

RISK ALLOCATION TO THE CONSTRUCTION FIRM WITHIN A PRIVATE FINANCE INITIATIVE (PFI) PROJECT

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The introduction by the UK government of the private finance initiative (PFI) in 1992 was intended to lead to a radical increase in capital projects which had previously been funded by the public sector. The construction industry whilst initially interested because of the potential extra work have subsequently expressed reservations about the successful implementation. The additional risk bearing was seen as a major concern by the industry. This paper addresses these concerns and considers the most appropriate and fairest means to both parties of assessing risk, including the possible use of independent risk assessors.

Keywords: Private finance initiative, risk assessment, risk allocation, residual value.

INTRODUCTION

When the Conservative Party came to power in the United Kingdom in 1979, the then Prime Minister, Margaret Thatcher stated that a primary aim of her government was to role back the frontiers of the public sector and to allow the private sector to take over many of the services. A key mechanism to achieve this was the Private Finance Initiative (PFI). The PFI would provide a means to harness not only the resources of the private sector but also their management, creative and innovative skills (Treasury 1996).

The Private Finance Initiative was formally launched by the Chancellor of the Exchequer in his Autumn Statement of 1992. The then current Prime Minister, John Major summed up the attitude of the government as follows:

We must work with industry, to see whether the public and private sectors working together can do more to invest in our future. It is time to look afresh to find new solutions.

Two of the fundamental principles behind PFI were risk transfer and value for money. The Chancellor reaffirmed this in January 1995.

We are looking for value for money and for the private sector to assume the risks it can manage with a prospect of profit but without a cast iron guarantee against loss. Risk and reward is the basis of all good investment in a market economy.

The two facets of value for money and risk bearing were seen as intertwined. The Government accepted that the private sector could not borrow finance as cheaply as the public sector but this extra cost would be offset by greater transfer of risk, and more efficient use of resources and management in the private sector (Knutt, 1996). This original concept of PFI by the Government was in many ways rather simplistic

and theoretical. The concept that PFI is solely about the provision of services as opposed to the supply of assets is one example of this philosophy. The Chancellor used an analogy to rail services where it was considered that the price of the ticket and the quality of the journey were the prime requisites. The capital cost of investing in the assets to provide same was not the main issue. Current problems with rail services shows the dangers of this short sighted approach. In construction similar problems may well occur in the future in the running of services within PFI projects in the fields of education and health.

