
Public Bodies' Perceptions on Risk Transfer in the UK's Private Finance Initiative

Simon S. Gao and Morrison Handley-Schachler
School of Accounting and Economics
Napier University Business School

Abstract

This paper presents a preliminary study of public bodies' perceptions relating to risk transfer in the UK private finance initiative (PFI). The study is based on semi-structured interviews conducted during the period from April to October 2002 at three public bodies which had used PFI to finance capital projects located in Scotland, Wales and England. Overall there is a mixture of impressions from the interviewees on attitudes to risk transfers and how risks were quantified in decision-making. The study reveals that PFI has definite advantages over conventional contractual and financing arrangements for public sector projects in a number of areas. However, these advantages do not predominately derive from risk transfer as generally suggested by the UK government. The client-contractor split, rather than risk transfer, was seen as being in many ways the most beneficial feature of the PFI. Given the lack of experience and expertise of public sector bodies in assessing and valuing risks, more training of risk management in procurement is clearly needed for public sector managers.

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Introduction

The Private Finance Initiative (PFI), introduced by the British Conservative government in 1992 to encourage the UK private sector to become more involved in public sector development projects, is a system under which capital developments for the public sector are funded by the private sector. It reflects the idea that government should, wherever possible, cease to be the direct provider of services and should instead purchase those services on behalf of its citizens. The current Labour Government embraced the concept seeing PFI as a means of grafting private capital discipline and efficiency on to public sector projects (Kirk and Wall, 2001, p.41). In the three years from 1997 to 2000 alone, over 150 projects were signed across the UK at a capital cost of over £12 billion, with further projects worth an additional £20 billion planned (HM Treasury, 2000). In education, by December 2001, thirty-seven separate PFI deals had been signed for schools alone, with a total value of £2 billion (Hirst, 2002a). According to the Audit Commission (2003), over 500 primary and secondary schools are part of PFI deals that are signed or are currently in procurement (covering the period 1997/98 to 2003/04). In addition, there are some 200 schools in three local education authorities in England that are involved in more specific PFI schemes such as the provision of IT or catering services. For the National Health Service (NHS), the Department of Health has signalled an intention to use the PFI for most of the 42 new hospitals envisaged between 2002 and 2008 and to extend the PFI into community-based services (Department of Health, 2002). Despite some decline in popularity in the early 2000 (Harding, 2002) and a more cautious attitude to PFI deals emerging in private industry (Hirst, 2002b), a steady stream of PFI projects continues to flow and the PFI is now a major player in public sector infrastructure provision. It is seen by the Government as a major vehicle for modernising public service delivery (Audit Commission, 2003).

Accordingly, there has been a growing interest in research on the PFI (e.g., Grout, 1997; Akintoye *et al.*, 1998; Broadbent and Laughlin, 1999; Hodges and Mellett, 1999; Mayston, 1999; Ball *et al.*, 2000; Price and Green, 2000; Gao and Handley-Schachler, 2001; Froud and Shaoul, 2001; McCabe *et al.* 2001; and Handley-Schachler and Gao, 2003). These studies demonstrate the problematic nature of the PFI and highlight the dangers of viewing PFI as an effective means of outsourcing large-scale public services. Some studies (e.g., Ball *et al.*, 2000; Gao and Handley-Schachler, 2001; Froud and Shaoul, 2001) warn of the likely errors in evaluating and subsequently transferring risks by the public sector bodies when they enter into PFI projects with private sector

partners. As far as the transferring of financial risk is concerned, Akintoye *et al.* (1998) find that many bodies involved in PFI viewed financial risk (e.g., debt risk, banker's risks) as less important than many other risks (such as design risk, construction cost risk, performance risk etc.).

Gao and Handley-Schachler (2001) argue that managing financial risks of public projects is very important for the public sector for a number of reasons. Firstly, the liabilities of public sector bodies are generally underwritten by taxes paid by the public, giving rise to a potential illusion that no expense is ultimately unacceptable. Second, where substantial financial losses are incurred, the alternative to increasing the tax burden to cover that loss is usually to decrease the provision levels of some services, frequently those which attract little public attention or which only benefit uncomplaining minorities. A further response to shortages of financial resources caused by unexpected adverse financial outcomes is to postpone necessary capital expenditure or maintenance work, thereby potentially preventing capital expenditure from being spread over time periods in the most advantageous fashion or occasioning a requirement for higher expenditure on repairs and renewals as a result of a lack of timely maintenance work. Poor management of financial risks can also have effects stretching some way into the future.

