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National Audit Office

Update on PFI debt refinancing and the PFI equity market

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 1040 Session 2005-2006 | 21 April 2006

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Comptroller and Auditor General
National Audit Office

3 April 2006

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SUMMARY

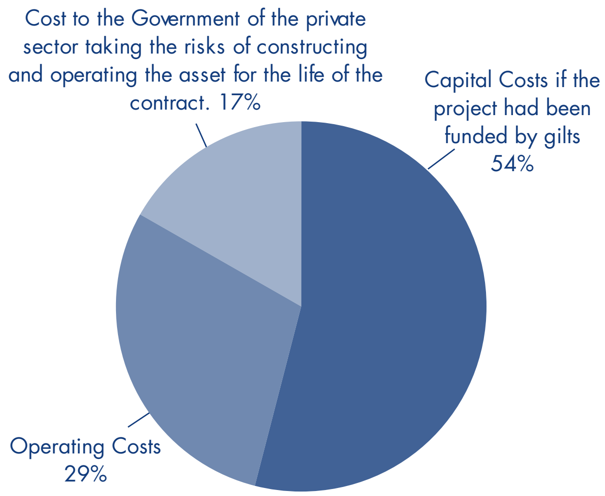
1 Most government projects by value under the Private Finance Initiative (PFI) are funded by the private sector through a mix of debt finance (in the form of bank loans or bond finance) and risk capital (known as equity capital[1]) provided by the shareholders of the project company.

2 Previous NAO reports[2] have shown that there are opportunities for the investors of the equity capital to secure benefits by refinancing on more favourable terms the debt finance of early PFI projects which have been successfully delivered. The improved financing terms on these projects are available as: lending in the PFI market is considered less risky now that the PFI market is established; the delivery risks of the projects have been dealt with; and, in the debt markets, it is currently possible to borrow for longer periods at fixed rates of interest which are lower than when the early PFI contracts were let.

3 Only a small proportion of a PFI project's total costs are subject to refinancing. In most cases a refinancing will not increase the overall financing costs of a project in cash terms but, in improving the terms of the debt finance, will enable payments to the investors of equity capital to be made earlier in the contract period. The resulting benefit to the equity investors can significantly improve the returns on their investments as their initial investment is small (typically around 10 per cent of the project's finance) relative to the debt being refinanced (typically around 90 per cent of the project's finance). In the illustration of costs measured over the whole life of a typical project **(Figure 1)**, 29 per cent are operating costs and a further 54 per cent represent the cost of financing the capital cost of the infrastructure if the Government itself funded the project through issuing gilts. The remaining 17 per cent represents the additional financing cost to government of the private sector taking the risks of constructing and operating the asset for the life of the contract (the financial risk premium).

1 An illustration of costs in a PFI project measured in nominal whole life values

It is the 17 per cent of costs which are subject to refinancing[1]



Source: This is based on a financial model developed by the Treasury, typical of a hospital project

NOTE

1 In nominal cash flows, refinancing redistributes the costs of finance between debt and equity but does not increase the total costs of the project.

1 Equity capital is usually a mix of ordinary shares and subordinated debt (debt that ranks behind the main debt on repayment).
2 Previous NAO and PAC reports dealing with PFI refinancing are set out in Appendix 1.

4 Before July 2002, it was not mandatory for PFI projects to have contractual arrangements to share gains arising from debt refinancing. Following reports by the NAO and Committee of Public Accounts (PAC)[3], which highlighted the particular opportunities for the private sector to secure gains from debt refinancing on early PFI projects, the Office of Government Commerce (OGC), who had responsibility at the time for PFI policy, consulted with the private sector and introduced arrangements whereby:

- PFI contracts signed from July 2002 onwards would provide for public authorities to receive 50 per cent of any gains arising from debt refinancing;
- As from September 2002, a voluntary code ("the Code") would apply whereby authorities would generally expect to receive 30 per cent of the gains from debt refinancing where their contracts had not included arrangements to share the gains.

5 The successful operation of the voluntary sharing arrangements of the Code is important as it is the early PFI deals, entered into before July 2002, which are likely to have the greatest potential for debt refinancing gains but most of these deals had no contractual mechanism for sharing these gains. In later deals, the improved financing terms now available should be priced into the deal when the contract is let and there are contractual arrangements to share any subsequent refinancing gains. In December 2002, the OGC told the PAC that it expected the public sector to receive £175 to £200 million from the introduction of the Code.[4] Responsibility for PFI policy was transferred from the OGC to the Treasury on 1 April 2003.

6 The opportunities to refinance the debt finance of PFI projects have arisen as the PFI market has matured. A further development as a consequence of the maturing PFI market and a period of liquidity in the global capital markets has been the emergence of a market, known as the secondary equity market, in the buying and selling of the equity capital in established PFI projects.

7 In this report we examined:

- how the level of debt refinancing gains which the Government has secured compares with the OGC's expectations in 2002;
- how well the new arrangements to share debt refinancing gains have been working;
- whether there are any risks for authorities from debt refinancings; and
- how the maturing PFI market is affecting the use of equity capital in PFI projects.

8 Our examination included a cross government survey of PFI projects. The study scope and methodology is set out in Appendix 2 and a list of the projects we surveyed is in Appendix 3.

9 In summary we have found that:

- The Government has secured £137 million from PFI debt refinancing but there has been little recent activity; (Part 1 of this report)
- Debt refinancings may bring risks as well as benefits; (Part 2)
- There have been developments in the PFI equity market as the PFI market has matured and financial markets have become more liquid. (Part 3)

In terms of the overall effect on the value for money of PFI deals, the debt refinancings that have been completed relate to only a small proportion of PFI contracts. As we reported during 2005[5], the increased risks to the public sector from certain refinancings which generated large refinancing gains through increased private sector debt made the value for money of those refinancings questionable despite the sharing of the gains. The Treasury's emphasis on value for money appears to be bringing greater discipline but also a reduction in debt refinancing activity.

3 Appendix 1.
4 Report from the Committee of Public Accounts: *PFI refinancing update* (HC 203, June 2003).
5 NAO reports on *Darent Valley Hospital: the PFI Contract in Action* (HC 209 2004-05) and *The Refinancing of the Norfolk and Norwich PFI Hospital: how the deal can be viewed in the light of the refinancing* (HC 78 2005-06).

10 Our main findings have been:

a) Some large debt refinancings have enabled the Government to secure gains of £137 million

The debt refinancing of PFI projects had enabled the Government to secure the right to gains of £137 million up to February 2006 **(Figure 2)**. £102 million arose from four refinancings.Three hospital deals (Norfolk and Norwich, Bromley and Darent Valley), where the lead investors were Barclays and Innisfree, accounted for £60 million of the Government's gains. The investors, who retained large gains from these refinancings, had shared 30 per cent of the gains with the public sector under the voluntary sharing arrangements of the Code. A further £42 million of the Government's gains arose from the refinancing of the London Underground Tube Lines project where the sharing was based on a contractual provision and did not, therefore, rely on the Code's voluntary sharing arrangements. The remaining debt refinancings of early PFI deals since the Code was introduced have mainly been undertaken on smaller projects. These have yielded small gains for both the public and private sectors with the public sector securing on average less than £1 million from each refinancing.

In addition, the financing of the Ministry of Defence's Skynet 5 project has been improved as part of a much wider substantial restructuring of the project.

b) Refinancing gains arising from the Code have declined since 2004

The £137 million of refinancing gains the Government has secured the right to includes £72 million from the voluntary sharing arrangements of the Code, nearly all of which arose prior to 2005. Only three small debt refinancings under the voluntary sharing arrangements have been completed since December 2004 from which the public sector will gain £0.7 million. The decline in gains from this aspect of debt refinancing has been affected by investors taking stock of the additional scrutiny of PFI refinancings following NAO reports in 2005 on two of the large refinancings of the Norfolk and Norwich and Darent Valley hospital projects.

2 The right to refinancing gains secured by the public sector up to February 2006

	Number of refinancings	Actual gains which the public sector has secured the right to £m	2002 OGC estimate of gains to the public sector £m
Voluntary sharing under the Code:			
Norfolk and Norwich Hospital	1	34	
Bromley Hospital	1	14	
Darent Valley Hospital	1	12	
	3	**60**	
Other deals	17	12	
	20	**72**	**175-200**
Other refinancing gains:			
London Underground	1	42	
Other deals	26	23	
	27	**65**	**No estimate**
	47	**137**	**No estimate**

Source: National Audit Office Survey, PUK Database and Report from the Committee of Public Accounts: PFI refinancing update (HC 203, June 2003)

These NAO reports, together with a subsequent PAC hearing on the Norfolk and Norwich deal, raised concerns about large refinancing gains where the private sector had increased its debt to accelerate the benefits to investors. The concerns focussed on the fact that these refinancings had been based on the public sector accepting both increases to the liabilities it would incur to end the contracts early and extensions to the minimum contract periods. The authorities judged that, on the balance of current probabilities, these arrangements would be value for money in the long term. These conclusions could change however if the authorities wish to end the contracts early because of changes in requirements over the next 35 years. The Treasury has re-emphasised to departments the need to rigorously evaluate the value for money of all refinancing proposals. This is expected to take into account any changes to public sector termination liabilities taking account of the amounts that the providers of both debt and equity finance would be able to recover on termination.

