factors including the need for governments to address the challenges posed by factors such as technological progress, ageing populations, urbanization and migration, security concerns and environmental issues. Other factors providing impetus for the adoption of the PPP model include the public finance pressures faced by most countries (which have been heightened by the global financial crisis) and widespread disenchantment with traditional procurement that has demonstrated a poor track record in terms of time and cost overruns (for example, Flyvbjerg *et al.* (2003), Mott and Macdonald (2003)).

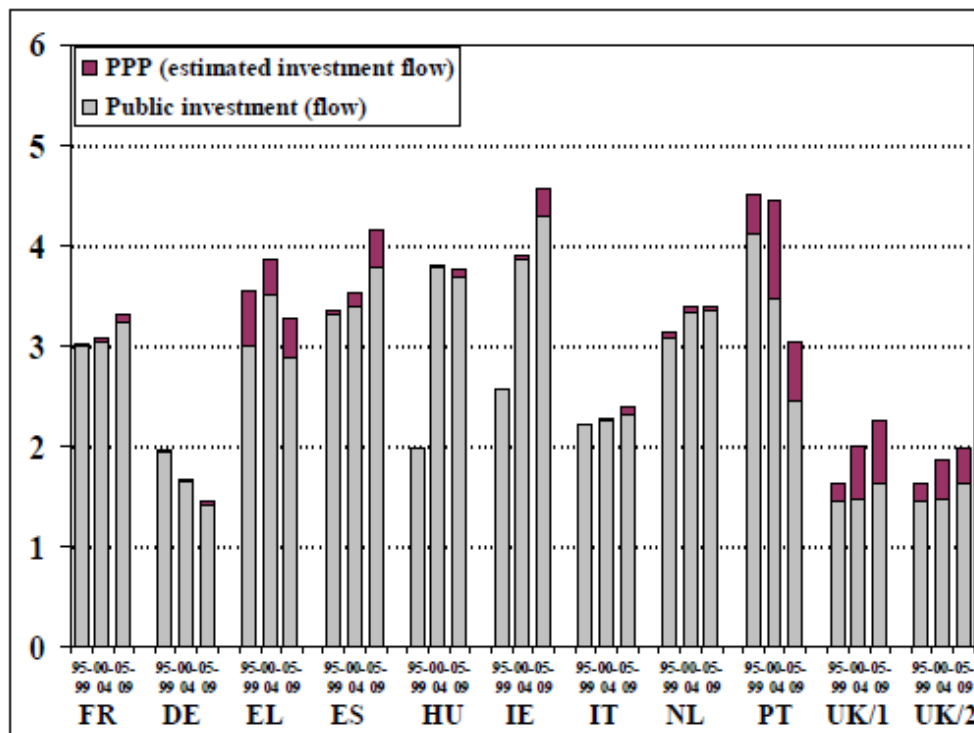
In Europe, the UK has led the way in adopting the PPP model for infrastructure investment. Comparable surveys of PPP activity in Europe have been carried out for the European Investment Bank by Kappeler and Nemoz (2010) and Blanc-Brude (2007). The most recent survey found that:

- More than 1,300 PPP contracts were signed (reached financial close) in the EU over the period 1990-2009. This represented a capital value of more than €250 billion. The number and value of PPP deals peaked in 2007 and declined thereafter.
- Over the period 1990-2009, the UK accounted for two thirds of the total PPP market but this has started to decline;
- Spain remains the second biggest PPP market accounting for over 10 per cent of deals over the period 1990-2009;

- France, Germany, Italy, and Portugal all represent 2-5% of the total number of projects, respectively;
- The shares of the PPP market (measured by value) are similar to the pattern observed in terms of number of projects;
- Focusing on the UK, the health and education sectors account for the largest percentage of projects (35 and 34 per cent respectively);
- In the UK, the value of transport projects has declined but still accounts for 17 per cent of the total. Health and education account for 25 and 27 per cent of the value of projects respectively;
- Outside of the UK the sectoral distribution of PPP is diversifying gradually. The transport sector (particularly roads) remains dominant but health and education are catching up in terms of share of total number of projects and total value.

Kappaler and Nemoz also estimate the share of total capital expenditure accounted for by PPP and direct government investment across Europe. Their findings are re-produced in Figure 1.

Figure 1: Government investment and PPPs (averages 1995-1999, 2000-2004 and 2005-2009, in percent of GDP)



Source: Kappaler and Nemoz (2010)

It shows that in the European countries covered, PPP investment flows represent less than one percent of GDP. With respect to the focus of this paper it is noteworthy that Kapaller and Nemoz find that Ireland ranks as one of the countries where PPP investment has made an appreciable impact at a macroeconomic level (albeit still behind Greece, Portugal, the UK and, to a lesser extent, Spain). Moreover it is also among the countries with the largest increase of PPPs relative to GDP over the years 2005-09 (along with Spain, the UK and, in relative terms, France, Germany and Italy).

The Global Financial Crisis (GFC) that followed the collapse of Lehman Brothers in 2008 has had profound effects on PPP activity with relatively mature infrastructure financing markets operating under conditions of a severe credit crunch that has had a major impact on both the availability and the cost of project finance (Hellowell and Vecchi, 2012). One of the principal effects of the credit crunch was the collapse of the monoline industry which had become an important source of PPP finance. Monoline insurers guaranteed the timely repayment of infrastructure bond principal and interest when the issuer defaults. The collapse of this industry meant the closure of the wrapped bond market and as a result, banks became the only viable source of finance but the collapse of inter-bank lending caused acute liquidity shortages (Connolly and Wall, 2011). These were amplified by changes in financial sector regulation. Hellowell and Vecchi (2012) point to new Basel III stability ratios as a critical factor in making long-term investment very expensive in terms of banks' risk-weighted capital requirements. As a consequence, commercial bank debt became more difficult to secure and lending terms (e.g. pricing, tenors, loan volumes) deteriorated significantly, affecting the bankability and value for money of PPP projects.

With respect to PPP, the GFC has resulted in a significant slowdown in market activity. According to the European PPP Expertise Centre (EPEC) the aggregate volume of PPP transactions to reach financial close in Europe in the first half of 2012 amounted to €6 billion. This represents the lowest volume recorded over the last decade and approximately one-third of the volume in 2007 (EPEC, 2012). In response to these developments, many governments and some supranational institutions such as the European Commission are taking actions to stimulate PPP investment. These include models of credit-enhancement "within infrastructure projects in an attempt to create a low-risk asset class and thus attract additional debt capital into the sector" as well as initiatives to develop "hybrid structures in which the scope of private financing is more limited than in the conventional PPP model, with state-provided liquidity (sourced via taxation or borrowing) substituting for what would normally be commercial debt" (Hellowell and Vecchi, 2012:2).