While financial risks can be defined from different perspectives, they extend well beyond the effects of inflation rates and interest rates in financial instruments. It is also necessary to consider the potential effects of poor capital works, faulty initial system development or poorly written long-term service agreements. The financial risks attendant on poor capital construction work can extend to increased maintenance work, higher lighting and heating costs, the need for secondary constructions, increased accident compensation, increased public and employer's liability insurance premiums, and unplanned demolition and replacement costs. The financial risks attendant on poor information technology servicing decisions can extend to unplanned hardware and software replacement, repeated retraining and costs of lost data and service interruption.

This paper aims to provide an analysis of financial risks involved in PFI projects and needs for risk sharing and transfer by examining the views of public sector professionals involved in a small number of PFI projects. It is based on the findings of semi-structured interviews conducted during the period from April to October 2002 at three public bodies which had used PFI to finance capital projects located in Scotland, Wales and England. Overall there is a mixture of impressions from the interviewees on attitudes to risk transfers and how risks were quantified in decision-making. While PFI has definite advantages over conventional contractual and financing arrangements for public sector projects, these advantages do not largely derive from risk transfer as generally suggested by the UK government. The client-contractor split, rather than risk transfer, was seen as being in many ways the most beneficial feature of the PFI.

The remainder of this paper is organised as follows. The next section is concerned with the background of the PFI and the importance of risk transfer in PFI deals. The third section describes the interviews and analyses the findings and implications. The final section concludes the paper and highlights the areas for further research.

The Private Finance Initiative and Risk Transfer

There are two types of PFI projects: Design, Build, Finance and Operate (DBFO) and Joint Venture (JV) projects. In DBFO projects, the private sector partner not only carries out all of the construction and maintenance work and takes charge of the day-to-day management of the facilities provided but may also recover costs through charges to the public. In JV projects, the private sector carries out at least some of the construction, maintenance or management but does not recover all of the costs directly from the public, receiving some subsidy from the public sector. The risk transfer aspect of PFI projects is relevant to both types of projects (Gao and Handley-Schachler, 2001).

In theory, the PFI is not an alternative source of funding public sector expenditure of any kind, though there is certainly the potential for it to be misused as a means of off-balance-sheet financing for capital projects. This is because the source of funding of any assets built under the PFI must be shown as a liability on the balance sheet of a public sector body at the time at which that particular body becomes the effective owner of those assets. Basically, PFI contracts requiring the construction of fixed assets are contracts enabling public sector bodies to use the assets, without the necessity of owning them. Legal ownership and effective control of the assets may remain with the private sector partner throughout the lifespan of the PFI project.

While PFI is not a form of public sector borrowing, contracts under PFI are certain to have very much the same effect on future public sector finances and taxation as public sector borrowing does. In other words, the existence of a PFI project increases future payments of taxpayers' money to private sector bodies to cover the cost of creating fixed assets, after factoring in the cost of capital. The private sector lender bears the initial cost of the asset and requires repayments and interest from the private sector PFI contractor, who in turn passes on the cost of repayments and interest to the public sector PFI partner, who in turn passes on the cost to the taxpayer as and when the repayments and interest are recovered by the private sector partner.

What marks the PFI out from other outsourcing methods is the scale and duration of PFI projects. PFI projects typically involve the provision and management of capital assets over a long period. PFI contracts cannot be easily severed by either the public sector or the private sector partner and may last in excess of 30 years. The scale and duration of PFI deals are significant, because of the responsibility of public sector bodies to ensure that substantial amounts of taxpayers' funds are not put at risk.

The most important issues to consider in the PFI are '*additionality*' (i.e., does the use of the PFI allow a higher level of capital investment?), '*value for money*' and '*risk transfer*' (Ball *et al.*, 2000, p.97). Value for money and risk transfer are interconnected. Risk transfer has been considered the linchpin of value for money in PFI schemes (Froud and Shaoul, 2001) and is a key criterion in testing value for money.

The National Audit Office (1997) emphasises that "appropriate risk transfer is crucial to obtaining value for money in privately financed projects." As argued by Mayston (1999), however, the process of attempted risk transfer itself could add to the evaluation, transaction, negotiation and monitoring costs involved, which can significantly reduce the attractions of PFI projects. Actually, a high risk premium paid for a small amount of risk transferred itself represents poor value for money (Mayston, 1999, p.253). Risk in practice is not a simple uni-dimensional commodity that can be costlessly assessed and completely transferred to the private sector. As noted by Mayston (1999):

"A large part of the risks which PFI contracts may seek to transfer to the private sector relates to demand risk concerning the level of demand by the public sector for the services offered by the PFI facility. ... It is important to note here that both the private PFI provider and the public sector procuring entity are bearing risks, and that all risk of demand fluctuations is not transferred to the private sector." (p.254)

The Treasury Taskforce on the PFI issued the following guidance on risk transfer in November, 1997 (HM Treasury 1997, paragraph 3.17):

"The principle governing risk transfer is that the risk should be allocated to whoever from the public or private sector is able to manage it at least cost. This is fundamental to the PFI."