The amount being received from debt refinancings, where sharing of gains under the Code would apply, has mainly declined because the private sector is less assured that the public sector will now agree to further refinancings involving significant increased debt. The private sector has less interest in taking forward other smaller value refinancings because the time and costs involved in arranging a refinancing of any size are considerable.

c) Gains from early PFI deals currently look likely to fall short of the OGC estimate

Up to February 2006, the gains of £72 million which the public sector had secured from the voluntary sharing arrangements of the Code were well short of the OGC's 2002 estimate of £175 to £200 million. It is difficult to estimate how much more the Government may now secure from these voluntary sharing provisions particularly as it is currently uncertain whether the recent decline in refinancing gains from early PFI deals will continue. In addition, the majority of the 700 PFI contracts which have been let may not give the prospect for the public sector to benefit from refinancing; many are too small for refinancing to be viable, others do not have project specific finance or there would be costs involved in unwinding the existing financing arrangements which could make refinancing unattractive. If there is some recovery in refinancing activity, our current best estimate is that the total gains to the Government from the Code are likely to increase to between £110 and £150 million, still short of the OGC's 2002 estimate. The OGC's estimate could, however, yet be achieved in due course if there are any further large refinancings. The Treasury accepts that the Government is receiving less from Code refinancings than initially expected but its main focus has been on the achievement of value for money through an appropriate balance of risk and reward rather than maximising the gains. The Treasury has carried out some initial research to identify which of the large PFI deals may be capable of refinancing.

d) The new gain sharing appears to be generally working well with some exceptions

Where early deals have been refinanced since 2002 the provisions of the Code for calculating and sharing the refinancing gains have, for the most part, been followed. Overall, the public sector has secured the right to receive close to 30 per cent of the refinancing gains **(Figure 3)** which was the expectation when the Code was established. In line with Treasury guidance, deals signed since 2002 are giving the public sector the right to 50 per cent of any refinancing gains.

We found no evidence from the survey returns that the private sector had undertaken refinancings without informing the relevant department. We did, however, find three refinancings since the new sharing arrangements came into force, of roads contracts let by the Highways Agency, where the gains were not shared in accordance with the Code. On two of these projects, the Highways Agency and Balfour Beatty said they had been at an advanced stage of negotiating these refinancings in 2002 before the sharing arrangements of the Code became effective. If the gains on these two refinancings had been shared in accordance with the Code, the public sector would have received £1.7 million. The gains from a third refinancing, completed by the Roadlink consortium in 2004, have not been disclosed to the National Audit Office but the Highways Agency believes Roadlink's gains to have been less than £1 million.

3 Sharing of gains on refinancings since the Code came into operation

Project	Total refinancing gains (NPV) £m	Amount shared with public sector (NPV) £m	% of gain shared with public sector
Norfolk & Norwich Hospital	115.5	33.9	29.3[1]
Bromley Hospital	45.3	14.2	31.3
Darent Valley Hospital	33.4	11.7	35.0
	194.2	**59.8**	**30.8**
14 other projects where gains were shared in accordance with the Code	48.2	11.7	24.3[1]
17 refinancings where gains were shared in accordance with the Code	**242.4**	**71.5**	**29.5**
3 projects where no gains were shared[2]	4.8	–	–
20 completed refinancings since the Code came into operation	**247.2**	**71.5**	**28.9**

Source: National Audit Office Survey and PUK database of PFI projects

NOTES

1 Norfolk and Norwich and three other projects gave rise to gains to the public sector of less than 30 per cent in accordance with the Code because returns to investors, prior to the refinancing, were less than expected when the contracts had been let.

2 Two refinancings, involving Balfour Beatty and WS Atkins had refinancing gains of £4.8 million. The gains from a third refinancing, completed by the Roadlink consortium in 2004, have not been disclosed to the National Audit Office but the Highways Agency believes Roadlink's gains to have been less than £1 million.

e) Refinancings provide scope for significantly increasing the investors' internal rate of return

In many refinancings the cash which the investors will receive over the contract period will decrease as investors exchange later benefits for the right to increased early benefits from the project. The acceleration of benefits can, however, significantly increase the internal rate of return[6] to investors in some cases. Most early PFI contracts were let on the expectation of an internal rate of return to investors of 15 to 17 per cent. Where projects disclosed to us the investors' internal rate of return following refinancing these ranged from less than 10 per cent to over 70 per cent. In a fifth of these projects, all early PFI deals, the investors' internal rate of return following refinancing had risen to over 50 per cent and, in the case of Debden Park School and Bromley Hospital, to as high as 71 per cent. As around half of the projects surveyed on this issue did not disclose their investors' internal rate of return there may be other projects where there have been high internal rates of return after refinancing.

f) The opportunity to benefit from refinancing can also create new risks

Sharing in refinancing gains has the potential to benefit the public sector but there are also risks. The risks relate to:

Income from refinancings involves some uncertainty

The public sector's gains from the Code depends on continued adherence to what are voluntary arrangements. The private sector has said that any attempt to amend the code could jeopardise the voluntary arrangements that have been widely complied with since the inception of the Code. In addition, the ability to refinance will depend on conditions in the financing market. Those authorities which have chosen to take their refinancing gains over time could, depending on the reasons for the termination and the contractual terms, also face uncertainty in collecting their gains if they were to effect an early termination of their contracts.[7] The future flow of income from the Code cannot, therefore, be predicted with certainty.

6 See paragraphs 1.36 and 1.40 for further explanation of this measure of investor returns. The improved debt financing terms which contributed to increases in investors' internal rates of return should be available to the public sector in current procurements reducing the likelihood of later refinancing gains.

7 See paragraphs 2.4 to 2.5 and Appendix 9 for further explanation of the risks associated with taking the gain as a lump sum or over time.

There can be additional liabilities following a refinancing

Some refinancing proposals have increased public sector risk as they have required the public sector's agreement to possible increases in termination liabilities or an extension of the contract period. The Treasury expects departments to carefully assess such proposals and only to accept them if the value for money of such proposals is fully demonstrated.

There may be service related risks

Although authorities reported they were generally satisfied with service performance and the incentives to perform following refinancing, it is still too early to judge whether the acceleration of benefits to shareholders following a refinancing will have an impact on service delivery in the longer term. The theoretical risks are that, having taken benefits, the investors might become less concerned about the project's performance or the project may not have retained sufficient funds to meet future asset maintenance obligations and unforeseen expenditure. Investors argue, however, that, as they expect further revenues from the projects, they will be concerned to ensure that contractors continue to perform. The providers of debt finance are also likely to be concerned that the repayment of their debt, which in some cases has increased on refinancing, is not put at risk by poor service performance. The Treasury has also observed that the terms of financing of PFI project companies following a refinancing are normally in line with those of new PFI deals. It therefore expects the risks to service delivery following a refinancing to be no different from those in new deals.

g) There are transactions which Treasury guidance excludes from gain sharing

The Treasury accepted, after market consultation and taking account of practicalities, that it would be unacceptable for the Government to interfere in certain situations which would, therefore, not be subject to gain sharing arrangements. These exclusions, set out in Figure 10, page 18 and para 3.6, include the sale of equity shares (although the profit on such sales will be subject to taxation). Also, the Government's gain sharing does not extend to the way that investors and other funders manage their portfolios of interests in PFI projects unless this impacts on the underlying PFI contracts which departments have entered into. These boundaries were initially set out in Treasury guidance in July 2002 and were then also applied to the operation of the Code. In negotiating the Code with the private sector the Treasury acknowledged that the private sector was making significant concessions to voluntarily share debt refinancing gains on early PFI deals where there had been no contractual requirement to do so.

h) There is now an emerging secondary equity market in PFI shares

The development of a secondary market for PFI equity has been helpful to investors who fund PFI deals and may also bring benefits to the public sector. Whereas previously there was uncertainty as to whether investors would be able to exit from their PFI investments there is now a reasonably assured market for investors to sell shares in successful PFI projects should they wish to do so. 40 per cent of projects told us there had been a change in the investors in their projects. In these situations either the initial or subsequent investors may wish to also refinance the project and we found that half of these projects had been refinanced, a higher incidence of refinancing than in projects where there had not been a change in investors. The sale of equity can also help future PFI projects where the proceeds are reinvested in other PFI deals. As the supply of PFI equity increases this should drive down the cost of equity and improve the pricing of PFI deals. The Treasury has said that it considers there is scope to reduce the returns of 13 to 15 per cent which investors currently expect when PFI projects are bid for. Further information on the secondary market is set out in Appendix 4.

i) Funders may derive benefits from establishing portfolios of interests in PFI projects

As the number of PFI contracts has increased there has been a trend towards investors and debt providers building a portfolio of interests in PFI projects. This may enable investors to achieve operating efficiencies across the portfolio or to improve financing terms either for the existing portfolio or for subsequent transactions. It is possible in theory that investors or debt providers may seek to improve the financing of the portfolio rather than refinancing individual projects, but there is little evidence to date of this type of activity.

j) There is limited information at present on the operation of the PFI equity market

All authorities receive information about a PFI project company's financial structure and the expected returns to investors when the company bids for the contract or if it refinances the project. In addition, Treasury guidance since 1999 has provided that authorities should have the right to further information available to the lenders. Nevertheless, many authorities had difficulties providing financial information about their PFI projects to assist this examination. Partnerships UK (PUK) records refinancings which have been notified to it and also launched in 2005 a database of PFI projects which includes financing information. However, considerable further work is needed to make aspects of this data accurate and comprehensive and this will require the support of the authorities. The profits or losses which investors may derive from selling shares in PFI project companies are not disclosed to authorities because the contract is between two private sector parties.

RECOMMENDATIONS

Recommendations arising from previous NAO and PAC refinancing reports are set out in Appendix 5 together with a commentary from the Treasury on progress in implementing these recommendations. Recommendations arising from this current examination are set out below.

Criteria for accepting refinancing proposals

1 The Treasury should continue to support authorities in ensuring that value for money is achieved in refinancing. It should continue the steps it has taken to articulate to the PFI market the public sector's criteria for accepting refinancing proposals, particularly those involving changes to termination liabilities. The Treasury should also continue its efforts to identify and disseminate examples of good practice in the treatment of termination liabilities and other refinancing issues.

2 Before accepting a refinancing proposal, an authority must give careful consideration to the impact of the proposals on the future of the project, in particular:

a whether, after investors have withdrawn benefits from the project, there will still be sufficient incentives to perform the required services and sufficient reserves within the project to fund the life cycle maintenance of the project and contingencies;

b the consequences of accepting any proposal to increase termination liabilities, or extend the contract period, particularly given that unforeseen events may arise in the future, such as changes in public service requirements or contractor performance, which could increase the likelihood of early termination of the contract needing to be considered; and

c that, depending on contract terms, receiving the gain over time may create a possible risk that part of the gain might not be received if the contract is terminated early. Decisions on the best basis for receiving the gain should take into account this risk and other aspects of value for money such as the impact on termination liabilities.