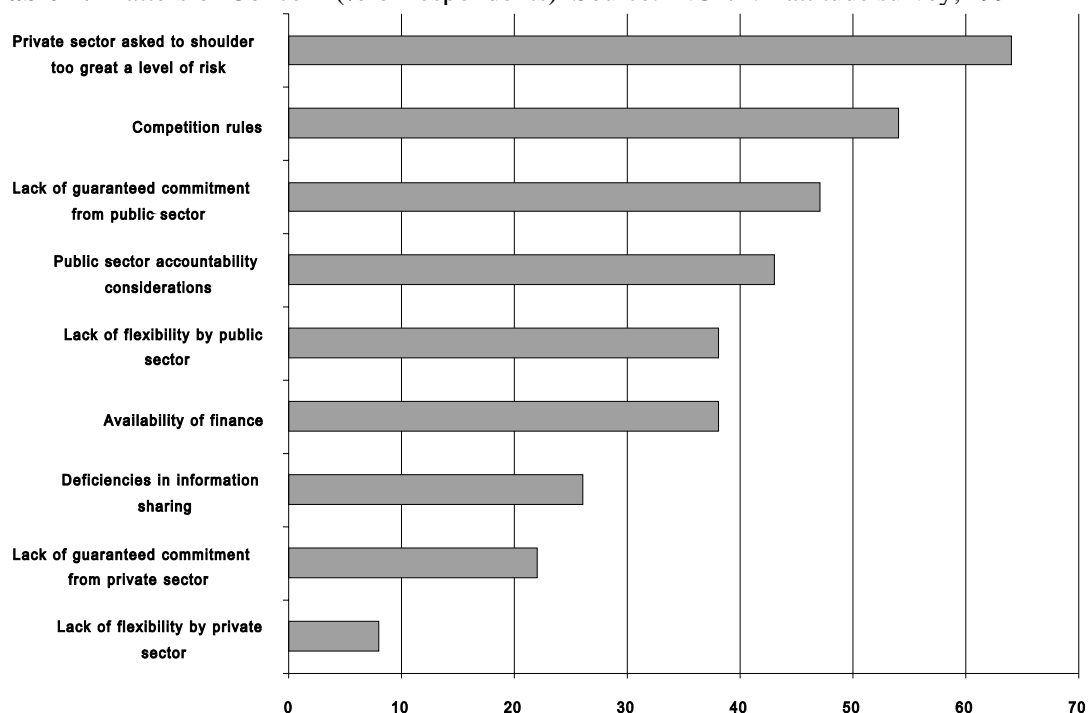
Some shift in the Government attitude towards risk was seen later in 1995. The term transfer of risk was changed to better allocation of risk. The basic concept of allocating risk to those best placed to manage it was considered more appropriate (HM Treasury 1995), thus overturning the earlier view of the then Financial Secretary, Stephen Dorrell who believed the private sector should shoulder the complete risk. Sir Alistair Morton, Chairman of Private Finance Panel supported him, and achieved notoriety by calling the Construction Industry whingers. Condemnation of the remark was forthcoming from numerous leading members of the industry (McAlpine 1995) and in addition from Sir Michael Latham, author of *Constructing the Team* (The Latham Report) who stressed the importance of partnership between government and the construction industry. All of this highlights the fact that whilst the overall concept of PFI may have been clear in the minds of the Government, the practicalities of implementing it were woolly and would require more detailed thinking if it was to be as successful as they hoped.

CONCERNS OF THE CONSTRUCTION INDUSTRY AND GOVERNMENT RESPONSE

Much of the criticism and concern of the construction industry relates to the slow progress in implementing the process. The industry had hoped that PFI would lead to increased work loads. So far, Donald (1996) said it had proved to be a red herring. Paul Shepherd, Chairman of BEC, pointed out that cuts in public sector work is real whilst PFI is about future hopes which in reality may not even replace the lost public sector work (Shepherd 1996).

A number of specific areas of concern were identified in a survey (New Civil Engineer/Builder 1994) (Table 1). Risk was seen as the major worry, followed by tendering procedures and their expense. Other areas of concern related to administrative problems, the need for better training of public officials, more consistency and simplification of procedures. The Environmental Junior Minister, Sir Paul Beresford, speaking at the launch of the Royal Institution of Chartered Surveyors Guide to the PFI (1996) discussed five myths about the PFI which contractors believed.

1. Contractors are being asked to take an unfair amount of risk when pricing PFI Projects. Sir Paul insisted this was not so and that the government were learning to share the risks with the contractor. Each party would take on the risk it is best able to deal with, thus reaffirming the previous Autumn 1995 statement of the Treasury.

Table 1: Matters of Concern (% of respondents) Source: NCE/NB attitude survey, 1994