While insufficient risk transfer will not only undermine value for money savings but place the asset on the public sector's balance sheet (HM Treasury 1996, p.1), the literature has shown some

ambiguity in classifying and measuring risks in the PFI (Gallimore *et al.*, 1997). Table 1 lists some risk factors considered in some previous literature which are clearly overlapping with ambiguous interpretations.

Table 1
Risk Factors Identified by Previous Studies

Private Finance Panel (1995)	Gallimore <i>et al.</i> (1997)	Akintoye <i>et al.</i> (1998)
<ul style="list-style-type: none"> • Design and construction risk (to cost and time) • Commission and operating risk (including maintenance) • Demand for volume/usage risk • Residual value risk • Technology/obsolescence risk • Regulation and legislation risk 	<p>a) Risks which arise with the creation of the asset but cease thereafter</p> <ul style="list-style-type: none"> • site acquisition risk • planning approval risk • design risk • construction risk (i.e. cost and time overruns) <p>b) Risks which persist for the life of the arrangement and possibly beyond</p> <ul style="list-style-type: none"> • Maintenance risks • Facilities management risk • Occupation-demand (revenue) risk • Obsolescence risk • Residual value risk 	<ul style="list-style-type: none"> • Design risk • Construction cost risk • Risk of cost overrun • Performance risk • Contractual risk • Tendering cost risk • Risk of delay • Volume risk • Risk of operating/maintenance cost • Payment risk • Legal risk • Financial risk • Planning risk • Market risk • Environmental risk • Residual value risk • Commissioning risk • Development risk • Project life risk • Possible change in government • Safety risk • Debt risk • Bankers risk • Changes in European legislation • Credit risk • Land purchase risk

While risk transfer is central to PFI, there are obstacles to the process of risk transfer. On the one hand, it is not easy to define and quantify risks (Gallimore *et al.*, 1997; Gao and Handley-Schachler, 2001; Froud and Shaoul, 2001). Some measured risks are transferable, but others may be untransferable. However, splitting of these risks has proved to be extremely difficult, as is shown in commercial projects. On the other hand, the principal difficulty in the transfer process is that the party to whom the risk is being transferred may object to accepting the risk. This may especially be the case with the risk of income shortfalls, where responsibility for disappointing financial performance may not be easy to apportion. Both the client side and the contractor may take decisions which increase or reduce the amount of income which will be received. Moreover, there is a limited ability among public sector managers to anticipate, define and attach risk probabilities and values to a range of outcomes (Froud and Shaoul, 2001). In addition, risk transfer does not give attention to new risks that may be created by the use of PFI. There is no requirement to assess to what extent new risks are created (Froud and Shaoul, 2001). As Froud and Shaoul (2001, p.252) note, 'how much risk should be transferred is a matter of some ambiguity'. Available evidence suggests confusion about both meaning and measurement of risk transfer (Gallimore *et al.*, 1997; Froud and Shaoul, 2001). Very little risk has been transferred and/or a very narrow conception of risk was defined (Froud and Shaoul, 2001, p.257). As found by Akintoye *et al.* (1998), the PFI parties (e.g. clients, contractors and lenders) have adopted different methods and techniques in dealing with risk assessment of PFI schemes and they also approach risks in different ways.

An example of this appears to be furnished by the case of Avery Hill student village, built by Wimpey for Greenwich University, discussed by McWilliam (1997), as part of a series of papers by those

closely involved in PFI projects. Although the private sector contractor accepted the more easily controllable cost risk, the public sector bore all of the income risk, even though some of the quality factors that might have led to low occupation levels were in the hands of the contractor. There was clearly the possibility of actions by either partner affecting occupancy levels¹.