Transactions excluded from gain sharing

3 As Treasury guidance permits a number of financing transactions which would not lead to gain sharing, the Treasury should monitor these transactions to ensure that the primary motivation of the private sector entering into such transactions is not to avoid sharing refinancing gains.




Monitoring of the extent to which projects may be capable of refinancing

4 As there are now 700 PFI contracts in existence, the Treasury should extend the work it has been doing on considering the capability of large projects to refinance, to form a view on the proportion of the 700 contracts which might be suitable for refinancing. Consideration of whether contracts are suitable for refinancing should take into account whether they have fixed interest arrangements which are coming to an end which might present refinancing opportunities.

Monitoring the cost of PFI finance

5 Current expectations are that the increase in sources of equity arising from the emerging PFI secondary market should drive down returns which equity providers seek from PFI projects. Debt finance should continue to be provided at competitive rates reflecting the lower risks now the PFI market is established. In order to demonstrate whether these expectations are achieved, the Treasury should make use of the new PUK project database to produce an annual summary of the trends in PFI financing costs.

Improved transparency in the returns to investors from PFI projects

6 To provide transparency and a better understanding of the dynamics of PFI equity investment, further information is required on the full range of costs and benefits which investors experience from participating in the PFI market. Part of this information should be provided by authorities making more extensive use of their contractual rights to information. To provide the full picture of the investors' experience from their involvement in the PFI market, the Treasury should discuss with investors what further information they could provide which would illuminate this issue.

PART ONE

The Government has secured £137 million from PFI debt refinancing but there has been little recent activity

1.1 Most early PFI deals had no provision for sharing refinancing gains as the Government considered the financing risk lay with the private sector. Following reports by the NAO[8] and PAC[9] which highlighted the potential for refinancing gains in early PFI deals, the OGC launched, in 2002, with the support of the Confederation of British Industry (CBI), the Code which expects the private sector to voluntarily share 30 per cent of refinancing gains with the public sector. PFI deals signed after July 2002 incorporate a 50:50 sharing arrangement.

The Government has secured the right to £137 million from PFI debt refinancing

1.2 The amount of refinancing gains to the Government up to February 2006 is set out in **(Figure 4 overleaf)**. Further details are listed in Appendix 9.

In addition, the financing of the Ministry of Defence's Skynet 5 project has been improved as part of a much wider substantial restructuring of the project.

The gains received by the public sector from the voluntary sharing arrangements under the Code have so far been less than expected

1.3 The operation of the Code is very important to enable the Government to secure a voluntary share of refinancing gains from early PFI contracts, most of which do not have a sharing mechanism but have the greatest potential for refinancing gains.

The Government gains under the voluntary sharing arrangements of the Code have so far been £72 million of the anticipated £175-200 million

1.4 At the PAC[10] hearing in December 2002 on the NAO's PFI refinancing update report[11], the OGC stated that the expected gain to the public sector from the voluntary sharing arrangements under the Code would be in the region of £175 to £200 million, although the period over which this gain would accrue was not indicated.

8 *Refinancing of the Fazakerley PFI prison contract* HC 584 1999-2000.
9 Thirteenth Report from the Committee of Public Accounts, *The Refinancing of the Fazakerley PFI Prison Contract* (372 (HC 995-i 1999-2000).
10 22nd Report from the committee of Public Accounts, *PFI refinancing update* (HC 203 June 2003).
11 *PFI refinancing update* (HC 1288 November 2002).

1.5 The 20 refinancings which have occurred under the Code have resulted in a total refinancing gain of £247.2 million. Of this, the public sector has secured the right to receive £71.5 million **(Figure 5)**, 28.9 per cent of the total gains. The amount receivable by the public sector falls well short of the £175 to £200 million estimated by the OGC in 2002.

1.6 However, the 2002 estimate was only an approximation using a simple methodology based on a small amount of data on completed refinancings available at the time. In addition, the OGC did not set any time limit within which the £175 to £200 million estimate would be achieved. The amount received has also been influenced by a number of other factors (paras 1.8 to 1.24).

There remains an untapped pool of projects which may be viable for refinancing under the Code

1.7 In total over 700 PFI contracts have been let. The 20 Code refinancings are from a population of approximately 500 early PFI contracts let before the Code came into operation **(Figure 6)**. However, the characteristics of the majority of these projects may not give the public sector the prospect of benefiting from refinancing. For example, almost half are small projects (less than £10 million in capital value). For these small projects, the cost of ending their current financing arrangements in terms of the external legal and financial advisor costs along with the internal resources needed to arrange new finance, may exceed the potential refinancing gain and thereby make the refinancing unattractive. There are also some PFI projects that are excluded from having to share any refinancing gain with the public sector as the finance is not specific to the PFI project (Figure 10, page 18). This leaves around 150 early PFI projects which could potentially be suitable for refinancing. There may, however, be costs involved in unwinding the existing financing arrangements of some of these projects which could make refinancing uneconomic.[12] The balance of whether the opportunities for gains, for example by being able to borrow for longer periods at lower rates of interest, outweigh the penalty costs of ending existing arrangements will vary from case to case.

4 Sources of refinancing gains to the Government up to February 2006

Refinancings taking place before the Code	£23 million
Refinancings as part of the voluntary sharing arrangement under the Code	£72 million
Refinancings since the Code with a contractual sharing mechanism	£42 million
Total	£137 million

Source: National Audit Office Survey and PUK database of PFI projects

5 Summary of the public sector's refinancing gains from the Code's voluntary sharing arrangements

Project	Refinancing Gain to the public sector (£m)
Norfolk & Norwich Hospital	33.9
Bromley Hospital	14.2
Darent Valley Hospital	11.7
Scotland and Wales (one project each)	5.2
8 other projects (excluding schools)	4.3
7 schools	2.2
Total Refinancing Gain to public sector	**71.5**

Source: National Audit Office Survey and PUK database of PFI projects

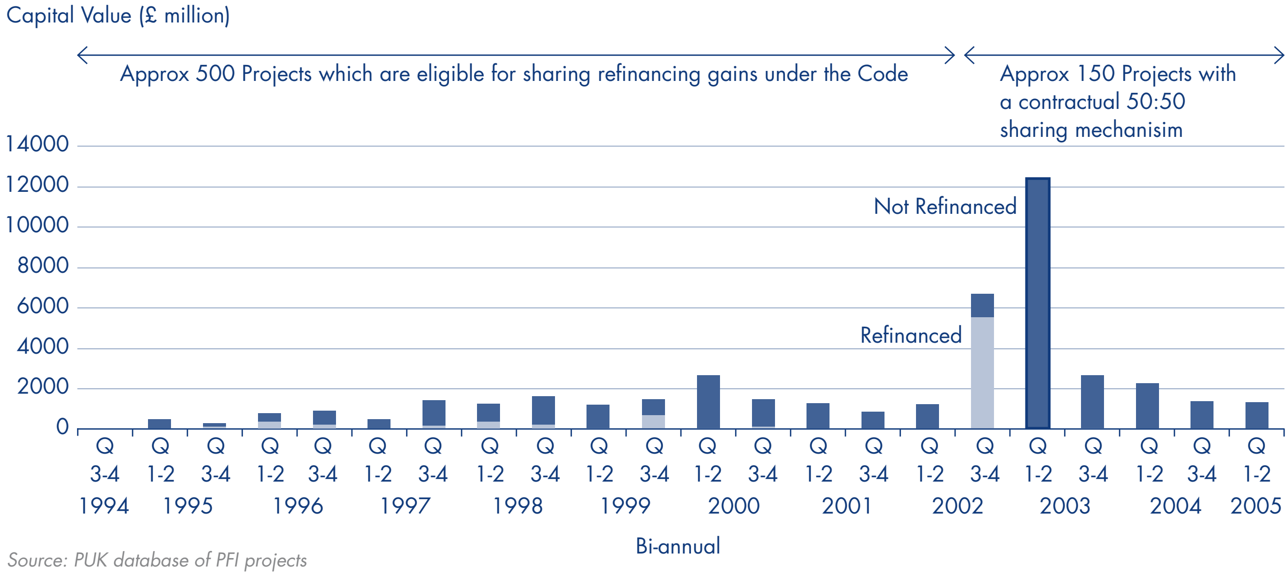
Full details of all refinancings can be found in Appendix 9.

Since the voluntary code was introduced the value of refinancings has been less than expected due to a number of factors

1.8 Excluding rescue refinancings[13] where the public sector would not expect to receive gains 13 Code refinancings had yielded £70.8 million up until the end of 2004.[14] By comparison, there were only three Code refinancings in 2005, of which only one, Laganside Courts yielded a share (£0.7 million) to the Government. There are a number of factors which may account for this subdued nature of refinancing activity despite there being projects which could be suitable for refinancing.

12 These costs could be for breaking fixed interest arrangements on bank loans or penalty payments for the early repayment of bond finance.
13 A refinancing where the contractor has been in financial difficulties.
14 Details of all Code refinancings are in Appendix 9.

6 PFI Projects (aggregate Capital Value at contract signature)



Source: PUK database of PFI projects

NOTES

1 The peaks during 2002-03 relate to three London Underground Projects with a combined value of £16.2 billion of which one, with a value of £5.5 billion, has been refinanced. The other two are bond financed and European Investment Bank financed and this limits their ability to refinance.

2 In addition to the above there were 11 PFI deals reaching financial close previous to 1994 of which one (Second Seven Crossing) has undergone a refinancing.

3 There is usually a time lag (usually 2 to 3 years) from contract signature to when a project can be refinanced based on the time it takes for a PFI project to become operational.

The sharing of gains and public sector involvement has caused the private sector to consider whether to go ahead with certain refinancings

1.9 The NAO's PFI refinancing update report (November 2002) identified that only 26 per cent of contracts let before June 2000 had an arrangement to share refinancing gains, and only half of these required the authority's approval for a refinancing. Hence prior to the introduction of the Code there was, in most cases, no obligation on the private sector to share refinancing gains or to consult with the public sector over the refinancing.