PPP Activity in Ireland

The origins of PPP procurement in Ireland can be traced back to the acute nature of Ireland's deficit of physical infrastructure that became more and more pressing as the country entered into the period of rapid economic growth in the mid-1990s. The urgent need to speedily deliver infrastructure in areas such as roads, public transport and environmental services provided an opportunity for private interests to make the case for more extensive private sector involvement in the financing and delivery of infrastructure assets as well as increased involvement in the delivery of public services on the back of these assets. They pointed to the development of the *Private Finance Initiative* (PFI) in the UK and argued that this model of procurement presented a useful approach to addressing Ireland's supply-side constraints.

Initially the government adopted a cautious approach, announcing eight pilot PPP projects in 1999. However, the PPP model quickly gained favour amongst relevant policy makers and when the *National Development Plan 2000-2006* was published in November 1999 it stated that the urgent need to deliver infrastructure was such that the PPP programme would be expanded before pilot projects were completed. Over the following months the envisaged level of PPP activity expanded rapidly. By May 2001 over 70 PPP projects were listed on the website housed by the Central PPP Unit in the Department of Finance. In June 2001, a report commissioned by the Department of Finance, described how Ireland's PPP programme had progressed from the stage of mobilisation to expansion and that there were 134 PPP projects at different stages of development (Reeves, 2003).

Despite the fact that more and more projects were nominated for procurement under PPP, progress in the early years was slow. By mid-2003, four years after the announcement of the pilot projects, the procurement process had been completed in just three cases (excluding water services), two of which were in the schools sector (Reeves 2003). At this point the PPP programme was the subject of strong criticism from the private sector with respect to aspects such as the extent of deal flow, the level of public sector skills in the context of procuring PPPs and the costs involved in bidding for PPP contracts (Reeves, 2008). Although a number of roads PPPs were close to completion by mid-2009 the total number of projects in operation remained low at that stage with just six projects (excluding water service projects) included in the data on PPP activity provided by the Department of Finance's Central PPP Unit. The procurement of many PPP projects has therefore proved to be a lengthy process in many cases and has been abandoned in others (e.g. nursing homes, national radiotherapy network, rail transport and prisons). Nevertheless the government's enthusiasm for PPP procurement has remained steadfast. Prior to the current economic crisis, the Multi-Annual Capital Investment Framework 2008-2012 (see table 1) shows that PPP investment was expected to account for 16 per cent of planned investment over the period 2008-2012.

Table 1: Multi- Annual Capital Investment Framework 2008-2012

	2008	2009	2010	2011	2012	Total
Direct Exchequer Capital Funding (1)	9,054	9,469	9,592	9,676	11,060	48,851
PPP Capital Funding (2)	334	893	1,806	2,278	2,407	7,718
<i>Within Envelope (1) + (2)</i>	<i>9,388</i>	<i>10,362</i>	<i>11,398</i>	<i>11,954</i>	<i>13,467</i>	56,569
PPP Funded by User Charges	365	450	345	200	200	1,560
Total Investment	9,753	10,812	11,743	12,154	13,667	58,129
PPP as % of Total	7.2%	12.4%	18.3%	20.4%	19.1%	16.0%

Notes: (1) Data set out in a 5 year rolling capital envelope. (2) Capital Investment under PPP is included in the years of construction where PPP investment is 'On Balance Sheet'. (3) Where PPP investment is categorised as 'Off Balance Sheet', capital investment and the costs of servicing the finance, maintenance operation of these projects are counted as expenditure upon completion of the construction of the projects concerned. PPP investment that is funded by user charges are not included separately.

In the meantime however the extent and composition of Ireland's PPP programme has altered significantly in the context of the international and domestic economic crisis with a large number of PPP projects put on hold or abandoned. On the basis of comparing the Central Unit's 'project

updates' for May 2009 and September 2012 it is possible to identify projects that were suspended or abandoned (see appendix - table A2). In nearly all of the 24 cases identified these projects were based on private finance which had become scarce and more expensive in the wake of the global financial crisis. Among the more high-profile projects put on hold or abandoned are large scale rail projects including Metro North and Dart Underground, and the Dublin Waste to Energy (Poolbeg Incinerator) contract, a number of social housing projects as well as contracts to provide buildings in third level education institutions.¹

Notwithstanding these difficulties the prospects for further procurement under PPP received a major boost in July 2012 following the announcement of a new 'Stimulus Plan' for the Irish economy. A number of suspended projects were re-instated (e.g. M11 Gorey-Enniscorthy and N7/N18 Gort Tuam) while a new set of PPP projects were announced. The latter includes new roads (e.g. N25 New Ross Bypass), 30 new primary care centres, a new State Pathology Laboratory, two new schools bundles and a campus for Dublin Institute of Technology. Table 2 provides the latest available data on PPP projects combining the last update from the Department of Finance (September 2012) and the projects announced in the 'Stimulus Plan'.

Table 2: Number of PPP Projects in Ireland in September 2012

Project/Stage Of Project Cycle	Pre-Tender	Procurement	Construction	Operation	Stimulus Projects	Total
Roads	0	1	0	10	3	14
Courts	0	0	0	1	1	2
Education	0	0	0	5	3	8
Arts	0	0	0	1		1
Primary Care					30	30
Pathology					1	1
Water	-	8	1	2		11
Wastewater	-	16	15	24		55
Total	1	26	16	43	38	123

(1) Data is derived from the PPP website housed by the Department of Finance and updated in September 2012. It is supplemented by (a) information provided at the announcement of the government's 'Stimulus Plan' in July 2012 and (b) information for water and wastewater projects provided by the Department of the Environment, Community and Local Government in November 2011 and information for roads projects provided by the National Roads Authority in April 2012 (2) Pre-tender projects are at various stages of the appraisal procedures for investment under PPP.

The data in table 2 shows that despite significant difficulties with bringing PPP projects to the point of operation the PPP model of procurement is set to play an increasingly important role in infrastructure investment in Ireland in the coming years.

¹ The C&AG (2012) showed that the costs already incurred on cancelled projects amount to €229.2 million (including €56.78 for enabling works that would be incurred if traditional procurement was chosen).

A Framework for Examining PPPs

The purpose of this paper is to evaluate the Irish PPP experience to date. Evaluation however can mean different things to different people and evaluation studies can vary in terms of purpose, methodology and the depth of analysis. The PPP model of procurement has been ascribed a host of different objectives by policy makers including the achievement of fiscal goals, the accrual of value for money and the delivery of infrastructure projects on time and budget and the analysis of any of these objectives can be based on any one from a range of evaluation techniques. Bearing these considerations in mind, this paper examines the Irish PPP experience from a broad public policy perspective. Drawing on contributions to the analysis of policy alternatives such as PPP (e.g. Weimer and Vining (2004) and Hodge et al (2010)) it focuses on aspects such as economic efficiency, government budget impact and political/governance aspects of PPP procurement.