The Avery Hill case suggests that the client departments may sometimes be too willing to accept income risk. The retention of income risks in the public sector, however, should not be viewed as inevitable and has some disadvantages. The practice of allocating income risks to the public sector appears in part to be inspired by a perception that those actions of a public sector body which will affect the income streams from a PFI project are random and unfathomable. This is not ordinarily the case. Those actions can be expected to be based on public policies which are either rational or determined by persisting political views or predictable political trends. It is therefore open to the private sector partner to take account of likely public sector actions before tendering for PFI projects. We argue that there are two dangers in the public sector body retaining income risks, beyond the general danger of costs falling on the taxpayer rather than on investors who have been offered a choice about whether to take the risk. First, if the public sector body has not itself properly considered the business case for the provision of facilities, it may find itself committed to paying for facilities which it does not actually want. This may result in deliberate efforts to make use of the facilities anyway, which may distort decisions on other matters. Second, demand for the facilities is likely to be heavily influenced by factors which are within the private sector partner's control, such as quality and fitness for purpose. If the private sector partner does not bear any income risk, the result is that there is a reduced incentive to make the facilities attractive to prospective users.

There may, however, be a necessity to pay a higher risk premium in some cases in return for the private sector accepting a higher share of income risks. The overall risk premium demanded would then form a factor in any decision on whether to transfer risks to the private sector, retain a limitable risk within the public sector or avoid the project altogether. The last option would especially need to be considered in the event that an extreme reluctance of the private sector to accept the income risk reflected a complete lack of confidence in the utility of the project.

We would argue that, because most risk transfers will result in the private sector partner building a risk premium into the contract price, risk transfers might often prove to be the least desirable risk-management option for public sector bodies involved in PFI schemes and other public projects². To both the public sector and the private providers more desirable options include structuring incentives to reduce or eliminate risks, such as those caused by unnecessary uncertainties about variations in resource use, starting with a process of capturing information about why such a risk exists (for example, why variations in resource use occur). As far as the risk transfer is concerned, the receiving party has to possess both the competence to appraise risk adequately and the expertise and experience necessary to control or minimise it. It would be wrong to presume that the private sector managers are all better in assessing and managing (i.e. controlling and minimising) risks than their public sector counterparts.

Concerning the cost of financing, there is general agreement that the public sector (because of its tax-raising powers) can borrow more cheaply than the private sector. Thus the private sector will face higher interest rates when borrowing to finance a PFI project. The Treasury Taskforce (Treasury Taskforce, 2000) identifies the current weighted average cost of private sector capital on PFI projects as between one and three percentage points higher than public sector borrowing³. The way in which the projects are funded can also have an impact on costs of financing. PFI projects are usually part funded through equity with the usual split being 90% debt and 10% equity (Ball *et al.*, 2000). Clearly such high levels of debt might make the borrowing partner vulnerable to the fluctuation of interest rates. Certainly, neither the private sector nor the public body would be

able to quantify the interest rate over the period of 30 years or more. As a result of this uncertainty, the private sector borrowers may be charged higher rates than expected. Ultimately the probable cost of financing which will have to be charged by a private sector partner will have to be passed to the public sector body through charges in the same way as other costs. However, the private sector may also need to build in a margin of safety on interest rates through a risk premium in the cost of a PFI project, whereas a public sector borrower under conventional financing arrangements (or any borrower in a scheme where there is no purchaser-provider split of the kind inherent in the PFI), could deal with the interest rate risk by varying charges to users (or taxes) to meet actual interest rate fluctuations when they occur.

Public Bodies' Perceptions on Risk Transfer – Results of a Preliminary Survey

In order to explore how risk is quantified in practice and to what extent risk transfer is quantified in PFI decision-making by public sector bodies, semi-structured interviews were conducted during the period from April to October 2002 at three public bodies (a local authority, an NHS Trust hospital, and a higher education establishment) which had used PFI to finance capital projects located in Scotland, Wales and England. Four senior managers (of whom two are finance directors, one a senior risk manager and one a treasurer) from the public sector organisations who were involved in PFI decision-making were interviewed, with each interview lasting 45 minutes to 1 hour.

Given the focus on public sector management's perceptions of financial risk and risk transfers involved in PFI projects, we primarily selected interviewees in accordance with two broad criteria. First, we wished to ensure that the public sector bodies involved included a local authority, an NHS Trust and an education establishment, as these types of body have utilised the PFI extensively in the past decade. Second, we wished to include public sector organisations across the country, in case there were any differences in PFI practices or attitudes between Scotland, Wales and England. The three public sector bodies were identified from invitations to tender placed in the Official Journal of the European Communities between January 1996 and December 1999. Confirmation was obtained from other internet sources, including the websites of Partnerships UK⁴ and the Scottish Executive⁵ and those of the public sector bodies involved, that the PFI projects in question were going ahead and that substantial progress had been made, at least to the extent of PFI contracts having been let⁶. The outline interview questions are given in the appendix.