1.10 The introduction of the Code has meant that the private sector now has to consider:

- whether the refinancing is worthwhile after sharing 30 per cent of their total refinancing gain with the public sector; and
- whether it wishes to undertake the time and expense of complex negotiations with the public sector before the refinancing can be effected.

Putting the Code into practice has brought greater appropriate scrutiny of the value for money of refinancing proposals

1.11 The fact that there were only two Code refinancings in 2005 which yielded gains of £0.7 million to the public sector was mainly attributable to the market taking stock of the scrutiny of two large refinancings of early PFI deals under the Code. The NAO's reports on Darent Valley Hospital and Norfolk and Norwich Hospital highlighted large refinancing gains by the project companies increasing their debt at the more favourable terms then available and thereby accelerating the distribution of benefits from the project to the shareholders. The internal rate of return to investors following the refinancings of these early PFI deals able to take advantage of the improvement in funding terms were 56 per cent at Darent Valley and 60 per cent at Norfolk and Norwich.[15] The public authorities agreed to higher termination liabilities and extended minimum contract periods as part of the increased debt arrangements. The authorities judged that, on the balance of current probabilities, these

15 On a similar refinancing, of the Bromley Hospital project, the internal rate of return to investors increased to 71 per cent following the refinancing.

arrangements would be value for money in the long term. These conclusions could change however if the authorities wish to end the contracts early because of changes in requirements over the next 35 years.

1.12 There was considerable interest shown by the media in these NAO refinancing reports, particularly focussing on the high returns to private sector investors. Some senior public sector officials expressed to us reservations that a refinancing in the current climate would lead to a critical press even if the refinancing is proven to be value for money. This is especially the case with regards to the earlier PFI projects where the market had been immature and therefore the refinancing gains could be large.

1.13 In February 2005, following the NAO report on Darent Valley Hospital, the Treasury issued an Application Note to help authorities and their contractors to apply existing Treasury guidance more rigorously and consistently to refinancing proposals. The note emphasises the need for a proven value for money case for refinancing proposals, particularly where the public sector teams are asked to accept increased termination liabilities in conjunction with the refinancing. This focus of attention is designed to prevent refinancings occurring which generate large returns to the private sector while at the same time increasing the risk to the public sector without due regard to value for money. The private sector's need to consider the impact of this Application Note, and the existence of other investment opportunities in an active market during 2005, contributed to the decline in PFI refinancing activity.

The Treasury has set out its position on the value for money aspects of refinancing but there has been some uncertainty in the market

1.14 Although the Treasury's Application Note emphasised the need for a proven value for money case for refinancing proposals, interviews we conducted with banks, advisors, monoline insurers and secondary market funds (SMFs) identified that, nevertheless, the market became uncertain in 2005 about what future refinancings would be acceptable. Their uncertainty arose in part because the Application Note was not prescriptive in the methodology to be applied in carrying out the value for money evaluation. Some funders and advisors generally assumed that increases in termination liabilities were no longer going to be accepted by departments. The Application Note had said that: "Given the complex issues which Refinancings raise, it would not be surprising for an Authority to conclude that the simplest Refinancing proposal – particularly one that does not involve any change to Contract termination liabilities – was also the best". The Treasury has clarified in discussions with the market on specific deals that consideration of whether there has been any change to termination liabilities should take into account the total amounts that the providers of both debt and equity finance would be able to recover on termination. Since refinancings that did not involve an increase in public sector termination liabilities were relatively unattractive to the private sector, this contributed to the reduced activity.

1.15 The Treasury has taken opportunities to articulate that there could still be cases where departments would be justified in accepting some increase to their termination liabilities but only where the consequences of agreeing to these increased liabilities has been fully assessed as value for money. The Treasury, together with the Department of Health, is planning to establish good practice in dealing with these issues on a current refinancing being taken forward on the Swindon PFI hospital project.

The public sector relies upon the private sector to instigate a refinancing

1.16 Evidence from our survey showed that public sector project teams were:

- aware of the potential for refinancings within their projects but,
- had no knowledge of the reasons why the private sector were not pursuing a refinancing and,
- were not proactive in finding out the reasons why the private sector were not pursuing a refinancing.

1.17 Although there are benefits to both sides in sharing in a refinancing gain which offers value for money for the public sector, the initiative for setting a refinancing in motion lies with the private sector since it is their debt which is to be refinanced. There is a risk that public sector driven refinancings could be motivated by affordability rather than value for money reasons. Also, the Treasury considers that there are risks to a public authority in pressing for a refinancing since the private sector might try to take a negotiating advantage from the authority's eagerness for a refinancing. For example, pressure might be brought to bear on the authority to agree to increased termination liabilities and contract extensions. Or, the authority might be asked to share in the initial costs of the refinancing proposal or find its bargaining power weaker in resolving any separate contract disputes.

1.18 However, there could be benefits from the public sector project teams being more aware of the refinancing intentions of their private sector counterparts since they could for example prepare in advance for dealing with the technical financial issues which arise from a refinancing. Creating a receptive atmosphere may also facilitate the refinancing process where the gain is deemed to be marginal by the private sector.

The refinancing gain which can be realised from a project can vary

1.19 Many factors can play a part in determining the size of the refinancing gain such as whether the size of the debt within the project has increased, the length of time remaining in the PFI project and the conditions in the financing markets (Appendix 6).

Refinancing without increased termination liabilities is likely to reduce the refinancing gain to the public sector

1.20 Treasury guidance expects that if the private sector proposes increases to the authority's termination liabilities, then the authority should also obtain an alternative refinancing proposal involving no increase to termination liabilities. This is expected to be part of the value for money assessment process. However, there is no requirement for the private sector to proceed with this alternative proposal. If the private sector is unwilling to refinance on terms which the public sector assesses as value for money, then this may reduce the extent of refinancing activity and this appears to have contributed to the low refinancing activity in 2005.

The size of gains will be affected by the timing of a refinancing and conditions in the financing markets

1.21 A PFI contract is of finite length – usually between 25 to 35 years – with the debt remaining within the project reducing over time. Hence, the potential gains to be made from refinancing the debt will diminish (other things being equal) the longer the delay in undertaking a refinancing. If lending rates on future new deals should become higher than they now are, there might, however, be a case to defer refinancing until lending rates reduce.

1.22 Although financing terms for PFI projects have generally been improving as the market matures, there could be fluctuations which either increase or decrease the scope for refinancing gains depending on financing conditions at the time of the refinancing. For example, in recent times there has been a high degree of liquidity in the bank and bond credit markets. This has created a competitive market with historically low risk margins – the part of the interest cost reflecting credit default risk **(Figure 7 overleaf)**. It is uncertain though whether these favourable conditions will continue. The Treasury note that investment decisions are long term decisions, not driven by potentially short term market phenomena.

1.23 Whilst many new deals are now bond financed where, as with all bond finance, significant penalties for early repayment of the bonds mean that refinancings may not be a feasible option, there may still be opportunities to reduce the risk margin on some other bank financed PFI deals.[16] The potential for refinancing gains needs to be weighed against the costs of ending any fixed interest arrangements.

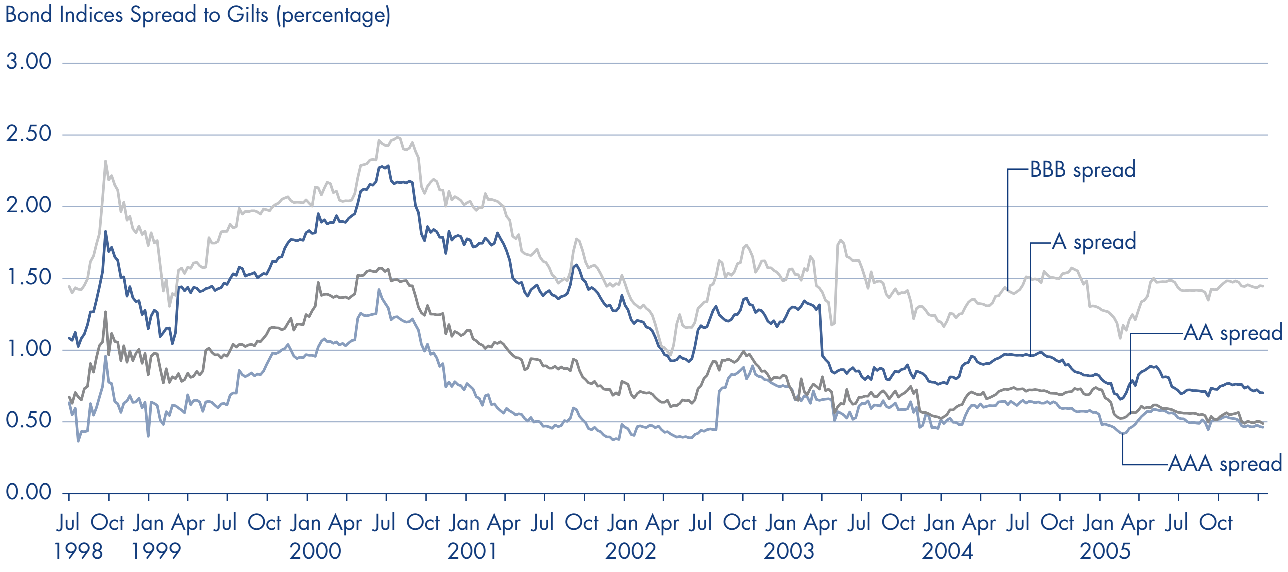
1.24 Furthermore, the cost of finance could increase if new opportunities emerge which attract funds which would otherwise have been invested in PFI projects. For example, the current growth of new overseas markets in PFI and PPP projects, or the 2012 London Olympics projects, may create attractive opportunities for investors as an alternative to investing in what is now a relatively mature UK PFI market where returns are expected to decline or remain tight. The Treasury does not expect these factors to have a significant effect on the PFI sector. It also notes that the cost of finance will be driven primarily by matters beyond lenders' choice of whether to invest in the United Kingdom – credit margins being currently very low due to global liquidity in financial markets, the interest of pension funds in making long term investments as a hedge against long term pension liabilities and banking regulation changes. Nevertheless, whether an investor will remain motivated to undertake a PFI refinancing given the time and costs involved will always be influenced by the opportunity costs of other possible transactions.