2. There is not enough return on the Investment. Government confirmed that they were still happy for contractors to make big profits for taking big risks. Even if PFI projects do turn out to be highly profitable, building contractors may only receive a small proportion of the profit. This is because most large PFI projects are undertaken by consortiums of whom a merchant bank or other financial institution are the major stakeholder, usually putting up 80% plus of the finance and charging a very healthy rate of interest for doing so. Building contractors within the consortium, conversely, will be apprehensive about the amount of money they have to invest because this may cause their financial gearing ratio with the bank to become dangerously high (Billingham 1995).
3. Schemes have been delayed whilst they are market tested (this refers back to the original Ryrie Rules edict of the 1980s which stated all projects must be tested against the equivalent competitive price market). The Minister claimed that seven Health Service Projects had been let since PFI compared with ten projects in the decade preceding its introduction. Statistics, however, have not reduced the perception of unnecessary delay caused by Civil Service red tape. Murray (1998) points out that the Civil Servants may run up to four hundred separate risk models on any one project before deciding to proceed.
4. Tendering costs are excessive. Answer given was that contractors could not afford not to bid for projects. Costs are always high but with experience in bidding will settle down. This answer is questionable on both grounds (Fig 1). The government had in any case recognised this problem and addressed it (Treasury guidelines, 1996). This recommended that not more than three or four tenderers should normally proceed to final tendering stage. It also suggested that preferred bidders are selected early with an agreed timetable to tender award. They also stated that individual departments could consider reimbursing bidding costs. A year later the government agency for roads admitted liability for bidding costs for three PFI road schemes which were dropped (Court 1997). The Paymaster

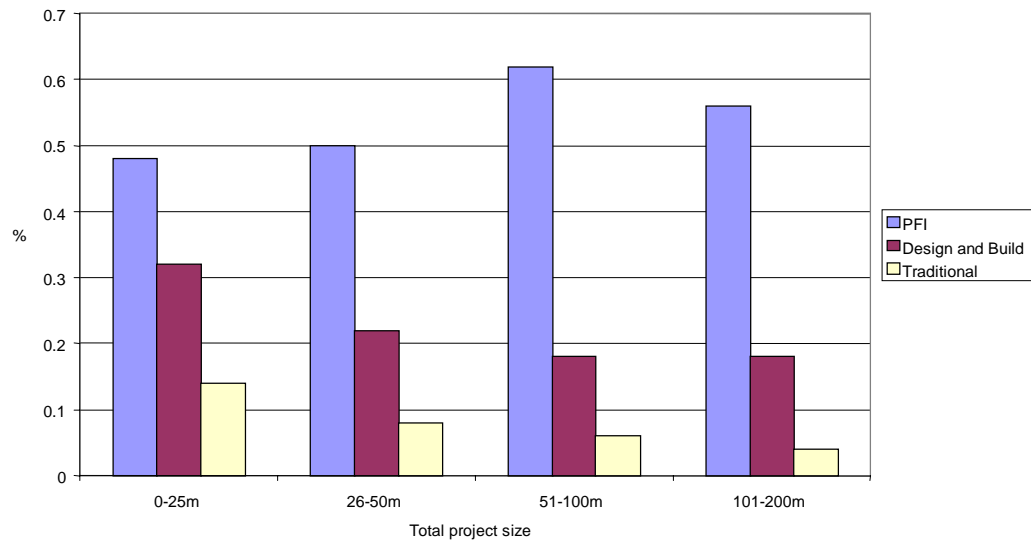


Figure 1: Tender costs as % of project cost (Source: BEC and Sir Michael Latham, *Constructing the Team* 1994)

General, Geoffrey Robinson, in a review of PFI stated that if a decision was made not to proceed with a project and that decision was not related to the viability of the tenders received, contractors' bidding costs should be refunded. Compensation for the roads projects was estimated to be in the region of £6 million. What the Public Audit Office will have to say about this waste of the taxpayers' money will make interesting reading!

- PFI schemes take longer to come to fruition. Answer was that he did not believe this would be the case once things have settled down. As the Government has scaled down their own prediction of the amount of PFI projects from £21 billion in 1994 to £7 Billion in 1997, the evidence hardly supports the answer. The present labour government, almost one year into office have only secured a further £1.5 billion worth of projects. The most optimistic interpretation would be that things can only improve. The construction industry have been vociferous in their criticism of the delays in awarding contracts, blaming bureaucratic incompetency (Hughes 1995, Dixon 1996, Dwyer 1996). More positive comments came from Laing (1996) who called for a centralised

task force to speed up hospital type projects and from Simms (1996) who suggested the formation of a hit squad to resolve blockages in the process.