Overall a mixture of impressions arose from the interviews with senior managers from these three public sector establishments involved in the PFI on attitudes to risk transfers and how risks were quantified in decision-making. One organisation entirely relied on external consultants for the calculation of an acceptable risk premium, which was an essential piece of information in deciding whether the PFI option offered the best value for money. The public sector organisation itself had little knowledge about how the expected costs of project risks were modelled. This is consistent with the recent findings by the Audit Commission (2003). One organisation has calculated its own expected risk values based on probabilistic future projections, which were in fact very much in line with the calculations used independently by the private sector in pricing the contract. The third organisation did not use a comprehensive model for risk pricing and gave little attention, for example, to financing risks but did give some consideration to income risk.

All the organisations involved felt that there were some advantages in having the PFI option available and that some benefits had been realised by using the PFI for some projects. All the interviewees considered that the private sector were in a better position to manage some risks than the public sector bodies, either because they have the experience and expertise or because private consortia had greater freedom and scope to manage risks. However, there were other risks in which the public sector was felt to have more experience, such as the income risks arising from core activities and contracts in the NHS.

Interviewees at all three public sector organisations commented on the beneficial effects of the client-contractor split which arises as a consequence of PFI schemes. This was variously said to be very beneficial for cost control, because the contractor was unable to push through changes in the scope of the project by suggesting additional works not covered by the original contract, and to be beneficial for risk allocation.

The client-contractor split, in fact, rather than risk transfer, was seen as being in many ways the most beneficial feature of the PFI. It is, of course, possible to establish a clear client-contractor split in any public sector project carried out using private sector contractors. The benefit of the PFI may be that it lays down very formal tendering and contracting procedures and also requires a contract price to be agreed at the outset. This may contain lessons for public sector managers involved with private sector contractors in general, as it appears from this that the client-contractor split does not work as well as it could do in non-PFI projects. The principles of drawing up clearly defined contracts before the commencement of work, having a clearly stated price for the whole project and having a formal procedure for agreeing variations can be observed without necessarily going down the PFI route. There may also be lessons for in-house projects but here the client-contractor split is more problematic because the client department will have no means of preventing the cost of scope changes initiated by the contractor department falling on the public sector body as a whole.

Interviewees at two of the bodies involved stated that PFI construction schemes were far more likely to be completed by the planned completion date and within the original financial budget than non-PFI schemes. This may well be the result of the greater effectiveness of the client-contractor split, which was felt to be an important feature of the PFI. It may also be a reflection of the effectiveness of construction cost risk transfers to the private sector, as this gives the private sector a much better incentive to manage the construction process efficiently.

This is in contrast to the Audit Commission's finding (Audit Commission 2003:21) that early PFI schools were no more likely to be completed on time than schools financed in other ways. The Audit Commission, however, noted that this may well have been because schools generally did not suffer from the time overruns that often occurred with other buildings such as hospitals and prisons. They also suggested that early PFI schemes may have experienced greater delays than later ones.

A further important aspect of the PFI was felt to be the fact that the private sector contractor could not walk away from the project after the completion of the construction phase. This resulted in a more joined-up approach to the provision and management of assets. Because the private sector contractor was involved in the continuing maintenance of the facilities and would be using the facilities to provide a service and incurring premises-related costs in doing so, the design of buildings was likely to be more practical, energy efficient and user-orientated under the PFI than in conventional projects.

If the private sector does not manage the process efficiently under PFI, of course, that will not usually have any effect on the public sector partner's cost. However, the observation was made by public sector bodies in both the NHS and the Higher Education sector that the PFI was better at delivering projects not only within the cost budget but also on time than conventional contracts. This is highly advantageous, as late completion of capital works can mean disruptions to public services which depend on the assets being constructed and additional expense in finding temporary facilities. The improved timeliness of project completion may be a positive side-effect of improved incentives for the private sector to carry out work efficiently in cost terms, by using up less labour and machinery time. It may also be the result of the increased threat of compensation claims under PFI contracts if the work is completed late. A third factor may be the

fact that where income-generating activities are to be run by and for the benefit of the private sector any delay in the completion of construction work will result in private sector losses.

At two of the public sector bodies, some income-generating activities, such as catering, car park provision and the letting of retail premises carried out at PFI-built premises, were deliberately left to the private sector with the private sector partner taking on all the financial risks and rewards of these activities, even though this was likely to represent a missed opportunity to generate substantial income. The reason for this decision was that the activities involved were not core activities of the public sector body involved and it was therefore felt to be undesirable to spend time and money on them. By placing these activities entirely in the hands of private sector partners the public sector was left free to concentrate on carrying out its own primary functions.