Current estimates suggest it is unlikely that the OGC's previous estimate for Code refinancing gains will be achieved in the foreseeable future

1.25 In order to reach the OGC estimate of £175 to £200 million, there need to be further gains of around £105 to £130 million shared with the Government from future refinancings under the Code. To consider the likelihood of this outcome we considered four potential refinancing scenarios and their likelihood of outcome **(Figure 8 overleaf)**. Further details on the four scenarios are presented in Appendix 7.

16 Bonds can be an attractive source of finance for a refinancing since they have a longer term to maturity which suits a 30 year PFI project, and they tend to be cheaper than bank debt. There may be costs involved in switching from one form of bank finance to another.

7 Movement in risk margins on bond finance



Source: Royal Bank of Canada (from Bloomberg information)

NOTE

AAA, AA, A and BBB are grades of investment. AAA has the least risk and therefore the lowest risk margin.

8 Four possible scenarios for the future of refinancing under the Code

Scenario	Likely public sector gain	Explanation of Scenario	Likelihood of scenario coming to pass
1	£0 million	The current subdued state of the refinancing market will continue indefinitely and there will be no further refinancing of PFI deals under the Code.	Possible, but the Treasury has been facilitating negotiations in a number of Code refinancings and so it appears probable that there will be more refinancings in the future.
2	£80 million	All early PFI projects with the potential to refinance will be refinanced but the refinancings will not involve contract extensions or the increasing of debt, and gains will only be derived from lowering the cost of the existing finance.	Possible, but there may be some reluctance from the private sector to undertake refinancings with lower benefits than previously.
3	£300 million	Future refinancings under the Code will continue with the average gain, in relation to capital value, that has been seen thus far.	Unlikely. Public sector gains of the magnitude of Norfolk and Norwich (£34m) and Darent Valley (£12m) are unlikely to be repeated and so average refinancing gains in the future will be lower than those seen in the past.
4	£580 million	Future refinancings under the Code will generate the same high level of returns, in relation to capital value, which was seen in the Norfolk and Norwich deal.	Highly unlikely given the current guidance and scrutiny of PFI refinancing deals, and the limited number of deals offering similar levels of return.

Source: National Audit Office

1.26 It is difficult to estimate how much more the Government may secure from Code refinancings as it is currently uncertain whether the recent decline in refinancing activity will continue. In addition, the majority of PFI projects may not have the characteristics to give the public sector the prospect of benefiting from refinancing (para 1.7). If there is some recovery in refinancing activity, our current best estimate is that the future gains under the voluntary sharing arrangements of the Code will probably be somewhere between Scenario 1 and 2, with the future gain to the Government in the £40 to £80 million range. Adding this to the sum already raised (£71.5 million), total refinancing gains from the Code would then be somewhere between £110 to £150 million; still short of the OGC 2002 estimate of £175 to £200 million. To generate more from refinancing in line with OGC's original estimate, the number of refinancings, or the gains arising from each refinancing, would need to increase compared to our assumptions. The OGC's estimate could, however, yet be achieved in due course if there are any further large refinancings. The Treasury accepts that the Government is receiving less from Code refinancings than initially expected but its main focus has been on the achievement of value for money through an appropriate balance of risk and reward rather than maximising the gains.

The agreed sharing arrangements have been applied in most debt refinancings but there have been exceptions

Authorities have been kept informed of any debt refinancings undertaken by the private sector but some transactions do not require gain sharing

1.27 We found no evidence in the survey returns that the private sector had withheld information about a debt refinancing from an authority. We did find six projects where the authority had not reported a refinancing but there had been some form of financial restructuring of the debt. However, these did not constitute refinancings where the gains should have been shared with the public sector **(Figure 9)**. Treasury guidance permits gains on certain transactions which improve the terms of a project's debt finance to be retained by the private sector **(Figure 10 overleaf)**.

9 PFI projects within our survey which had experienced some form of financial restructuring of the project debt

Form of Financial Restructuring	Numbers of Projects	Why the financial restructuring does not require any sharing with the government
Access to a funding allowance which could be drawn upon to meet the demands for variations. [Connect and Power Supply PFI projects]	2	There was no refinancing of the original debt and there was no gain realised to be shared with the public sector.
To resolve the distressed financial position of the contractor. [Croydon Tramlink]	1	There was no gain to be shared. Rescue refinancings are specifically provided under Treasury guidance as situations where the public sector will not share in refinancing gains.
Additional borrowing to run the project. [MoD's Signal Service project]	1	The Authority explained that the debt increased when, after the contract award, the Contractor found an error in the financial model used to support the bid for the project and therefore had to borrow more money, with no deterioration to the Authority's position.
Corporately refinanced (financed using its own resources) [Global Wide Area Network Linking Operation]	1	Corporate refinancings are defined by guidance as non-qualifying i.e. the private sector is not obliged to share the gain.[1]
New owners sought external financing – original deal was corporately financed (London Fire)	1	Consultants to the project team concluded in a review of the restructuring that there was no gain to be shared.

Source: National Audit Office Survey

NOTE

1 Treasury guidance on standard PFI contract terms (SoPC3 section 35.4.3) requires the authority and its advisors to conduct due diligence over corporately financed projects in order to satisfy themselves that the financial structure is not simply designed to bypass the refinancing provisions.

In addition, in the MOD's Skynet satellite communication project, the private sector consortium Paradigm has raised new finance in connection with a revised insurance strategy for the project, the additional costs of which will be borne by the MOD.

10 Debt transactions where Treasury guidance provides that gains do not have to be shared

The following is a summary and the full details of exemptions from gain sharing are as stated in the standard contract terms issued by the Treasury.

- **Corporately Financed projects**. These projects are financed through the corporate funds of the service provider rather than through finance obtained specially for the project so that the contractor is both service provider and financier. The Treasury view is that in the circumstances which meet the criteria set out in its guidance it is not feasible to identify any financing benefit that the contractor may secure.
- **There is no gain sharing until the internal rate of return (IRR) assumed in the bid has been achieved**. Investors whose IRR at the time of the refinancing is below their base case model IRR, are entitled to retain refinancing gains without sharing, until the project's IRR rises above its base case IRR. This concession was mainly intended to help projects in financial difficulties. However, in our opinion, it can also produce outcomes which appear overly generous to investors whose returns in projects out perform initial expectations as a result of large refinancing gains. For example, in the Norfolk and Norwich hospital refinancing, in line with the voluntary code, the contractor Octagon was exempt from sharing £5.8 million of the refinancing gain as its pre-refinancing IRR (16 per cent) was below its base case IRR (19 per cent). Immediately after the refinancing, Octagon's IRR increased to 60 per cent. In our view it would seem more appropriate in such cases where the post refinancing IRR is significantly above the base case IRR for the full amount of the gain to be shared. The Treasury view is that changing the voluntary code would jeopardise the voluntary sharing arrangement which to date has been adhered to.
- **Improvements in general interest rates if the private sector was exposed to interest rate risk**. The contractor bears the risk of increased interest rates following financial close. Where the contractor has not hedged this risk and is therefore exposed to both upward and downwards movements in interest rates, the contractor is entitled to keep gains arising from favourable movements in interest rates.

Source: Standard contract terms issued by Treasury (SoPC3). Information on the Norfolk and Norwich Hospital Refinancing from the NAO report on that transaction.

1.28 It would be risky for a private sector company and associated lender to undertake a refinancing without informing the public sector. Any refinancing that increases termination liabilities or requires covenant changes, requires agreement by the client. Also, guidance on PFI contract terms provides for termination of the PFI contract for a breach of the refinancing provisions. In this event the authority's termination liabilities would include nothing in respect of compensation to the equity shareholders. Furthermore, it would be difficult for the private sector to secure the agreement of all of the equity holders in a project to such action given the reputational damage that would result from subsequent discovery.

The sharing of refinancing gains has been, in general, in accordance with guidance but with some exceptions

In most cases refinancing gains have been shared according to the Code

1.29 The Code required the private sector to generally share 30 per cent of the total refinancing gain with the public sector. **Figure 11** shows the amount shared with the public sector of those projects that were refinanced under the Code. Five projects resulted in the public sector receiving less than 30 per cent of the refinancing gains for reasons permitted by the Code but three projects did not share gains which the Code expected to be shared.

The three exceptions were road projects where there was no sharing of the gains

1.30 In three PFI road projects managed by the Highways Agency there was no sharing of the gains on refinancings after the Code came into operation. Two refinancings (A30/A35 (Exeter to Bere Regis) and A50/A564 (Stoke–Derby Link)) were signed on November 7th 2002, a short period, 5 weeks, after the Code had been published. If these had proceeded unchanged but shared in accordance with the Code, the public sector would have received a gain of £1.7 million.[17] At the time of the refinancing, the shareholders in both of these roads projects, which had been awarded by the Highways Agency, was Balfour Beatty (68 per cent of the equity) and WS Atkins (32 per cent).

17 On these deals there is no compensation payable by the Highways Agency to the lenders on contractor default, therefore the termination liabilities of the Highways Agency are unlikely to have increased beyond the original contract.

11 Whether the PFI projects refinanced under the Code have shared 30 per cent of the gain with the Departments

	No. of Projects
Shared 30 per cent (or greater) with the Department	12
Did not share 30 per cent with the Department for reasons permitted by the Code (Medium Support Helicopters[1], Hairmyres Hospital[2] and Tower Hamlets Schools[3] Heart of the City Offices[4], Nottingham Express Transit[5])	5
Did not share with the Department where there was a gain which the Code expected to be shared (A30/A35 and A50/A564 and A69)	3
Total	20

Source: National Audit Office Survey

NOTES

1 At the time of the refinancing, the return to the project was below that projected in the base case when bidding for the contract.

2 A project based in Scotland not included in our study.

3 This was a rescue refinancing where the post refinancing project IRR was below that of the IRR stated in the business case, hence there was no gain sharing according to the Code (Figure 10).