Economic Objectives

From an economic perspective the measure of success for PPP (or any government project) is economic (allocative) efficiency) or in broader terms improved social welfare. Satisfying this criterion requires that a given PPP project yields positive net social returns (in other words, the benefit-cost ratio is positive). There is no empirical study, that I am aware of, that has attempted to measure the allocative efficiency of PPP. One of the principal reasons governments opt for the PPP model is that they accept the argument of superior private sector technical efficiency (also called x-efficiency) and therefore the prospect of delivering projects at a lower overall cost. In practice, the relevant argument in favour of PPP in this regard is generally made on the basis that it can provide better value for money (VFM) than traditional procurement. VFM is achieved when it produces “a flow of services of at least equivalent quality to that provided by the public sector, but at lower overall cost (taking everything into account, particularly the transfer of risk)” (Ball and King, 2006: 37).

The PPP literature suggests that the VFM case for PPP is predicated on three principal drivers: (i) competition for contracts; (ii) risk transfer and (iii) superior private sector innovation which is based on a move from input to output specification.

Drivers of VFM

Competition

Economists have for long argued that competition *for* the market (e.g. franchising, contracting out) can yield efficiency gains. It has also been noted that if government contracting is to be successful in achieving goals such as improved efficiency (value for money) a number of important conditions must hold. Sappington and Stiglitz (1987) contend that successful contracting requires that product specification is simple, technology is well known; significant demand fluctuations are unlikely within the terms of the arrangement, the incumbent or any bidder does not possess advantageous

information, entry costs are not high and the transfer of assets at the end of the contract period is not difficult. Other factors that could plausibly be added are the absence of collusion and bidding on the basis of loss-leading behaviour. Where one or more of these conditions are not satisfied there may be difficulties in designing, executing and enforcing contracts. This suggests that models of government contracting such as PPPs are not appropriate in all cases. For instance, contracting for the provision of IT or health services can be expected to be more complex than contracting for roads construction.

Risk Transfer

The principal driver of proposed VFM under PPP is that the model allows for a level of risk transfer that is not possible under traditional procurement methods. Transferring the appropriate level of risk provides the incentive to increase returns by reducing costs and increasing efficiencies. There may of course be potential difficulties if too much risk is transferred. This can reduce competition for contracts or result in contract failure after agreements have been made. Transferring too much risk or the wrong type of risk will also reduce VFM. It is important therefore to ensure that the amount of risk transferred is optimal.

In practical terms risk transfer involves (1) identifying the risk (2) deciding who takes the risk (3) incorporating risk allocation within the terms of the contract (e.g. devising an appropriate payment mechanism) (4) pricing of risk when constructing the public sector comparator. The challenges involved in successfully implementing risk transfer should not be underestimated. There is a burgeoning critical literature (largely based on the UK experience) on the issue of risk transfer in the context of PPP. Although a full review of issues is beyond the scope of this paper a flavour of the arguments can be discerned from the work of Ball *et al* (2000, 2001) who argue that from the inception of the PFI, the private sector has been reluctant to take on risk and they attribute this to the crucial role played by banks who are described as 'undoubtedly cautious' and unaccustomed to providing long term funding. They provide case-based evidence of how the private sector has endeavoured to reduce the amount of risk borne. They document evidence from a high school project where intensive negotiations resulted in significant reductions in private sector risk by reducing instances where penalties can apply. They also cite the example of a water purification project where the private sector was willing to bear the risk of a dry year or a wet year but were unwilling to take on the risk that an industrialist, who is the main polluter, would go out of business. There are also issue in implementing risk transfer and there is abundant evidence of failure of public sector clients to impose risk transfer by, for example, imposing penalties (Hall, 1998, Ball and King, 2006, Reeves, 2008)

Superior Private Sector Innovation

A number of writers and policy makers refer to the scope for innovation under PPPs as a source of VFM compared to traditional procurement.^[5] This enhanced scope for innovation is attributed to the move from input specification under traditional procurement to output specification under PPP.

^[5] For example Farrell, Grant, Sparks, (1998), (Hall, 1998).

Under traditional procurement the public sector specifies the asset to be built (e.g. school). Once this is completed the public sector assumes responsibility for its continuing operation and maintenance. Under PPP the public sector provides an output specification wherein they specify the requirements for the service to be provided. This allows competing bidders the scope to create innovative solutions that may offer better VFM. There are few empirical studies of this aspect of PPP that I am aware of but where evidence does exist it fails to support the basic claim in favour of PPP on the grounds of better innovation (e.g. Audit Commission, 2003, Ball et al 2000, 2001, Reeves and Ryan, 2007).

Obstacles to VFM

It is important to recognise that in addition to doubts about the strength of 'drivers of VFM' there are also some important factors that diminish the *prime facie* case in favour of PPP on PPP grounds. These include potentially higher finance costs of PPP and the magnitude of transaction costs.

Potentially Lower Financing Costs for the Public Sector

A number of writers have highlighted how VFM is difficult to achieve because private finance is more expensive compared to the cost of government borrowing (Ball et al 2001, Hodge and Greve, 2007). Although there is merit in this argument the overall question concerning who should finance projects is complicated. Bettignies and Ross (2010) make a number of arguments in this regard. For example they argue that many private consortia are made up of blue-chip multinational companies that can secure financing rates close to those that apply to governments. They also draw attention to cases where large-scale borrowing by governments can push overall public debt levels over critical thresholds with the effect that ratings agencies may downgrade government's total debt. In such an event, the impact on the cost of public debt may be larger than the effect of the higher rate paid by private borrowers. Another relevant argument is that private finance creates incentives for private consortia to monitor projects more closely thereby enhancing the prospects for delivery on time and within budget. Against these arguments it should however be noted that private consortia face at least two risks under PPP which can lead to higher interest rates. Ball et al (2006) highlight two such risks. First, the consortium could go into liquidation before the contract ends. Second, payments are usually made if the asset is usable. If the relevant asset is defective and not available for use payments can be reduced or cease. As a consequence private consortia face higher interest rates which authors in the UK have suggested are in the 2 – 3 per cent range (Hall, 1998, Heald, 1997).

Transaction Costs

Another important factor that can serve to diminish VFM under PPP is transaction costs. When considering VFM the critical question is whether the total cost of PPP is lower than the counterfactual of traditional procurement (Boardman et al, 2005, Vining et al, 2005). Total cost equals production cost plus transaction costs (Williamson, 1975) where the latter refer to the costs

of establishing and maintaining a partnership; “more specifically, they encompass legal, financial, and technical advisory costs incurred by both public and private sectors in the procurement and operational phases of a project” (Dudkin and Valilla, 2005). There are good reasons for believing that transactions costs are higher under PPP compared to traditional procurement. It is generally accepted that transaction costs are likely to be high when the agreement is characterised by high asset specificity, complexity, uncertainty and small numbers exchange (Williamson, 1975, 1985). Such conditions are likely to apply in long term contracting settings such as PPP.