It is worth remarking on the potential costs and benefits for the public of this approach to income-generating activities. Obviously, there is a cost to the public purse, in that the income will not be available to fund public sector activity, which may mean that there are missed opportunities to reduce taxes or increase services. On the other hand, it does mean that employees of public sector bodies are free to devote their time to fulfilling the purposes for which those bodies were actually set up, thereby providing a better core service.

Some sharing of risks and rewards occurred. For example, one organisation had insisted that the gains from the sale of the premises for more than the amount projected at the end of the PFI rental period should be shared between the public and private sector partners. This, however, amounts to the sharing of a capital gain (or the effects of a smaller than expected loss of value), rather than of the risk and rewards attaching to a continuous income stream. The administration of a one-off sale and of the distribution of the proceeds of the sale could be expected to be far less onerous than that of an ongoing trading department. Moreover, the form of expertise required to administer property sales could not be dispensed with in the vast majority of large public sector bodies and this form of income risk therefore does not require the acquisition of management staff with different specialist skills from those of existing staff. This makes the management of risks attaching to capital receipts potentially less difficult for the public sector than the management of trading income.

A major benefit of PFI, identified by a local authority, and one which goes to the heart of the classic risk transfer approach was the absolute certainty about the total cost of provision of buildings⁷. The PFI deal ensured that this would not exceed the financial resources which had been included in the budget for this work. Even though there was a possibility that this meant paying a higher price than might have been obtained through a conventional competitively tendered contract with shared responsibility for cost risks, the fact that the PFI deal placed a ceiling on expenditure was felt to be of supreme importance because of the risk of financial difficulties, higher taxes and service cuts if expenditure exceeded the project budget. In fact, it was said to have been unlikely that the project would have gone ahead at all without the PFI route being available because the uncertainty over potential expenditure under a conventional scheme was thought to be intolerable.

It should be added that this consideration would not be substantially altered merely by removing restrictions on public sector borrowing. The risk of intolerably high costs would still exist in many projects carried out in-house or under contractual arrangements which were more generous to the private sector partner, even in the absence of formal controls on borrowing. The contracting arrangements formally adopted under PFI can therefore be seen to remove a real risk for many public sector bodies and, by removing this risk, to enable more public sector capital expenditure to be carried out.

One danger which arises from this is the likelihood that PFI contractors, who are informed of the anticipated price of PFI schemes through the notices in the Official Journal of the European Community, will simply bid to the budget. In other words price competition may be at a greater risk of being undermined as a result of contractors' latching on to public sector bodies' fears of overspending on projects and always bidding for a known maximum price that the public sector is willing to pay. This danger is not unique to the PFI. It may, however, become standard practice always to demand the known maximum price for PFI work because of the contractors' awareness that all cost risks will fall on them.

For the local authority, the prospect of additional capital expenditure was a major factor, because local authorities in all parts of the United Kingdom are bound by various forms of capital consents or borrowing consents⁸. It was said to have been very unlikely that the scheme could have proceeded outwith the PFI, because of the lack of capital consents. This was also an issue for the NHS but not in the Higher Education sector, where the same limitations on borrowings do not apply.

Part of the reason for adopting the PFI was that conventional finance was not always available. This was especially true of cases where the projects did not carry a high priority for the organisation involved, not being connected with core activities. Part of the objective of the PFI was to generate additional investment in public services and to the extent that other financing is not available public sector bodies which use the PFI are achieving this. It should, however, be remembered that the decision not to make conventional finance from borrowing or taxation available is a policy decision by the central government. Increased investment in public services could be achieved by raising taxes or by issuing bonds instead of using the PFI. So at a national level it is not possible to argue that either the availability of a different accounting framework for the PFI or the fact that the unitary charge does not count towards the public sector borrowing requirement actually increases investment in public services.

It seems there was no clear cut-off in terms of different types of risks. All the interviewees considered risks purely in terms of additional cost that could be lost than they projected on normal business. It is the cost itself determining the level of risks and whether risks should be transferred. None of the interviewees considered risk as an opportunity or uncertainty which might bring in additional income/benefits. Further, the running cost was mainly used to determine whether the business and risks should be transferred to the private bodies. One interviewee comments that "we want to keep 'easy money' business, and focus on our core business". The 'easy money' business, in the view of the interviewee, is the business that has stable income streams (especially income streams from the public sources) and less uncertainty.

