



National Audit Office

**REPORT BY THE  
COMPTROLLER AND  
AUDITOR GENERAL**

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**HM Treasury**

Equity investment in privately  
financed projects

# Summary

## The role of equity investment in privately financed projects

**1** The Private Finance Initiative (PFI) model has been used since the early 1990s. Projects have typically been funded using 90 per cent debt finance from banks and 10 per cent equity finance. Equity investors (investors) have been exposed to the risk that their returns might vary, compared with initial expectations. These investors were also first in line to bear losses if projects encountered serious difficulties.

**2** Investors have typically been either contractors, who also provide services under the contract, or financial institutions. Some investors are interested in a long-term involvement with a project. However, many of those investing in the project at its start, known as primary investors, will sell their shares soon after the new asset has been delivered in order to fund new projects. These primary investors sell their shares to secondary investors who want a long-term stable income from mature projects.

**3** Equity is just one of the components of a PFI project. In July 2010, we reported on the increased cost of debt in *Financing PFI projects in the credit crisis and the Treasury's response*. In April 2011, we reported on *Lessons from PFI and other projects*. The latter report summarised learning points from our recent reports on procuring and managing projects.

**4** The Treasury is responsible for private finance policy and guidance and, on 15 November 2011, the Chancellor announced his intention to reform the PFI model. The Treasury launched a call for evidence on 1 December 2011. This is looking at many aspects of privately financed projects, including the role of equity finance, about which the Treasury has been conducting its own analysis in support of the planned policy reform.

## Scope of this report

**5** Publicly available information on investors' risks and rewards from private finance projects is limited. Some examples of high investor returns have attracted adverse publicity. In order to examine this topic to draw out issues for further consideration we developed an audit approach which, given the lack of available data, drew evidence from a number of sources. The sources included: publicly available data; information held by public authorities relating to the investors' bids for projects; certain unaudited data provided to us by investors; our observations of the way that the PFI market operates from our previous PFI examinations; interviews with parties engaged in PFI projects; and illustrative financial modelling which we undertook on three projects to analyse the relationship between risks and returns.

**6** We examined whether authorities' use of private sector equity in recent standard form PFI contracts is value for money. Our analysis also highlights learning points from involving private investors in government projects that will be of relevance to the Treasury's current review of the PFI model. We examined whether:

- investors positively contribute to delivering the specified public services and encourage beneficial service improvements;
- investors bear, and actively manage, project risk; and
- the returns, for investors, are transparent and reasonable, derived from contracts priced in line with market principles.

## Key findings

**7 The equity investment plays an important role in the structure of PFI projects.** Investors have helped to secure the debt finance that forms the bulk of the funding. Banks, or bondholders, have provided around 90 per cent project finance on condition that a project has been fully developed by investors whose equity will be lost first if the project company encounters difficulties. Investors have also brought together the private sector teams to deliver the required service. The design of the investors' PFI subcontracts, and the investors' oversight of contractors, has contributed to a good delivery record for PFI projects.

**8 However, there is a reputation risk to a private finance programme when investors are perceived to be earning high returns from government projects.** In return for bearing the risks of losing their equity first, equity investors receive all of the remaining cash flows once the project has paid off its third party debt. Where the potential risks have not arisen, this residual value will be sizeable compared to the original amount of equity. Investors will naturally seek to maximise their returns and their aims may not always be consistent with optimising value for money for the taxpayer throughout the contract period.

**9 Investors bear some risks, particularly in the early stages of projects, but these risks are limited.** The main risks PFI investors bear are:

- a** not knowing whether their bids will be successful and whether their bid costs will be recovered in PFI procurements. Procurement has often taken around three years or longer, with losing bidders often involved for a substantial part of the procurement;
- b** that their selected contractors may fail, or persistently underperform. This risk is particularly critical during the construction;
- c** that lifecycle costs will be higher than estimated over the life of the project (often 30 years, sometimes longer); and
- d** adverse events affecting the original investment assumptions on certain other risks including insurance, disputed subcontract responsibilities, rates of inflation and project company running costs.