Dudkin and Vallila (2005) estimate the magnitude of transaction costs under PPP. Using data on 55 contracts across five sectors in the UK they conclude that *ex ante* transaction costs alone amount on average to well over 10 per cent of the capital value of the project. The public sector and the winning bidder’s costs reach some 7 per cent. In addition, the aggregate costs incurred by failed bidders can be estimated at some 5 per cent of the project’s capital value, bringing the total procurement phase transaction costs to well over 10 per cent. The authors do not estimate transaction costs incurred over the operating stage but they do note that these can also be significant. They quote Torres and Pina (2001) who report some evidence related to the US, noting that it has been reported that the monitoring of the performance of the private sector partner in PPP type of arrangements entails extra costs anywhere between 3 and 25 per cent of the contract value. As a consequence, it has been recommended in the US context that monitoring costs of 10 per cent of the contract value be budgeted in such arrangements. It should be recognised that Dudkin and Vallila’s results do not reveal insights into the magnitude of the difference between traditional public procurement of investment projects and PPPs in terms of transaction costs but the likelihood of greater costs under PPP are recognised.

Overall, case for VFM under PPP is unconvincing. When the likely higher costs of finance incurred by the private sector as well as higher transaction costs are taken into consideration it is evident that the achievement of VFM depends on factors such as competition for contracts (which may be undermined by high bidding costs) and risk transfer. This is a tall order. In terms of empirical research into this question there are a number of studies based on individual cases and small sample sizes that prevent any statistical studies of the VFM question. A thorough review of these studies is provided by Hodge and Greve (2007) who conclude that “Overall, it seems that the economic and financial benefits of PPPs are still subject to debate — and hence considerable uncertainty....[and] “caveat emptor” is the most appropriate philosophy for governments to adopt as they move forward with infrastructure PPPs (Hodge and Greve, 2007: 551-552)

PPP and Public Finances

For governments, the PPP model involving private finance holds a number of attractions in terms of exchequer finances. First, provided enough risk is transferred the use of PPP can prevent the investment showing on the government balance sheet. The attraction of off-balance sheet accounting for PPP investment is understandable, particularly in the context of a fiscal crisis or where fiscal targets apply. Nevertheless, while accounting rules can permit such treatment of expenditure under PPP the underlying economic position does not *necessarily* change as what is bought now must be paid for later. The precise impact of PPP on public finances will depend on a number of factors including inflation, growth in national income and the level of overall capital

investment, the interest rate differential between private sector and public sector borrowing and any efficiency differential between traditional procurement and PPP. Ball et al (2002) provide an in-depth examination of the implications for public finances of using PPP.² The authors simulate the effects of transferring a constant amount of spending from traditional finance to private finance every year. They show that the fall in public borrowing will diminish over time and may eventually wholly disappear. The impact of switching to private finance on the required tax yield for a given level of investment is also examined and the authors conclude that this may be permanently higher or permanently lower. In addition, they show that if the switch to private finance did reduce both public borrowing and taxes, then it may not facilitate much additional investment.

PPP and the Challenge of Governance

Millward and Provan (2000) define governance as an inclusive term

concerned with creating the conditions for ordered rule and collective action, often including agents in private and nonprofit sectors as well as within the public sector. The essence of governance is its focus on governing mechanisms (grants, contracts and agreements) that do not rest solely on the authority and sanctions of government (2000, p. 360).

As a form of governance, PPPs raise a number of challenges, most of which have economic dimensions. Hodge and Greve (2011) summarise these challenges as follows:

- (i) The complexity of PPP in terms of the long term nature of detailed contract negotiations, lengthy contracts and little or no input from 'public stakeholders' and complex organisational structures on the public and private sides of the contract. In other words, a contractual setting where transactions costs are likely to be non-trivial;
- (ii) The contradiction of key government actors (for example, Ministries) acting as advocate of PPP policy and guardian of the public purse;
- (iii) The place of PPP in terms of a range of governance options (contracting out, PPP, traditional procurement). PPP is not the only game in town;
- (iv) The management of PPP contracts in the face of divergences in the objectives of partners, their sets of skills and experience, and asymmetric information;
- (v) The management of long term contractual relations and balancing the competing goals of fostering co-operative relations whilst enforcing the contractual agreement.

Of particular relevance in the context of PPP is the question of accountability. The shift towards greater private sector involvement in public service delivery weakens the thread of accountability

² More precisely, the authors examine the implications of adopting the private finance initiative (PFI) which is the term used for the PPP model that involves private finance (e.g. DBOF contracts).

between citizens, parliament and those responsible for service delivery (executive government). A key challenge in the implementation of PPP is therefore to establish mechanisms that improve accountability. Transparency is important in this regard and the advantages of making PPP arrangements more accessible and assessable are widely recognised (Barrett, 2003, Demirag and Khadaroo, 2008, Forrer et al., 2010). The international experience suggests that PPPs are characterised by shortcomings vis-à-vis expectations in this regard. Among the problems identified in the PPP literature are limited transparency and complex adjustment formulae (Hodge and Greve, 2007), the curtailment of potential improvements in transparency through concerns about commercial confidentiality and inadequate accountability downwards to users through the measurement of user satisfaction (Maltby and Gosling, 2004, Shaoul et al., 2006). Addressing these problems constitute an important challenge if procurement under PPP is to satisfy reasonable standards of legitimacy.

Evaluating the Irish PPP Experience

Given the scale and reach of PPP activity in Ireland, it is striking that Ireland's experience to date has commanded little attention in the academic literature. The following section seeks to examine the Irish PPP experience in terms of the economic, financial and governance aspects discussed above. It analyses PPP in Ireland with reference to previous studies of PPP (including studies by this author) and information made available by government agencies and various other sources. Any research into PPP faces challenges in terms of access to information particularly details in relation to the financial details around individual contracts. Government bodies and other state agencies are notoriously cautious about releasing financial information about PPP contracts, mainly on the grounds that such information is commercially sensitive. This raises immediate concerns about transparency and accountability which are part of the governance challenges that arise in the context of PPP procurement.

Governance of PPP in Ireland

Information and Accountability

Among the many challenges arising from increased commercialisation and privatisation are those of accountability and transparency. The shift towards greater private sector involvement in public service delivery weakens the thread of accountability between citizens, parliament and those responsible for service delivery (executive government). As a consequence the rise in popularity of PPP in countries such as Ireland has often been accompanied by reasonably well developed institutional frameworks that incorporate formal accountability mechanisms such as *ex ante* appraisal of procurement options (value for money testing), detailed contract documents and formal auditing mechanisms which provide the scope for *ex post* performance review. Despite the establishment of such frameworks, concerns about the quality of accountability remain widespread.

The Irish PPP experience to date has been characterised by a distinct scarcity of information that is made available to Irish citizens (including academics and other independent researchers). This

scarcity also extends to statutory bodies charged with duties of oversight in the public interest. This has obvious implications for making decision makers accountable for their actions.