4 No gain to be shared.

5 At the time of the refinancing, the return to the project was below that projected in the base case when bidding for the contract.

1.31 Balfour Beatty and WS Atkins had begun the process of a refinancing in the previous year prior to the introduction of the Code. They signed commercial terms with their banks in February 2002 and received credit approval from their funders between April and May 2002. During late 2001 and the first half of 2002 it was widely known that the Treasury was negotiating with the private sector a code which would expect the private sector to make 30 per cent of the refinancing gains on early PFI deals available to the public sector. The refinancings of these two projects were planned by Balfour Beatty and WS Atkins on the basis of no gain share with the public sector. Balfour Beatty and WS Atkins were ready to sign the final refinancing agreements with the Highways Agency in September 2002, but due to various delays, the final signing of the refinancing deals took place when the Code had come into practice. The nature of the refinancings did not require any consent or document change involving the Highways Agency and were structured so as not to increase the potential termination liability of the public sector.

1.32 Balfour Beatty and WS Atkins told us that had they been required to share any gain with the public sector then they would probably not have proceeded with the refinancing because the resulting value to shareholders would have been reduced to a level that it would not have been worth pursuing given the additional management time required to re-negotiate the transaction applying to the Code and the uncertainty of outcome that would have been created. However, both Balfour Beatty and WS Atkins confirm that they support the principles of the code and subsequently each has been involved in several refinancing discussions with various public sector bodies where the sharing of refinancing gains was an accepted base assumption even though the concession contracts do not require them to do so.

1.33 On a third roads contract, the A69 Carlisle to Newcastle, which the Highways Agency had let to the Roadlink consortium the project was refinanced in 2004 but with no sharing of the gains. The amount of the refinancing gains has not been disclosed to the National Audit Office but the Highways Agency believes that the gains to Roadlink were less than £1 million.

1.34 The Highways Agency has succeeded in obtaining gains of £4 million on two other road projects where the refinancing gains were shared.

The authorities have taken steps to check refinancing gain calculations but there has been one variation from Treasury guidance in the use of the discount rate

1.35 In projects where a refinancing had occurred, the public sector teams had generally involved advisors in checking that the refinancing gain had been calculated correctly.

1.36 Guidance recommends to departments that refinancing gains should be discounted using the investor's IRR as set out in the PFI contractor's base case submitted when bidding for the contract. This discount rate is used as it is a measure of the private sector's expected cost of using equity capital in the project. In most cases, the higher the discount rate used, the greater the refinancing gains.[18] However, in the refinancing at Darent Valley Hospital, the contractor, THC Dartford, successfully argued that using their business case IRR would have given the Trust an unreasonably high amount from the refinancing in relation to the risks that THC Dartford had borne in undertaking such an early PFI deal. After extensive negotiations involving the Department of Health and the Treasury, a compromise discount rate (15 per cent) was agreed between the parties. The 15 per cent used was an approximate equity return prevailing in the market at the time of the refinancing. If the original business case discount rate of 21 per cent had been used, the Trust would have secured an extra £1.4 million. The refinancing gains on other early PFI deals did use higher discount rates equivalent to the base case IRR: Norfolk and Norwich Hospital (19 per cent) and Bromley Hospital (22 per cent).

There are contractual arrangements to share refinancing gains in current deals

1.37 The survey responses to deals signed since October 2002 which are expected to share refinancing gains 50:50 confirmed that these contracts incorporated the prescribed 50:50 sharing mechanism.

1.38 Of the eleven large projects signed after October 2002 which we surveyed, only one had so far undertaken a refinancing (Jubilee, Northern and Piccadilly Tube Lines). The reason why there have not been more is that only one of the remaining ten that have not been refinanced is purely bank financed, where the prospects for refinancing are most likely, and, in any event, the projects are unlikely to have reached the stage when a refinancing would take place. In the Tube Lines project the public sector share of the refinancing gain was a contractually negotiated 60 per cent. This higher sharing arrangement with the Government reflected the fact that the authority was required to give approval to a deal which was predominantly bank financed but was planning to be refinanced using a bond at an early opportunity.

Refinancings have increased investors' returns by varying amounts

1.39 In most cases the refinancing will not increase the overall financing costs of a project in cash terms. The total cash which the investors will receive over the contract period will generally decrease as investors exchange later benefits for the right to increased early benefits from the project. Further information on the effect on investors' cash receipts from PFI projects which have been refinanced is set out in Appendix 9. If increased debt is used to improve the benefits to the investors, the project cash flows will include the repayment of the increased debt and related interest charges over the contract period.

1.40 The acceleration of benefits can however, significantly increase the rate of returns to investors. The internal rate of return (IRR) is a standard business measure used to compare the returns to investors in different projects.[19] At the request of the PAC, we have analysed the IRRs of PFI projects after refinancing and the rate of change in the IRR as a result of the refinancing. These analyses requested by PAC are set out in Appendix 9 together with other data on the projects which have been refinanced. Although there are other measures of investor returns, the characteristics of the IRR calculation make it very sensitive to increases to investor benefits in the early years of a project which is a feature of many refinancings.

1.41 Treasury guidance notes that: the IRR calculation is relevant for the purposes of calculating the refinancing gain; however the authority should be aware that IRRs are generally not a reliable alternative to Net Present Value measurement for the value of an investment.

1.42 On early PFI deals, the expected IRRs were generally 15 to 17 per cent. **Figure 12** shows that, where projects disclosed their IRR after refinancing, the IRRs have varied from below 10 per cent to over 70 per cent. At the top end of this range, in four out of 20 projects (all refinancings under the Code), the IRR had risen to over 50 per cent. As around half of the projects surveyed did not disclose to us the rate of investor returns there may be other projects with high investor returns after refinancing.

18 In the case of a refinancing comprising only a reduction in bank debt margin this effect is reversed.
19 The IRR is the discount rate at which the present value of the investors' receipts from a project equals that of their payments, including their initial investment. The IRR percentage does not mean the investors will receive this as a constant return each year; the receipts from the project may vary from year to year.

12 The IRR of PFI projects post refinancing

Post refinancing Internal Rate of Return (%)	Number of Code refinancings	Number of other refinancings	Total
70+	2	–	2
60–70	1	–	1
50–60	1	–	1
40–50	–	1	1
30–40	–	1	1
20–30	–	1	1
10–20	3	7	10
0–10	–	3	3
Total	**7**	**13**	**20**
No response/Returned incomplete information	8	8	16
Total PFI projects surveyed[1]	**15**	**21**	**36**

A full analysis by project is set out in Appendix 9. We set out below the three projects with the highest investor IRR and the three with the lowest investor IRR following refinancing based on the information which project teams provided to us.

The three projects with the highest investor IRRs following refinancing were:

Project	Total refinancing gain	Pre refinancing internal rate of return to investors	Post refinancing internal rate of return to investors	Main initial investors
Debden Park School	£1 million	16%	71%	Jarvis PLC, Barclays Capital
Bromley Hospital	£45 million	27%	71%	Innisfree, Barclays, Taylor Woodrow Construction
Norfolk & Norwich Hospital	£116 million	16%	60%	Innisfree, Barclays Private Equity, 3i PLC & Serco Group

The three projects with the lowest investor IRRs following refinancing were:

Project	Total refinancing gain	Pre refinancing internal rate of return to investors	Post refinancing internal rate of return to investors	Main initial Investors
Tyne and Wear Fire	–	0%	0%	Jarvis PLC, Barclays Private Equity
Calderdale Hospital	£12 million	7%[2]	8%	Bovis Lend Lease, RCO Holdings, HBOS
Brooklands Avenue, Cambridge	£0.8 million	9%	9%	Kajima Partnerships Limited, Japan England Insurance Co Ltd, WestWind Capital Partners Ltd

Source: National Audit Office Survey

NOTES

1 Information was requested from the 36 English PFI projects which have been refinanced.

2 The contract award IRR was used in this table as the pre refinancing IRR was not provided by the project team.

PART TWO
Debt refinancings may bring risks as well as benefits

2.1 The complex nature of refinancing transactions means that they may create risks for the public sector as well as offering benefits.

Income from debt refinancing involves some uncertainty

The Code is voluntary and the private sector has stated that any changes could damage their commitment to it

2.2 In most early PFI deals there was no contractual requirement to share refinancing gains. It was, therefore, a major change when the private sector accepted in 2002 the introduction of the Code which provided for sharing refinancing gains on these deals. The Code is not legally binding and its ongoing operation depends, therefore, on the support of the private sector. Some private sector parties have told us that they would withdraw their commitment to the Code if any future changes are made which could adversely affect their ability to benefit from refinancings or if it were extended, for example to include equity transactions which are currently defined as falling outside the Code. The Treasury have emphasised to us that the Code has not and will not be changed. They have repeated this view in recent Treasury guidance.

The future flow of income from refinancing cannot be predicted with certainty

2.3 As the recent refinancing experience described in Part 1 of this report demonstrates, the rate of refinancing taking place, and the gains from them, may be subject to fluctuations. They will be affected by various factors including conditions in the financial markets and the types of refinancings which are entered into. It is not possible for the public sector to plan with any certainty for particular levels of future refinancing income.

There are risks from the public sector taking its share of refinancing gains over time through a reduced charge

2.4 The public sector can take its share of the refinancing gain as either:

- a lump sum; or
- over time in the form of a reduced annual unitary charge; or
- by receiving services to the value of the authority's share of the refinancing gains.

2.5 Most public sector departments have chosen to take the gain as a lump sum with the exception of the Department of Health which has advised NHS Trusts to take their refinancing gains over time. There are possible advantages and disadvantages of either taking the refinancing gains as a lump sum or over time (Appendix 8). But, if the gains are not taken as a lump sum, an authority could be exposed to uncertainty over recovering the outstanding balance of the gains it is due if the contract is ended early. Whether this becomes an issue will depend, amongst other things, on the contractual arrangements for early termination (which differ between current contracts and early PFI contracts) and the reasons for terminating the contract (which can effect the terms of the termination). The Department of Health accepted, when examined on this point by the PAC, that an authority had less protection if a PFI contractor failed and the authority had not taken the gains as a lump sum. The Department pointed out, however, that by taking the gain as a lump sum, the need to fund this amount would add to the contractor's debt which could increase the authority's termination liabilities. The Treasury emphasises the flexibility of current arrangements whereby authorities are able to select the option for receiving their share of the refinancing gains that best suits their circumstances. It also notes that, in current contracts, if the contract is terminated due to contractor default, the authority will normally pay its termination liabilities over time by continuing to pay an annual charge which will have been reduced to take account of the authority's share of the refinancing gains.