A further issue which was brought up by some of the interviewees was the role of the banks in PFI deals and public-private contracts generally. The banks were felt to have considerable power to make or break PFI deals. The banks were felt to be more reluctant to lend money for construction works to high-risk private contractors, as happens under the PFI, than to tax-backed local authorities, as happens with conventional competitively tendered building works. The banks wanted to lend to the client, not to the contractor, and were perceived to be keen to unpick deals which had already been agreed between the main parties in order to achieve this. The attitudes of banks and financial institutions to different forms of public-private partnerships is an area which merits further academic study.

Table 2 summarises the advantages of the PFI that were identified by public sector managers, together with the authors' opinion on whether or not those advantages are necessarily unique to the PFI.

Table 2
Advantages of the PFI, Identified by Public Sector Managers

Factor involved	Advantage	Less effective without PFI framework	Less effective without private sector partner	Probable net cost to public sector
Client-Contractor Split	Improved cost control and avoidance of unnecessary additional works.	No. No reason why conventionally financed contracts should not have an effective client-contractor split.	Yes. Client and contractor are legally the same.	No. There should be savings as a result of the cost risk being transferred to the partner best placed to manage it.
One main contractor for construction and facilities management	Design and construction will be more user-orientated.	Yes. Construction company does not have to think about maintenance or operation.	No. This should apply in all cases where one organisation is responsible for both construction and management, though there is a risk of construction departments ignoring the needs of separately managed maintenance departments.	No. There should be efficiency savings.
Spin-off of non-core trading activities	Provide better public service by concentrating on core activities.	Yes. Contractor leaves after construction phase.	Yes. No private sector partner to take over these activities.	Yes. Income is being foregone by the public sector.
Projects more likely to be within budget	Less expensive for public sector.	No. Depends on the extent of cost risk transferred to the contractor.	Yes. No profit motive and therefore no incentive to keep costs down.	No. However, the project price may reflect the risk allocation.
Projects more likely to be on time	Avoidance of service disruption and expense of finding alternative facilities while awaiting completion.	Yes. Constructor is not losing income while the project remains unfinished.	Yes. No profit motive and therefore no incentive to ensure assets are operational at an early stage.	No. There should be savings.
Increased capital investment	More service provided.	No. Could be achieved by higher taxes or public sector borrowing, provided cost risk does not fall on public sector.	Yes. In the absence of an external contractor to bear the cost risk, that risk is less likely to be taken on.	Yes. Increase in both capital and maintenance costs.

Conclusions

This paper presents a preliminary study of public bodies' perceptions relating to risk transfer in the UK private finance initiative. Overall there is a mixture of impressions from the interviewees on attitudes to risk transfers and how risks were quantified in decision-making. The study reveals that PFI has definite advantages over conventional contractual and financing arrangements for public sector projects in a number of areas. However, these advantages do not predominantly derive from risk transfer as generally suggested by the UK government.

PFI schemes can provide a financial benefit to the public as a result of the transfer of some risks from government bodies to the private sector. Some of these risks relate to costs, including construction costs and some relate to income. However, the client-contractor split, rather than risk transfer, was seen as being in many ways the most beneficial feature of the PFI. The use of the PFI imposed a clear client-contractor split, thereby making management of the private sector partner

more effective than in non-PFI projects. This is intriguing, because there is no obvious legal reason why conventional financing and contractual arrangements should render the client-contractor split ineffective, as long as there is a private sector contractor involved. We would suggest that further research into the operation of the client-contractor split in non-PFI capital contracts would be of public benefit.

Public sector bodies also showed themselves to be risk averse, on the one hand, reflecting their need to safeguard public funds and the fact that public service and not economic income generation lies at the heart of the functions of those public sector organisations which were visited. This aversion to risk was demonstrated by a willingness to pay a higher price for the use of assets, provided that the price was guaranteed than might possibly have been obtained if more risk of price increases had been accepted. It was also evident in the reluctance of public sector bodies to be involved in income-generating activities connected with the ongoing operation of PFI-based assets. On the other hand, the 'risk averse' attitude may mirror the fact that the public sector organisation itself had little knowledge and experience about how these risks can be assessed and managed. Overall, they have little understanding of how the costs of various risks were modelled in the PFI project appraisal and valued in terms of a risk premium. Given the lack of experience and expertise of public sector bodies in assessing and valuing risks, more training of risk management in procurement is clearly needed for public sector managers.