The risks that investors have borne have, however, been limited in that:

- e investors usually pass most cost risks to their contractors by giving them mainly fixed price contracts;
- f the Government, as the procurer, is a very safe credit risk. This reduces the investors' risk and also their cost of obtaining bank finance;
- g as the PFI market has matured many projects, such as hospitals and schools, have been repeat projects where the format and risks of the projects are well understood;
- h in 84 of 118 projects in operation where investors told us their current experience, investors were reporting returns equal to or exceeding expected rates of return. Thirty-six of those projects were forecasting significant improvements. The remaining 34 of the 118 projects were, however, currently performing below expectations; and
- i in relatively few of the 700 PFI projects have investors reported that they have lost their entire investment, or injected more money to save a project.

**10 To date, the Treasury and departments have relied on competition to seek efficient pricing of the contract, without systematic information to prove the pricing of equity is optimal.** Competition has generally created an expected return to equity of between 12 to 15 per cent at the point contracts are signed. The Government has considered the role played by equity investors and has previously published an earlier study on PFI returns and policy documents intended to place downward pressure on equity pricing. However, any improvement in pricing has not been sustained and information on the investors' experience has remained limited. To date, the Treasury has not systematically gathered data from investors on their actual and forecast returns from operational PFI projects or on their pricing when selling investments.

**11 Our findings suggest that the public sector may often be paying more than is necessary for using equity investment.** We explain in Part Three of this report why there are potential inefficiencies in the pricing of equity:

- **Inefficient procurement.** There is scope for reducing the time and costs of bidding for privately financed projects which is one of the main factors influencing investor returns.
- **Investors' cost of capital.** Investors told us they tend to price equity by reference to a pre-defined internal 'hurdle-rate' required by their investment committees, rather than by reference to the specific risks of the project unless there are higher risks involved (such as traffic demand risk). But PFI projects benefit from the secure payments that the Government as a customer provides.
- **Lender requirements.** The minimum investor returns which are priced into PFI contracts have been strongly influenced by banks through requirements (known as 'cover ratios') for a defined level of cash flow. This provision increases the protection of their loans but is not always needed.

**12 In the absence of systematic information more detailed analysis of project returns can help to assess whether equity pricing is reasonable.** To undertake this more detailed analysis, we made informed assumptions about the relationship between risks and returns in three projects to identify those aspects worthy of further consideration. Our estimates suggested that, while the majority of investor's returns could be explained by reference to the risks they were bearing, we could not explain a proportion of the returns earned by investors. The parts of the investors' returns which could not be fully explained were a relatively small amount – around £1.15 million per annum in total across the three projects – but they were equivalent to around 1.5 to 2.2 per cent of the authorities' payments and could be significant over the long term life of PFI projects. These illustrations do not represent a conclusion on the value for money of those projects and should not be taken as indicative of similar questions in other projects. But they do suggest that there is merit in further analysis of the composition of equity returns.

**13 Authorities have, generally, not been equipped to challenge investors' proposed returns rigorously and may require better support to do so.** Our previous reports on *Commercial skills for complex projects* and *Lessons from PFI and other projects* have highlighted that the public sector needs to use commercial skills better when negotiating with experienced private sector counterparties. Public sector negotiators need accurate data for decision-making, for good project assurance and to challenge options that have been selected.

**14 Some primary investors have sold their equity in successful projects to release their capital and fund new projects which resulted in accelerating the receipt of their returns.** The typical profile of project cash flows provided investors with their returns towards the end of contract periods of 30 or more years. Once projects successfully reached the phase of full operations, some investors accelerated their returns by using either of the two following options, or both:

- **Debt refinancing.** Investors refinanced the bank debt, mainly in the early days of PFI when the banks offered better terms as the PFI market became established. Our previous reports showed examples of debt refinancing resulting in investors increasing their returns from between 12 and 15 per cent to 50 to 70 per cent. Such high returns from debt refinancing have not arisen in subsequent contracts, since the Treasury introduced new terms for sharing gains with the public sector.
- **Sale of equity.** Share sales have enabled primary investors to release their capital and fund new projects, thereby also accelerating their returns. The increased rate of return reflects mainly the higher risks associated with developing and delivering projects. Our analysis has shown that investors selling shares early have typically earned annualised returns between 15 and 30 per cent. In exceptional cases, returns have been higher (up to 60 per cent) or lower (as low as 5 per cent). These returns were mainly driven by the prices secondary investors were prepared to pay to invest in an established project. We consider the potential inefficiencies in the initial pricing of equity will also have been a contributing factor.