The most rigorous analysis of PPP procurement to date has been conducted by the Office of the Comptroller and Auditor General (C&AG) in relation the first schools project procured under PPP. Since the publication of the VFM Report on this project in 2004 there has been no further published detailed analysis of PPP projects from the C&AG.³ Reports by the C&AG provide the principal source of information for the Public Accounts Committee (PAC) of Dail Eireann (Irish Parliament). Although the PAC can compel the accounting officers of government departments to come before its enquiries these powers do not extend to the private sector. As a consequence the PAC has expressed frustration in relation to the level of transparency. For example, in 2007, the PAC expressed the view that:

The PAC in recent years has held several plenary sessions relating to significant PPP projects. These meetings of the committee were informed by particular chapters of the annual reports of the Comptroller and Auditor General, as well as a number of Value For Money reports that also emanated from his office.....While the circumstances applying to each of these projects vary widely, and the history of each differs, some common threads have appeared. The largest common factor has been the frustration expressed at the Committee of either not having appropriate access to information relating to these projects, or being publicly unable to refer to information deemed to be commercially sensitive. This committee believes that this obstacle needs to be overcome. Public accountability and value for money are very important issues (2007, pp.7-8).

External oversight of PPP arrangements is therefore effectively confined to the Office of the C&AG. With just a single published case-based VFM Report covering procurement under PPP the dearth of detailed analysis of PPP has serious consequences for public accountability and gives citizens little reason to be confident that the public interest is being served by PPP arrangements. Although there is a need for the public sector to balance the requirement for transparency against the public interest in a vibrant competitive process, Siemiatycki (2006) suggests that in Ireland the balance has tipped in favour of confidentiality. The same writer states that the central Private-Public Partnership Unit within the Department of Finance reported that confidentiality in DBFO projects is specifically necessary to provide the private sector with incentives to deliver innovative technologies, limit costs, protect commercially sensitive information, and encourage flexibility to re-engineer business processes (Siemiatycki, 2006:147).

Governance of the Decision to Use PPP – The Value for Money Assessment

The *ex ante* VFM test provides one of the principal mechanisms of accountability for the PPP model and the question of VFM assessment has attracted much attention in the PPP literature. A quantitative assessment of VFM generally involves a comparison of the cost of the PPP with a

³ This point refers to detailed case-study analysis. The Annual Report of the C&AG includes a full chapter on financial commitments under PPP which does provide top-line information on all PPP projects.

hypothetical scenario that estimates the net present value (NPV) of the expected lifecycle costs if the project were to be pursued by traditional procurement (Morallos and Amekudzi, 2009). This hypothetical scenario, which is generally referred to as the public sector comparator (PSC), has been the subject of some critique in the PPP literature. A full discussion of such issues is beyond the scope of this paper but specific concerns in this regard include the possibility of errors in estimating cost and revenue flows and associated probabilities. In addition, the identification and quantification of risks is an inexact exercise and there is evidence to suggest that this element of the VFM exercise can be used to swing decisions in favor of preferred outcomes (Ball *et al.*, 2001). It has been argued that the PSC concentrates on aspects that can be easily quantified and expressed in monetary terms and that insufficient attention is paid to issues such as service quality (Kintoye *et al.*, 2002). Moreover, the importance of transaction costs in the context of PPP procurement has been highlighted by a number of writers (Vining and Boardman, 2008, Lonsdale, 2005, Reeves, 2008) and this aspect is rarely given adequate attention in VFM assessments.

The Central PPP Policy Unit at the Department of Finance is the central point of access to the PPP process in Ireland. The Unit describes its key functions as covering the development of the legislative framework, providing technical and policy guidance to support the PPP process and to disseminate best practice in PPPs. Its main guidelines for procurement under PPP places much emphasis on VFM and according to Morallos and Amkudzi (2009) in their international review of the practice of VFM analysis, Ireland is among the group of countries with the most comprehensive frameworks in this regard.

The most recent guidelines in relation to VFM assessment, issued in October 2007, describe four separate VFM tests which take place at the following stages:

1. VFM Test 1: takes place at the detailed appraisal stage which applies to all capital projects that fall within the capital appraisal guidelines. When a project is under consideration for procurement under PPP the detailed appraisal includes a *PPP Procurement Assessment*. The guidelines require that this VFM test be mainly qualitative in nature and that it covers questions such as whether the project is of sufficient scale and has a risk/operational profile that justifies a PPP approach? And whether the project has the potential to deliver value for money if procured as a PPP?
2. VFM Test 2: involves a compilation of a detailed public sector benchmark⁴ (PSB) prior to commencement of the procurement process.
3. VFM Test 3: takes place when the PSB is compared to private sector bids as part of the tender evaluation process.
4. VFM Test 4: takes place when the PSB is compared to the final bid after negotiations with the preferred bidder are complete and before awarding the contract.

⁴ The public sector benchmark is the equivalent of the public sector comparator conducted in other countries including the UK.

In terms of public accountability, the key question is whether the conduct of VFM assessments is such, that concerns are addressed in relation to accuracy, reliability and manipulation. Besides the schools study by the C&AG (2004) evidence in relation to the conduct of VFM assessments in Ireland is not readily available. Recent work by Reeves (2013b) does however provide information based on his research into PPPs in the Irish water services sector where there are over 60 contracts at various stages of the PPP project life cycle. In all cases the private sector is contracted to design, build and operate (DBO) water infrastructure such as water and wastewater treatment facilities. For the purpose of his analysis Reeves' (2013b) examined the conduct of VFM assessments for six projects and raises a number of methodological issues that cast doubt over the reliability of these estimates. These included:

- Estimates of capital cost costs under DBO were based on data sourced from other Irish local authorities that had recently adopted this form of procurement. However, the number of comparator plants used in the analyses varied considerably with just one benchmark plant used in one case and nineteen in another. Furthermore, the majority of capital cost estimates were based on tendered costs rather than costs agreed in the final contracts.
- Estimates of operating and maintenance (O&M) costs under DBO commonly omitted relevant costs such as those incurred due to re-deployment of labour within the local authority if DBO was the chosen procurement option. Where local authority labour is not transferred to the private contractor the possibility of an incremental cost to the local authority arises.
- In all cases covered a central management charge (estimated as a percentage of all other O&M costs) which is a non-incremental cost was attributed to traditional procurement option.
- In each of the cases covered in this study the practice was to discount cash-flows that were not adjusted for inflation over the contract period. However, it is not clear whether the discount rate applied was 'real' or 'nominal'. Consequently the possibility arises that 'real' cash flows were discounted at a nominal rate.⁵
- The importance of transaction costs in terms of comparing procurement methods was noted above. These were not accounted for in any of the cases examined. Such omissions have the potential to create significant bias in favour of the PPP model given the findings of Dudkin and Vallila (2005) who estimated that transaction costs of average 10 per cent of capital value before contracts reach the stage of operation.