This paper is clearly limited in the number of interviewees. It is therefore suggested that far more extensive research needs to be carried out to establish whether the above findings reflect the public sector's experience with the PFI in general. Other possible areas for future research are as follows:

1. More research needs to be carried out on public-private partnerships and capital contracts in general to establish the extent and nature of risk transfers and risk sharing in non-PFI contracts. Some research into the effectiveness of client-contractor splits would appear to be needed, as it is unclear why this is being identified as a benefit specifically linked to the PFI structure.
2. In addition, the rôle of the banks and financial institutions in public-private partnerships is a potentially very important area. The support of financial institutions is vital to these partnerships and their attitudes, especially towards the private sector partners and the risks involved in lending to them therefore need to be more thoroughly investigated.
3. A final area for future research should be the experience of private sector partners involved in the PFI and their attitudes towards risk sharing in public sector contracts, as the results presented here naturally reflect only the experience of the public sector client-side.

Appendix

Outline Questions Used in Interviews

PFI Project in General

1. How did the public sector body make the decision to use the Private Finance Initiative in providing the new facilities?
2. Why was the PFI route chosen?
3. [If Value for Money is offered as an answer, Was this in terms of providing a better solution or in terms of costing less? and What aspects of the scheme offered Value for Money?]

Risk Management and Transfer in the PFI Project

4. Was project risk management a factor in deciding to opt for the PFI?
5. If so, which risks were considered to be important factors in the decision?
 - What financial risks, if any, were identified in relation to this project before the decision to use the PFI was taken?
 - Were there any financial risks which were specific to this project?

- Are there any other financial risks are typically considered in relation to projects of either of these kinds?
6. What (financial) risks were transferred to the private sector as a result of using the PFI which would otherwise have been retained by the public sector body?
 - What risks is the PFI most effective in transferring?
 - What (financial) risks have been retained by the public sector body?
 - How was it decided what risks should be retained by the public sector and what risks should be transferred to the private sector?
 - Are there any risks which the public sector body retained which you now believe should have been transferred to the private sector?
 - Are there any risks which you believed had been transferred to the private sector which were not, in fact, effectively transferred?
 7. Did the PFI scheme transfer any risks from the private sector to the public sector (were there risks which would have been borne by the private sector if the project had been carried out in another way which were borne by the public sector under PFI)?
 8. Was PFI deliberately used as a tool to manage public sector financial risk?
 9. Does use of the PFI create any new risks which would not otherwise exist?
 10. Are there any risks which you consider the public sector is better at managing than the private sector?
 - Is this because of greater experience or through being in a better position to control these risks or for some other reason?
 11. Are there any risks which you consider the private sector is better at managing than the public sector?
 - Is this because of greater experience or through being in a better position to control these risks or for some other reason?
 12. Are there other methods which could be used to transfer (financial) risk from the public sector to the private sector? Are any of these methods better than the PFI for transferring risk?
 13. Do you determine a cost of risk (or expected cost of risk)?
 - How is the cost of risk determined or estimated?
 - Do you use any risk modelling techniques to quantify or evaluate risks?
 - Do you include risk premiums in the evaluation of options for carrying out large scale projects?
 - How are risk premiums calculated?
 14. Is there anything else of which we should be aware?
 15. Do you have any questions for us?

Notes

1. For example, low uptake of the accommodation by students may be the result of the provision of a poor quality of amenities and furnishings by the contractor, a joint decision by the contractor and the client to locate the accommodation too far away from vital learning or social facilities or a decision by the client to relax residence requirements.
2. We thank a referee for a very helpful comment for supporting our argument. "The private sector can re-negotiate its financial risk by initially paying higher interest charge accordingly related to the financial sector's judgement of risk which has then re-negotiated with the finance provider (or an alternative provider) enhancing their profit. While this route has been closed down it could be contextual to the timing of the interviews and comments therein."
3. Although the lower end of this range may appear to be a small margin, it may denote a substantial amount of money over the life of a project of 30 years or more.
4. <http://www.partnershipsuk.org.uk/>
5. <http://www.scotland.gov.uk/>
6. As this project was a pilot and preliminary research, an additional 7 interviews and a questionnaire survey of larger scope are planned at later stage. This paper, however, reports the findings from the three initial interviews.

7. Although the local authority would be paying for the buildings, maintenance and services through a unitary charge, the cost of the buildings would be a major influence on the level of this charge.
8. In Scotland, Section 94 Consents under the Local Government (Scotland) Act 1973, which lay down limits to the amount of capital expenditure which may be funded from borrowing, capital from current revenue being unlimited and expenditure of capital receipts being subject to other legislative provisions. Similar arrangements apply in England and Wales. In the NHS, External Financing Limits apply, which are both more objective and more comprehensive than the rules applying to local government, because they apply to borrowing for both revenue and capital purposes.

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