There can be additional liabilities following a refinancing

2.6 Where the private sector has increased debt on refinancing in order to accelerate shareholder dividends, it is possible that the public sector will face the prospect of increased termination liabilities as, in certain circumstances, the termination liabilities may be linked to the amount of private sector debt.[20] It will then be for the authority to assess whether the refinancing proposals represent value for money taking account of the likelihood that it might wish to terminate the contract at some stage during the contract period. However, assessing such a likelihood is difficult because the changing nature of public service delivery over time means that an authority could change its view on the desirability of continuing an existing contract in future years. An authority should, therefore, be very cautious about accepting increased termination liabilities because high levels of termination liabilities could act as a disincentive to end a contract where other factors would suggest this is the correct strategy.

Half of the refinancings in our survey involved increased debt with most resulting in increased termination liabilities

2.7 From our surveys, 17 projects returned information on their debt structure following a refinancing **(Figure 13)**. In eight of these projects the authorities reported increased termination liabilities following the refinancing.[21]

2.8 The increases in the projects' main borrowings (known as senior debt), where significant, were from £6 million to £106 million (Norfolk and Norwich Hospital). The average increase was £31 million. On average, the increases represented about a 20 per cent increase in the senior debt in the project.

In one project the private sector had accepted that the authority's termination liabilities would not increase

2.9 In one case, on the Highways Agency's A19 PFI road deal, the contractor arranged for their lender to bear the additional risk arising from a £9 million increase in the senior debt. This illustrates that the public sector does not necessarily have to accept increased termination liabilities where the private sector increases its debt.

In other projects, however, the authorities had not appreciated the impact on their termination liabilities

2.10 In some situations, however, it was not always clear whether authorities had been fully aware of the possible impacts on their termination liabilities as a result of a refinancing. For example, one contractor had released cash reserves as part of its refinancing but the authority did not recognise that this would have increased its termination liabilities.[22]

20 Under current guidance, in terminations due to contractor default, the termination liabilities are calculated by reference to the market value of the project, not by the outstanding debt.
21 Further details are set out in Appendix 9.
22 Following the refinancing, the authority's termination liabilities would have had to cover that part of the contractor's borrowings which could previously have been repaid out of the cash reserves.

13 Effect of refinancing on private sector debt structure and public sector termination liabilities

% Change in amount of debt	Number of Projects
0 – 10	7
10 – 20	4
20 – 50	4
> 50 increase	2
No answer provided	30
Total	**47**

Source: National Audit Office Survey

14 Contract Extensions on refinancing

PFI Project	Contract Extension[1]	Length of extension
Darent Valley Hospital	28 to 35 years	7 years
Bromley Hospital	30 to 35 years	5 years
Norfolk and Norwich Hospital	34 to 39 years	5 years

Source: National Audit Office Survey

NOTES

1 In each case the minimum period of the contract was extended. The authorities had the option to continue the contracts for longer periods.

2 Barclays and Innisfree were the lead investors on all three projects.

Some authorities have taken on increased termination liabilities without a full appraisal and exploring alternatives

2.11 In two projects, the authorities' termination liabilities were increased although the projects teams reported in the survey that there had not been a clear value for money case justifying the increase. In four projects, termination liabilities were increased without any exploration between the contractor and the project team of alternative refinancing terms which could have resulted in no increase in termination liabilities.

2.12 The effect on termination liabilities where the private sector has increased its debt on refinancing can be dramatic. As we noted in our report on the refinancing of the Norfolk & Norwich PFI hospital the NHS Trust's termination liabilities could be as much as £257 million higher following the refinancing which increased the PFI consortium Octagon's debt from £200 million to £306 million.

Some contracts have been extended on refinancing, but it is difficult to be certain that existing services will be needed for longer periods

2.13 We were informed of three hospital projects where contract extensions had been agreed by the public sector at the time of the refinancing. The contract extensions had been proposed by the private sector to enable their debt to be repaid over longer periods, thus increasing the refinancing gains **(Figure 14)**.

2.14 There are various issues which could affect the value for money of a contract extension. In our report on Darent Valley Hospital we noted that the financial case for extending the contract was not as clear cut as the Trust had believed.[23] In each of the above projects where the contract had been extended, the authorities were committing themselves now to paying for further services in over 30 years' time. The changing nature of public service delivery makes it difficult to be certain now that such services will be needed so far into the future. Authorities must therefore carefully assess both the benefits and risks relating to any suggestion that the contract period should be extended as part of a refinancing with the decision being taken on operational and value for money factors. The Application Note advises authorities over the need to justify on sound value for money terms a contract extension.

There may be service related issues

2.15 There is a potential risk that, where, following a refinancing, investors receive large accumulated benefits from a PFI project they may become less concerned about whether the service performance is satisfactory in the remaining period of the contract.

23 See NAO Report *Darent Valley Hospital: The PFI Contract in Action* HC 209 February 2005 paragraph 2.24.

On other projects surveyed there has been no evidence so far of major changes to operational risk

2.16 In other projects surveyed we were informed that the authority did not consider that there was any major change to the operational risk, or the quality of performance, within the project following the refinancing. In most cases these are still early days following the refinancings and the service performance will need to be closely monitored in the coming years, including issues relating to life cycle maintenance (para 2.20).

Where the private sector brings forward gains, there are still incentives for them to perform

2.17 As part of our survey, authorities were asked if they considered that their private sector contractors still had suitable long term incentives to deliver the contract satisfactorily after they had benefited from a refinancing. All of the project teams who responded on this issue felt that there were still sufficient incentives to perform. The main reasons given to support this view were that:

- the contract specified penalties for under performance;
- there were contractual incentives for good performance; and
- there was the possibility of reputational damage to the contractor if they under-performed.

2.18 The risk that investors may be less concerned about performance after taking early benefits is balanced by the fact that their ability to realise the further benefits they expect to earn over the remainder of the project will continue to be dependent on the performance of the contractors. One would expect the investors, therefore, to be concerned about any decline in service performance and to seek to address delivery problems. In addition, there is an added comfort for the public sector in a refinancing from the funders' checking process known as due diligence. The lender will be concerned that the repayment of their debt, which may have increased on refinancing, is not put at risk. It will take care to assess the future profitability of the project and the likelihood of termination before agreeing to the proposals. An integral part of this assessment is an evaluation of how incentivised to perform the contractor would be following the refinancing. The Treasury has also observed that the financing structures of PFI project companies following a refinancing are normally in line with the structures of new PFI deals. It therefore expects the risks to service delivery following a refinancing to be no different than in new deals. It further considers that the PFI contract is what drives the PFI contractors' incentives and that the mix of finance is not a direct contributor to performance.

2.19 The need for good performance incentives following a refinancing reinforces the importance of a strong performance management system within PFI projects. A public sector authority considering a refinancing should review their performance management system and re-evaluate its effectiveness in a post-refinancing environment. Where necessary they should seek to strengthen the PMS although the private sector may demand a pricing adjustment if there is a significant change in the risks they are being asked to bear.

It is too early to judge, however, whether large early distributions to investors will affect future performance

2.20 Whilst the projects surveyed were generally satisfied with performance so far since refinancing, it is too early to judge how well the incentives to perform following a refinancing are likely to work in the longer term. In particular, following a refinancing, if the project company distributes to the shareholders a very high level of accelerated benefits to the detriment of retaining contingent funds there could be a risk that the project company would find it difficult in future years to fund one-off items of expenditure such as large value items of building maintenance or contingencies (unforeseen items of expenditure). Investors have acknowledged to us that service expenditure needed on maintenance can vary significantly from earlier estimates. The private sector's ability to fund whole life asset maintenance is an issue which the public sector needs to monitor. The Treasury agrees this is an important issue which it expects authorities to give proper attention to, but noted that the incentives to perform outlined in paragraphs 2.17 to 2.19 will require the PFI contractor to give appropriate consideration to asset maintenance.

A refinancing may present an opportunity to develop other aspects of the project relationships

2.21 In our survey:

- no authority reported that the relationship with their contractor had deteriorated following a refinancing;
- most authorities indicated that their relationship had remained the same; and
- a small number of authorities commented that their relationship had improved.

2.22 Those authorities which noted that there had been an improvement in the relationship with their contractor commented that there was a greater degree of mutual trust and an increased sense of partnership following the refinancing. The process of refinancing, which tends to necessitate a great deal of interaction between project teams, can therefore re-establish and develop relationships.

2.23 Some authorities reported that refinancing had provided an opportunity to resolve contractual issues which had been in dispute. For example, a characteristic of some early performance management systems has been the inappropriate use of subjectivity in defining performance indicators.[24] This has caused problems in assessing the performance of facilities management services and imposing, where necessary, financial deductions for poor performance. A refinancing can enable such contractual problems to be resolved but they should be negotiated separately from the refinancing and should not be viewed as reasons for entering into refinancing negotiations.

24 See NAO Report *Darent Valley Hospital: The PFI Contract in Action* HC 209 February 2005 paragraph 1.33.

PART THREE

There have been developments in the PFI equity market as the PFI market has matured and financial markets have become more liquid

3.1 As the PFI market has matured there have been developments in the PFI equity market. In particular, there is an emerging secondary market for selling shares in PFI project companies. The developments in the PFI equity market may bring benefits to the public sector but at present the public sector has only limited information about the operation of the PFI equity market. There is scope to improve the compilation of this, and other, information on the financing of PFI projects.