While it must be recognised that these findings are based on a limited number of cases they nonetheless provide insights into the conduct of VFM assessments which are generally kept from public scrutiny. The findings reveal that VFM assessments are open to error and evidence from the UK in particular also raises suspicion about the potential for manipulation (Shaoul, 2005, IPPR, 2001). There is a particular danger that the VFM assessment may be 'rigged' to ensure a preferred outcome if the relevant public authority believes that approval for a particular project will not be granted unless it is procured as a PPP. In such cases, PPP is effectively the only game in town and there is ample evidence that this is a problem that has arisen under PFI in the UK (IPPR, 2001) and Reeves (2011) shows that there are similar governance problems with PPP in the Irish Water Services sector.

⁵ If a higher nominal rate is applied this can potentially favour the PPP option as payments are spread over the life of the contract.

Ex-Post Governance and the Management of PPP Contracts

The governance challenges that arise under PPP do not end once the contract has been awarded. PPPs require monitoring, supervision, performance measurement and relationship management following the execution of contractual agreements and over the life of the contract. The contract document is the principal instrument for regulating the relationship between the public agency and private contractor and therefore serves as an important tool of accountability. As the duration of PPP arrangements can run for decades, accountability depends heavily on factors including the procedures and decision rules included in the original agreement. These include mechanisms for enforcing risk transfer, rewarding success and punishing underperformance (e.g. penalty points, payments deductions). The role of the contract should not however be overstated. The long-time duration and (sometimes) complex nature of PPP arrangements increases the likelihood of relational contracting and the literature on incomplete contracting and socio-legal theory illuminate a host of extra-contractual mechanisms such as trust and reciprocity that also serve to regulate the public-private relationship (Vincent-Jones, 2006).

Effective contract management demands an adequate stock of public sector skills which allows public sector clients strike a balance between enforcing the agreement while maintaining co-operative relations. As Forrer *et al* (2010) assert

PPPs need to be stewarded by the government in order to ensure that public interests are met throughout the arrangement. “[T]he public partner should seek a leadership role that defines the tenor of the partnership” (Ghere 2001, 448). Thus, while both partners develop interdependence in the partnership, ensuring public accountability requires government to play an upper hand. This requires public managers to be aware of various dimensions of public sector accountability (2010: 479).

Governance challenges also arise in relation to the meeting the needs of stakeholders who may not be direct parties to the written contract but who do have a stake in the cost and standard of services delivered. There are a range of such stakeholders including taxpayers, end-users and wider citizenry.

There is a dearth of available information on the governance of PPP contracts despite that fact that the number of contracts where assets are built and services are under provision continues to rise. To gather information regarding the management of PPP contracts Reeves (2008) conducted a study of the first PPP contract in the schools sector. The contract to design, build, finance and operate five post-primary schools was signed in 2001 and the schools opened in 2003. On the basis of data collected from semi-structured interviews with key stakeholders a number of problems that impeded the operation of the PPP project as well as issues that undermined the extent to which effective contract management could enhance accountability under the PPP, were identified.

Among the issues highlighted by school principals was concern in relation to the level of skills and experience of the public sector client (Department of Education and Science) as well as the commitment to enforce the terms of the contract. Despite instances of contractor underperformance, no penalties (e.g. reduced payments) had been imposed thereby raising doubts about the willingness or capacity of the public sector client to transfer risks and effectively manage the contract. Significant problems arose in terms of communication between the public sector client

and the ultimate users of the contracted service i.e. the schools. Particular concern was expressed by schools due to a lack of transparency regarding the rights and responsibilities of parties to the contract. As a result, this PPP has been characterized by marked dissatisfaction on behalf of most schools. From an efficiency perspective the evidence also points to an appreciable level of transactions costs. The conclusion of this analysis is that transparency and the establishment of a sufficient flow of information to all key stakeholders are essential if PPPs are to be characterized by good governance and service providers and public sector managers are to be made accountable. Information is a pre-requisite for effective contract monitoring and enforcement and transparency can secure a level of 'buy in' by stakeholders which can underpin the development of long term cooperation and mutual benefit.

PPP and the Irish Public Finances

A number of questions arise in relation to public finance aspects of PPP investment in Ireland. First, what is the total level of investment under PPP to date and how has it been accounted for in terms of the general government balance and general government debt?

An indication of the level of investment under PPP to date is provided in the annual report of the C&AG. The data in table 3 shows that at the end of 2011 over €2.3 billion of expenditure had committed to PPP projects. Moreover there are commitments of over €4 billion outstanding on 37 PPP contracts (and relevant expenditures which will be spread over relevant contract durations).

Table 3: Expenditure and Commitments under PPP Contracts at end 2011

Department/Agency	No. of Projects	Expenditure to Date (€)	Outstanding Commitment (€m)	Total
Education and Skills	5	255	1,078	1,333
Courts Service	1	59	567	627
Office of Public Works	1	95	658	753
National Roads Authority	10	1,285	1,689	2,974
Environment, Community and Local Government	20	648	37	685
Total	37	2,342	4,029	6,408

Source: Office of Comptroller and Auditor General (2012)

Note: (i) Assumes inflation will average 2% a year over the remaining lives of the contracts. (ii) Amounts shown in relation to projects sanctioned by the Department of Environment, Community and Local Government are the contributions by the Department towards the capital cost of the local authority PPP projects. They do not include expenditure under the contracts by the relevant local authorities, or the outstanding commitments that will have to be met by the local authorities from their own future budgets.

Total commitments of over €6.4 billion represent a significant level of capital (and operating) expenditure under PPP and with another 85 projects in the pipeline (see table 2) it is evident that PPP will continue to play an important role in infrastructure and public service delivery for decades to come.

How these expenditures are treated in terms of key fiscal aggregates is an important question given the importance attached to this issue since PPP was launched in 1999. It is interesting to note that the Minister for Finance initially justified PPP on the basis of its compatibility with the objective of fiscal constraint. The arguments with regard to VFM (presented above) indicate that Minister's assumption may plausibly be described as 'heroic'. Nevertheless the Minister's statement certainly points to the attraction of PPP on the basis that it provides a potential means for investment that would not count against public borrowing (i.e. 'off-balance-sheet' financing). Whether this was actually the case or not with respect to the calculation of the General Government Balance and General Government Debt was not clarified until 2004 when Eurostat decided that the relevant accounting treatment depended on the level of risk transferred. Data recently accessed from the Department of Finance (to be published shortly) shows that the biggest 22 Irish PPP projects have been officially recorded as 'off-balance sheet'. This means that the contractual capital value (€5.05 bn) was not recorded as general government expenditure during the period of construction. Instead, in accordance with the accounting rules devised by Eurostat, the capital and operation costs (€6.03 bn) will be recorded as expenditure and will be added to general government debt on a phased basis over the relevant contractual periods (i.e. in excess of 20 years) (for more information please see appendix). This accounting treatment is clearly attractive to governments especially at times of fiscal stress. However, it is clear that what is bought now will be paid for later and the extent to which the net financial position of the exchequer is improved or not depends largely on whether value for money is achieved on individual projects.