THE POLITICS OF RISK WITHIN PFI

PFI was introduced by the previous Conservative Government. The present Labour Government have largely endorsed the principles into their policy strategy. When two major political parties agree, it suggests the policy must be politically expedient. If the philosophy of PFI is to get things done to-day rather than sometime in the future and if this results in more hospital and school provision without the taxpayer having to pay increase in taxes, it is not surprising that the public welcome it and governments promote it. What does not receive the same consideration is what are the likely future consequences of the policy. The paper addresses some likely matters of future concern.

PAY NOW WORRY LATER

If the project should turn sour in its future operation, such as the hospital in Clydebank what are the consequences? In most cases it is likely that the public sector will pick up a modern building at a knockdown price. Apart from some bad publicity at the time of collapse of PFI operator, the Government and the public do not suffer any direct financial loss. The moral here from the Government point of view would appear to be to ensure that PFI approved projects should be of a nature that the building is likely to be of interest to another PFI operator, or alternatively, the relevant public sector would find the building a useful asset for their future needs.

BUYING ON THE NEVER-NEVER

Consider a health clinic built under PFI. The local health trust pays rent for thirty years. At the end of this time period, the health trust has the option to purchase the building from the PFI operator. Since the building by this period of time is likely to be somewhat technically and operationally obsolescent, the health trust is unlikely to be very interested in acquiring the building. Instead it is more likely to relinquish its option to purchase and enter into a new PFI contract for a new building. To the public health body and thus indirectly for the taxpayer, PFI in financial terms becomes like the national debt or undated Government Stock such as War Loan - never likely to be fully redeemed.

In this scenario, what are the implications for the PFI contractor. The most important is that the contractor should study carefully the clause dealing with the options open to the health trust at expiry period. The contractor should try to ensure that if he has to dispose of the building at the end of the period that there is a formula built into the contract which will guarantee a fair minimum selling price. An alternative solution which could be attractive to both parties is to enter into a new PFI contract to modernise the building, either for its existing or an allied use.

RISK CATEGORIES

The literature is in general agreement that risks can be categorised in a number of broad categories (HM Treasury 1995).

1. **Design and construction (to cost and to time):** This is very similar to the rationale for a design and build procurement contract. The public sector (client) is purchasing a product at a pre-agreed price obtained normally through a competitive or negotiated route. Any future problems caused by specifications, design, delays should be met by the PFI provider.
2. **Commissioning and operating:** This is the natural progression of the previous risk category and is normally the sole responsibility of the PFI provider. Should the operating costs turn out to be dearer than anticipated this will be borne by the operator. There may be some exceptions in regard to personnel employed in the running of the building. Medical staff in a health building may be employed by the Health Service. Since future maintenance costs of the building are the responsibility of the PFI operator, greater consideration in the design and choice of materials should be undertaken by the contractor in order to minimise future life cycle costs.
3. **Demand for volume/usage:** This is likely to be one of the most contentious categories of risk for the operator. The risk will vary according to the type of

building (Haywood 1996). In the case of prisons, the risk is not just in anticipating the demand but on the suitability and acceptability of the product in the future. Other examples are the likely changes in toll charges due to changing government policy. PFI operators should always consider the unforeseen element of risk arising in these categories of projects.

4. **Residual value:** This is another area of future dispute. Because the problem will not arise until the end of the PFI contract period, little immediate thought appears to have been given to the potential areas of conflict between the parties. The residual value will be influenced by many factors; some, such as the maintenance policy adopted by the operator, but others completely outside the latter's control and caused by changes directly or indirectly in government or local authority legislation or policy. Planning blight is likely to be one of the most serious causes in change of building value. The case for independent risk assessors to evaluate specified outcomes needs to be considered. This is considered further in the final part of this paper.
5. **Technology:** Changes in the technical requirements of buildings may result in obsolescence and inefficient functioning of building. Public sector clients are likely to require built in safeguards to their contracts in this respect. Whilst the right of termination of contract may be the preferred solution for them, a procedure which offers incentives to modernise and upgrade could be more attractive to both parties (Platt 1996).
6. **Regulatory:** Problems caused by planning blight have already been discussed. Taxation changes are another area which could have considerable financial implications on the economic viability of the building. These would also appear best dealt with by independent risk assessors.