**15** There are other potential methods of remunerating investors that the Treasury's current review of PFI is able to consider. In some government projects there have been certain limits to the investors' returns or the public sector has shared in both upsides and downsides by investing in the project. Other potential mechanisms include sharing equity gains from share sales or separate contracts for construction and operations, each priced according to the respective risks. This is, however, a complex area and all of these potential mechanisms have both possible advantages and disadvantages.

### **Conclusion on value for money**

**16** Equity investors have helped to deliver many infrastructure projects and to manage them in ways from which the public sector can learn. The range of evidence that we have drawn upon in this report is too broad to support a definitive conclusion on the impact on past projects of potential inefficiencies in equity pricing. However, it raises a concern that the public sector is paying more than it should for equity investment. There appears to be definite scope for improving the value for money from using equity investment in future government projects. These considerations, together with learning points from our other recent reports on project delivery, need to be part of authorities' wider analysis of when the use of private finance is appropriate for future projects.

**17** The Treasury does not wholly accept the views of the National Audit Office (NAO) and it has asked us to include the following text:

"The Treasury agrees that this is the right time to assess the value for money of the PFI delivery model, reflecting on the nearly twenty years of experience of PFI projects, and agrees with the NAO that there should be scope for improving the value for money from using equity investment in future government projects. The Treasury considers that this aim needs to take into account a wider range of issues that together contribute to the overall economics of a transaction, rather than merely looking at equity returns on their own. This is what the Treasury is currently doing through its call for evidence on PFI reform launched in December 2011. Investors' pricing of equity is inextricably linked to the other terms of a project, which together determine the overall commercial opportunities and risks of the transaction. Prices are agreed with the private sector in response to a competition – in each case where the sponsors of bids are able to bid the lowest equity returns that would enable them to offer the most competitive market pricing at the time for the services required and the risks transferred."

## Recommendations

- a Lessons from the use of PFI equity have relevance to new commercial arrangements under consideration.** The Treasury should take into consideration lessons from the experience of using PFI equity in its development of new commercial models. The lessons should include:
- When designing a delivery method, to consider the most appropriate method for remunerating private investors, while allowing the amount the Government pays for projects to reflect the benefit of having a strong public sector customer.
  - To be aware that attractive projects are likely to encourage a secondary market, which will provide early enhanced returns to initial investors.
  - To be transparent about investors actual risks and rewards, to enable proper assessment of the value for money being achieved from using investors.
- b There is evidence to suggest the public sector may often be paying more than it should for PFI equity investment.** The Treasury should address the potential inefficiencies in pricing by:
- providing guidance to departments on how to challenge bidders' proposed equity returns more rigorously during the procurement stage. The Treasury should consider the role that 'should cost' models might play in such challenges;
  - working with the Cabinet Office and other government departments with policy responsibility in this area, to consider the potential to drive down procurement times;
  - considering whether additional cash flows, which lenders require to protect the repayment of their loans, can be shared with the public sector once the lenders' risks have reduced in mature projects; and
  - giving consideration to other areas where the efficiency of risk allocation and pricing could be improved, such as inflation provisions and changes in life-cycle costs.
- c There are alternative investment models that limit the potential for very high investor returns.** The Treasury should use its current review of PFI to consider alternative models of public private partnerships. It should consider both the advantages and disadvantages of a range of possible sharing mechanisms that reinforce market pricing for equity and reduce the risk of inefficient pricing of risk.

- d The Treasury recognises that there are limitations in the currently available information about investor gains and losses in PFI projects.** The Treasury should establish with investors a standard form of disclosure so that, on each change of shareholder, authorities become entitled to equity sales data sufficient to judge the rate of return to the seller. Authorities should regularly use their contractual rights to obtain up-to-date financial information from project companies.
- e Good knowledge and understanding of the risks retained by investors and their contractors is an important part of effective project management.** Authorities should clarify with project companies how risks transferred to the project company will be managed between the investors, contractors and other parties, such as insurers. This will help the authorities to assess the reasonableness of the investors proposed returns and also to monitor the project's risk management.
- f PFI investors have established active contract management procedures from which the public sector can learn.** The Treasury, working with the Cabinet Office and other government departments with policy responsibility in this area, should consider how the positive disciplines which investors have brought to PFI projects, such as taking immediate steps to enforce contracts and/or resolve problems, could be applied to publicly managed projects.