Economic Impact of PPP in Ireland– Value for Money

There is a distinct scarcity of information with regard to whether PPP has (or is expected) yielded VFM in the Irish case. Establishing the magnitude of VFM (if any) is not possible until the end of the lengthy contract period that applies in the case of PPP. Hence, most studies of VFM are based on the *ex ante* VFM tests that are normally conducted as part of the process used to decide on the procurement method adopted in individual cases. The methodological issues and challenges that arise in the conduct of such tests were covered in the earlier section on governance. It is important that these issues are borne in mind when considering the evidence on VFM. In the Irish case, such evidence is only available in the case of first schools PPP and some contracts in the water services sector.

VFM on Schools PPP

The most detailed information on VFM was published by the Office of the C&AG (2004) which conducted a detailed study of the first schools project procured under PPP. The C&AG reported that the initial VFM exercise conducted by the Department of Education and Science (DOES) estimated that PPP would yield cost savings of 6 per cent compared to traditional procurement. On the basis of their examination however, the C&AG highlighted a number of significant errors in the original VFM exercise. The principal errors were in relation to the timing and discounting of payments and the calculation of the residual value of the school buildings at the end of the contract. Having corrected for these errors the C&AG estimated that the PPP would be between 13 per cent and 19

per cent more expensive. The C&AG also accounted for elements of the deal that changed after the VFM exercise (namely, changes in interest rates and treatment of VAT). Including these elements ultimately led the C&AG to conclude that the final PPP deal was in the range 8 per cent to 13 cent more expensive than under traditional procurement.

Water Services

Reeves' (2013a,b) study of VFM assessments for PPP in the Irish water services sector was discussed in the earlier section on governance. When the whole-life cost of providing water services was compared under both procurement models, *ex ante* appraisals indicated that PPP would provide better VFM in 5 of the 6 assessments examined. On average, the whole-life cost of PPP procurement was estimated to be 4.5 per cent lower compared to traditional procurement.⁶ Reeves (2011, 2013a,b) raises concerns about the reliability of these estimates. Moreover, he shows that in cases where local authorities (and consultants that prepared VFM assessments) engaged in stakeholder consultation around the estimates, a collaborative approach led to substantially revised estimates of VFM. In one case, Reeves (2011) shows that the estimated VFM under PPP was revised downwards from 9.5 per cent to 0.8 per cent (of whole-life cost under traditional procurement) following consultation. In another case Reeves (2013b) shows that after consultation, estimated VFM was revised from 2.3 per cent in favour of PPP to 2.25 per cent in favour of traditional procurement. Whereas both cases highlight the practical difficulties encountered in conducting VFM assessments they also indicate that the magnitude of VFM is relatively small. When one considers that these estimates do not account for transaction costs, the potential for achieving VFM in these cases appears limited.

In addition to some detailed case-evidence there is some piecemeal information available that sheds some light on the performance of PPP in VFM terms. The question of risk transfer deserves special mention in this context. The scope for transferring more risk to the private sector constitutes one of the principal arguments in favour of PPP. In the Irish case however there have been worrying examples of where the PPP contractors have failed to take on the level of risk that was originally envisaged. One example is the hospital co-location contracts that were cancelled because the private contractors could not bear the financial risks expected by the HSE. According to Reeves (2013b) the termination of the PPP for new housing in St. Michaels Inchicore can be mainly understood in terms of the failure to adequately transfer risk to the private sector.

The (possibly) loss-leading contractor withdrew from the contract due to inability to absorb the financial risks associated with the collapse of the Irish housing market. The contractor also pleaded an inability to assume planning risks which materialized in some contracts where restrictions were placed on dwelling sizes and reductions were required in the overall size of the developments. The reluctance of the private sector to assume risks has been highlighted in the PPP literature as a factor that substantially undermines the case for PPP (Ball *et al.*, 2001, Edwards and Shaoul, 2003, and

⁶ This compares with claims by the Department of Environment, Heritage and Local Government that compared to traditional procurement, PPP DBOs represent average savings in the range of 10%-20% in relation to capital costs and 5%-10% for operational costs (C&AG, 2012: 81)

English and Guthrie, 2003). The private contractor's behavior in this case exemplifies how failure to adequately transfer risk can have drastic consequences. Moreover, as Curran (2008) points out the contractor's failure to assume risks is difficult to justify as "he is one of the most experienced property developers in the country. It is hard to imagine that, when he won these tenders by submitting far and away the lowest tender price, he didn't realise the normal planning process would still apply" (Curran, 2008). The failure of this PPP demonstrates one of the fallacies of the risk-sharing argument. Whereas elaborate PPP contracts can seek to transfer risks to parties that are best placed to assume them the ultimate risk taker is the user of public services.

There are also grounds for concern with regard to risk sharing on some roads contracts. The Office of the C&AG (2012) explains how in two roads contracts the National Roads Authority (NRA) have entered into a sharing of traffic risks. As a result, the NRA is obliged to make payments to the PPP contractors if traffic falls under certain levels. As traffic levels on the Clonee-Kells and Limerick Tunnel project have fallen below original projections the state commenced making payments in 2011 (€5.2 billion) and the C&AG has concluded that on the assumption that traffic on both routes will grow at an average of 2.5% a year the State will continue to make traffic guarantee payments to the PPP companies until 2025 (Clonee-Kells) and 2041 (Limerick Tunnel). It is noteworthy that the NRA has been perceived to have driven hard bargains on risk transfer with PPP contractors on the ten projects to date (Reeves, 2005). Nonetheless the economic crisis and subsequent decrease in traffic levels has resulted in the state paying more than originally envisaged. This highlights the challenges when contracting under conditions of uncertainty which often apply under complex, long-term, PPP contracts. Moreover it impacts negatively on the scope for achieving VFM on these contracts, a point explicitly recognised by the C&AG (2012: 90).

A final point regarding risk transfer arises following the introduction of a new form of contracting for all major public works in 2007. The C&AG (2012) note that new contracting arrangements include fixed-price contracts which are likely to give better VFM under traditional procurement. In addition, under the new form of contracting, all construction risks (other than archaeology) are transferred to the contractor. This change in the form of contracting will reduce the prospects for better VFM under PPP as construction risks will now be borne by contractors under traditional procurement and PPP.

Given the scale of Ireland's PPP programme to date it should be a matter of some concern that so little is known about whether PPP has succeeded in delivering on one of its main objectives i.e. VFM. The dearth of available information in this regard does little to assure the wider public that PPP serves their best interests. Where evidence is available however, it fails to lend convincing support for PPP as a procurement model that delivers VFM for the taxpayer.