ASSESSING THE RISK

In construction projects procured under one of the conventional systems (traditional, design and build, and management) various risks are present which have to be evaluated by the contractor before arriving at the final estimate of price. Rarely would these evaluations involve the contractor in the use of the more sophisticated formal techniques associated with Risk Analysis. PFI is different; it requires the consideration of future events which are of a much more uncertain nature. Risk/Decision Analysis provides us with the academic bases to measure these uncertainties. Moore, a leading academic in Risk Analysis(1980) stated that it was important to neither ignore risk or be frightened by it; systematic methods to assess risk have been developed. The concern by the construction industry may thus be largely due to lack of understanding and knowledge about risk management and its assessment. Chartered Quantity Surveyors, who would be expected to make financial evaluations of the various risks are unlikely to have been trained or had experience in using the formal techniques of risk assessment. Research by Fortune and Lees (1996) found that only around 15% claimed to have knowledge of Risk Analysis methods. The authors concluded that educational issues were a significant impediment to the proper evaluation of them. In the short term there is therefore likely to be a training problem. Lack of knowledge will be compounded by lack of historical data about many of the events which have to be assessed. Even without this additional factor, it is unlikely that two Chartered Quantity Surveyors would agree the uncertainty (probability) of the event happening. Whilst it could be argued that this is no different

from normal construction cost negotiation (one high one low at start of process before working towards consensus) the question remains is this the best way to do it. What are the alternatives?

1. Public body to state clearly the conditions under which the contract is to be awarded and therefore priced. This would mean removing what is often termed “unforeseen risks” from the contractor. Justification for these being borne by the public purse can be found in the policy of state airlines which do not use private insurance companies to cover for loss of aircraft on the grounds that the Government is big enough to stand the loss and it is more economical than using a middleman whose premiums would still have to be paid indirectly by the public. In addition the amount of the premiums would include profit to the insurance company.
2. Identify these events which are uncertain e.g. the number of cars per year which will cross a bridge and thus create a certain revenue for the PFI operator. Here the contractor could be asked to price on a set number with a price adjustment formula introduced to correct payments based on actual numbers. Because the formula would work both up and down this should discourage contractors from artificial manipulation of their costs. The formula would be created by an independent risk assessor who would be an expert in the particular type of risk category and whilst by the nature of the subject could not be expected to get any one risk assessment 100% correct, should over a number of assessments score a high level of calibration. Indeed the acceptance of this procedure would merely be acquiescing with the basic principle of the use of probability viz. that one can never be said to be wrong in any one assessment (except for absolutes at either end of the scale). It is one’s ability over a number of predictions of somewhat similar nature events which determines ones ability (Birnie and Yates 1991).

CONCLUSIONS

This paper has examined the rationale behind PFI. Superficially the case for it has been strongly made by the Government both past and present. The problems appear more in the detail of implementing it. Paul Shepherd, Chairman of the Building Employers Council considered the fundamental problem with PFI was that it should be operator driven not contractor driven (Barrie 1996). Others have expressed similar sentiments including Sir Michael Latham (1996) who considered it would be more sensible for clients to raise the finance separately in the private sector and then obtain the building by means of a recognised procurement route. An appropriate analogy would be to a private person building and financing a new house through a building society loan. Letting each player in PFI concentrate and do what they are expert in would seem a sensible way forward. Otherwise the present system is likely to become soured through disputes and bad publicity.

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