Concluding Remarks

On the basis of the evidence reviewed for this paper it is not possible to confirm that PPP has met the key policy objectives generally attributed to the PPP model of procurement. The evidence in the Irish case is not strikingly different from that available from other jurisdictions which also cast serious doubt about whether PPP can deliver better quality, cheaper infrastructure on time and within budget as many of its proponents would have us believe. The most instructive case from abroad in this respect is that of the UK where over 700 PPP projects have reached financial close and

around £55 billion of private sector finance has been raised. In December 2012 the UK government launched a new approach to PPP. It recognised a number of problems with the PFI including: (1) expense and the slowness of procurement; (2) insufficient flexibility during the operation period with the public sector sometimes getting locked into contracts that cannot be altered when circumstances change; (3) lack of transparency about issues such as the future liabilities created by PFI and the returns made by investors; (4) problems with risk transfer particularly with the transfer of operational risks resulting in the public sector paying expensive risk premia; (5) concerns about windfall gains to equity investors which have raised questions about VFM on PFI projects.

The scale of PPP activity in the UK is such that the Irish case is not directly comparable. However it is striking that after thirteen years of procurement under PPP, there has been no official in-depth analysis of the experience to date. Yet PPP is now a major part of the current governments plan to stimulate the economy. The absence of any publicly available body of evidence in support of this plan represents a major shortcoming in terms of the formation of economic policy.

The evidence presented in this paper suggests that decisions to adopt PPP in Ireland (and possibly other jurisdictions) have been guided by two main criteria. Past decisions to adopt PPP have been guided by the relatively impoverished VFM concept and the next wave of PPP procurement is largely being driven by fiscal pressures and the attraction of 'off-balance sheet' financing. Neither objective serves as a complete and satisfactory guide for policy makers. In this context Vining and Boardman (2008) ask, what criteria should society use to judge the best way to provide infrastructure? Their answer provides a complete description of what is required in normative terms:

From a normative perspective, one potential criterion is that governments should seek to minimize the sum of total social costs...this means that governments should minimize the sum of the production costs they incur (including payment to third parties), plus their transaction costs, plus (net) negative externalities, holding quality constant. As some of these costs, especially for major infrastructure projects, can occur over an extensive time period, government should seek to minimize the present value of these costs. This criterion emphasizes that in assessing the consequences of alternative ways to provide infrastructure, one should include all government transaction costs that derive from the project even if they do not appear in the project's budget. Also one should include all externalities and account for quality differences; these costs rarely show up in any budget (2008:150).

The merit of these criteria is that they view PPP from a wider societal perspective. Even if PPP projects are shown to yield VFM, total social costs will not necessarily be minimised due to the significant transaction costs that arise in the case of a complex contracting model such as PPP. Considering PPP in terms of wider social costs illuminates many of the challenges that must be addressed by policy makers if the problems that have bedevilled the PPP model of procurement are to be overcome (see Boardman and Vining (2008) for an excellent set of suggestions). While there is recognition of some of these challenges in some jurisdictions (e.g. the UK), the same cannot be said in the case of Ireland. This does not augur well for a country that is set to place increased faith in the PPP model in the coming years.

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APPENDIX 1

Table A1: PPP Projects Abandoned or Suspended since 2009

Project	Comment
Roads -	
N17/18 Gort – Tuam	Reinstated July 2012
M11 Gorey – Enniscorthy	Reinstated July 2012
Rail	
Metro North	
Metro West	
Dart Underground	
Lucan LUAS	
Courts	
Courts Bundle (County Towns)	
Prisons	
Mountjoy Complex Relocation	
Munster Prison Complex	
Arts	
Abbey Theatre	
National Concert Hall	
Office of Public Works	
Decentralisation of Government Offices	
Education	
Bundle 1 – Third level buildings	
Bundle 2 - Third level buildings	
Bundle 3 - Third level buildings	
Environment (ex Water Services)	
Greystones Harbour Re-Development	Suspended and now re-commenced on phased basis
Dublin Waste to Energy	Suspended
Social Housing – O’Devaney Gardens	Contract Signed.
Social Housing – St. Michaels, Inchicore	Contract Signed
Social Housing – Dominick Street	Contract awarded but not signed
Social Housing – Infirmary Road	Contract awarded but not signed
Social Housing – Sean McDermott St.	Contract awarded but not signed
Health	
National Network for Radiation Oncology	Some already completed
Hospital co-location (2 contracts)	Not officially recorded as a PPP

APPENDIX 2

Accounting treatment of Conventional Procurement Contract & PPP contracts⁷

⁸Project Details

2 year construction period and 20 Year operation period.

Capital cost of €1,000m (split 25% year 1 and 75% year 2) provided by the Exchequer in the Conventional Procurement contract and by private sector finance in the PPP contract.

Annual unitary payments by government €62m (capital repayments of €50m plus €12m for interest and services provided)⁹

For simplicity it is assumed that the €12m for interest and services is split 50:50, i.e. €6m for each regardless of procurement method

Note : A minus sign denotes a worsening of the position.

Conventional Procurement

Year	Construction		Operation			Total Project Costs over 20 years
	1	2	1	2 etc	20	
GGBalance impact	-250	-750	-12	-12	-12	1,240
EBalance impact						
1. Voted Current Expenditure	0	0	-6	-6	-6	-120
2. Voted Capital Expenditure	-250	-750	0	0	0	-1,000
3. Central Fund	0	0	-6	-6	-6	-120
Total EBalance impact	-250	-750	-12	-12	-12	-1,240
Capital Envelopes impact	-250	-750	0	0	0	-1,000

PPP On Balance Sheet¹⁰

Year	Construction		Operation			Total Project Costs over 20 years
	1	2	1	2 etc	20	
GGBalance impact	-250	-750	-12	-12	-12	-1,240
EBalance impact						
1. Voted Current Expenditure	0	0	-62	-62	-62	-1,240
2. Voted Capital Expenditure	0	0	0	0	0	0
Capital Envelopes impact	-250	-750	0	0	0	-1,000

PPP Off Balance sheet

Year	Construction		Operation			Total Project Costs over 20 years
	1	2	1	2 etc	20	
GGBalance impact	0	0	-62	-62	-62	-1,240
EBalance impact-						
1. Voted Current Expenditure	0	0	-62	-62	-62	-1,240
2. Voted Capital Expenditure	0	0	0	0	0	0
Capital Envelopes impact	-250	-750	0	0	0	-1,000

Source: Department of Finance (2005b) *Guidance Note on the Accounting Treatment of Capital Projects for General Government Purposes* - Standing Committee on the impact of Investment on the GGB: Dublin: Stationery Office.

⁷ Some projects undertaken by local authorities and paid for out of own resources are not currently included under the Capital Envelopes but do have GGB/GGDebt impacts.

⁸ For sake of simplicity, the same contract cost has been used in each example.

⁹ The unitary payment is treated as voted current expenditure and is not split between voted capital and current.

¹⁰ For on-balance sheet projects, the GGB impact of the unitary payment excludes the capital repayment element. This is because for these projects the capital cost has been recorded against the GGB upfront and to record it again would be double counting.