There has been a growth in investors selling shares in PFI projects which may bring benefits to the public sector

The development of a secondary market has contributed to the growth in transactions involving the sale of shares in PFI projects

3.2 There is now an emerging secondary market for the sale of shares in PFI project companies. This has developed because investors are seeking opportunities to invest in established PFI projects now that the PFI market has matured and there is current liquidity in the financial markets. As a result, whereas previously there was uncertainty as to whether investors would be able to exit from their PFI investments, there is now a reasonably assured market for investors to sell shares in successful PFI projects, should they wish to do so. While sellers may reinvest their proceeds in other PFI projects there is no obligation to do so. The shares are being bought by existing investors and specialist funds (secondary market equity funds (SMFs)) established to build portfolios of shareholdings in PFI projects. Further details about SMFs are in Appendix 4.

3.3 32 projects reported that there had been a change in the shareholdings of their PFI project company which represented 40 per cent of those projects which provided information on their current investors. The timing of these share sales is set out in **Figure 15**.

15 Timing of when share sales have taken place

	Number of projects	%
Within one year of contract letting	1	
One to two years after contract letting	2	
Two to three years after contract letting	4	
More than three years after contract letting	25	
	32	**40**
Share sales have not occurred	48	
Total	**80**	**100**

Source: National Audit Office Survey

NOTES

1 45 out of 123 projects did not respond to this question.

2 Of the 32 projects reporting a share sale 16 (50 per cent) had been subject to a refinancing. Of the 48 projects reporting that a share sale had not occurred 12 (25 per cent) had been subject to a refinancing.

3.4 Where a share sale takes place either the initial or the new investors may still wish to refinance a project's debt finance in which case authorities would expect to share in the gains. Depending on their investment strategy, there may be less incentive for initial investors to carry out an early refinancing if they can receive part of the project's potential refinancing gains in the value they receive for selling their shares. The value at which the shares are sold may include an amount which the purchaser is willing to pay for the potential of the project to yield future gains on refinancing the debt finance after allowing for the uncertainties of whether a refinancing will actually take place. Nevertheless, we found that half of the projects where there had been a share sale had been refinanced by either the initial or subsequent investors which was a higher incidence of refinancing than in projects where there had not been a share sale.

3.5 In addition, it can be possible for investors to sell their economic interests in a project without selling shares. Jarvis had built up interests in a portfolio of around 30, mainly schools PFI projects, when it began to experience financial difficulties in 2004. Jarvis responded by initially selling the rights to the distributions from their shares in most of their PFI projects to the Secondary Market Infrastructure Fund (SMIF) and subsequently sold the shares in certain of the companies to SMIF (Appendix 4).[25] In principle, the incentives applicable to Jarvis as sub-contractor are not affected by the sale of its shares or economic interest in shares. However, there is a risk that Jarvis may not have a suitable incentive for satisfactory performance, and indeed may not have the financial resources to fulfil its service obligations. SMIF is likely, however, to be concerned to protect the interests it has acquired in these projects and may be able to bring in specialist asset management capabilities which could improve the way these projects perform.

Treasury guidance excludes equity sales from gain sharing although profits on selling shares would potentially be subject to taxation

3.6 The Treasury acknowledged in its July 2002 guidance that the profits on selling equity shares in PFI project companies would not be subject to gain sharing.[26] The factors the Treasury's decision took into account included:

- these transactions should not affect the financial robustness of the project company which is in a contractual relationship with an authority;
- the value for which the shares are sold may reflect factors other than the performance of the project;
- profits on the sale of shares in PFI project companies will, like other chargeable gains, be potentially subject to taxation; and
- if gain sharing were to be applied it is possible that primary equity returns may rise to compensate.

The expansion of the PFI equity market may bring benefits to the public sector

3.7 The emergence of the secondary market may bring benefits to the public sector by attracting more investors into the PFI market. As the supply of equity in PFI projects increases this should, assuming efficient markets, drive down the relative cost of equity and bring benefits to the public sector in the pricing of PFI projects. The Treasury has said that it considers there is scope to reduce the returns of around 13–15 per cent which investors expect when PFI projects are bid for.

3.8 In addition, the public sector can learn from the management techniques employed by SMFs to reduce the operating costs of a portfolio of PFI projects. The Treasury has an ongoing initiative to also seek to identify ways in which operating costs can be reduced. It notes that it always encourages and welcomes efficiency in its supply chains and would expect any efficiencies which the SMFs introduce to be reflected in the prices which they bid in future PFI procurement competitions.

25 In December 2005 Treasury guidance on change of ownership restrictions was extended to include the sale of the economic interest in PFI projects.
26 The detail of this exemption is set out in the standard contract terms issued by the Treasury.

Equity investors and debt providers may derive benefits from establishing portfolios of interests in PFI projects

3.9 As the number of PFI contracts has increased there has been a trend towards equity investors and debt providers building a portfolio of interests in PFI projects. The SMFs are an example of this trend. Where an equity investor or debt provider is involved with a portfolio of projects there may be opportunities for further benefits from:

- greater operating efficiencies arising from economies of scale and common working practices across the portfolio; and
- making changes to the financing arrangements of the whole portfolio rather than refinancing individual projects.

Investors may be able to reduce operating costs through efficient management of a portfolio of projects

3.10 Investors with a portfolio of PFI projects may also be able to improve their returns by efficient management of the operational activities of the projects within their portfolio. One secondary market fund told us:

- their business had been rationalised by the creation of regional directors;
- 70 per cent of the fund's employees are involved in asset management;
- these employees had specialist knowledge in operational and construction matters; and
- they were charged with the task of enhancing the value of the PFI projects.

Any gains which arise from an efficient asset management approach are operational profits outside of the code and would not have to be shared with the public sector although, as noted above, the Treasury would expect operating efficiencies to feed through into better pricing of new competitively bid PFI contracts.

There may be other opportunities for equity investors and debt providers to generate financing benefits from a portfolio of PFI projects

3.11 It is a normal business strategy for equity investors and debt providers with a portfolio of interests to seek ways of improving the financing of the portfolio. An example of this which has taken place in the PFI sector is that the Dublin based financial institution, DEPFA, created a special purpose vehicle in order to structure what is known as a synthetic securitisation of 24 of its portfolio of PFI loans. This involved transferring the risks inherent in the loans to other financial institutions. DEPFA was then able to reduce the capital it had to set aside under banking regulations. As a result, DEPFA was able to enhance its return on capital on its PFI debt portfolio by increasing its lending base. The Treasury has accepted that since such securitisations are external to the PFI contracts and at a lender's corporate level, they are not to be included in the gain sharing arrangements. It is possible that other financial investors or debt providers may have securitised some or all of their PFI exposure as this is a common and accepted means of portfolio management.

3.12 In addition to possibly laying off the risk of financing a PFI portfolio, it is also theoretically possible that equity investors with a portfolio of PFI projects, such as the SMFs, could seek to improve the financing terms for their portfolio as a whole rather than refinancing individual projects on a project by project basis. In order to do so, they would have to be the primary equity holder in all of the projects within the portfolio or have the agreement of the other equity holders. If it were possible to refinance the portfolio without requiring authority permission (which would, for example, be needed for increases to termination liabilities) then any gains may not have to be shared with the government. The Treasury notes that its guidance limits the opportunities for portfolio refinancings where there would be no gain sharing with the public sector. Although we were informed by some SMFs that portfolio refinancing without gain sharing was an option open to them, neither we nor the Treasury are aware of any such transactions having been completed. One SMF told us that it would rather not go against the spirit of the Code which generally expects the sharing of refinancing gains.

There is scope to improve the compilation of information on the financing of PFI projects and the returns to investors

3.13 All authorities receive information about the financing arrangements of their PFI project companies when the companies bid for the contract and when the companies seek the authorities' approval for a refinancing. In addition, standard contract guidance on rights to information, which has been present in contract guidance since the first version in 1999 and has been expanded in December 2005 guidance, gives authorities the right to further information available to the lenders. In total, this information helps departments and the Treasury to keep track of financing terms available on PFI deals and should help them to monitor the ongoing financial position of the PFI project companies. Current expectations are that the increase in sources of equity arising from the emerging PFI secondary market should drive down returns which equity providers seek from PFI projects and that debt finance should continue to be provided at competitive rates reflecting the lower risks now that the PFI market is established. However, the Treasury has not published a summary of the current trends in PFI financing terms across the PFI sector.

3.14 Although authorities should, therefore, have information on the current financing structure of their PFI project companies, many of the project teams that we surveyed had difficulties in providing this information. 20 PFI project teams, out of 123 surveyed, did not return our questionnaire despite repeated reminders. In a follow up survey to obtain further information on refinanced projects requested by the PAC, including the current investor internal rate of return, 16 out of 36 projects provided no information or incomplete information.

3.15 Partnerships UK launched in 2005 a database of PFI projects which includes available information on the financing of PFI projects and the extent of refinancing activity, although considerable further work is needed to make aspects of this information accurate and comprehensive. In order to complete this work, Partnerships UK will require the support of the authorities. The results of our survey are being made available to Partnerships UK to enable them to improve the accuracy of data they had been compiling on completed refinancings.

3.16 The authorities we surveyed would not normally receive updated information on the profits or losses which investors may derive from selling shares in PFI project companies; this information is not disclosed to authorities because it is a contract between two private sector parties. Such information, together with further information on the full range of costs and benefits which investors experience from participating in the PFI market, would provide greater transparency, an insight into the balance of risks and rewards which the private sector experience from entering into PFI projects, and a better understanding of the dynamics of PFI equity investment.

APPENDIX ONE

Reports and Guidance on Refinancing by the National Audit Office, PAC and Treasury

Reports

National Audit Office reports

June 2000 HC 584	The Refinancing of the Fazakerley PFI prison contract
Nov 2002 HC 1288	PFI Refinancing Update
Feb 2005 HC 209	Darent Valley Hospital: The PFI Contract in Action
June 2005 HC 78	The Refinancing of the Norfolk and Norwich PFI Hospital: how the deal can be viewed in the light of the refinancing

PAC reports

Mar 2001 HC 995-i (1999-2000)	The Refinancing of the Fazakerley PFI Prison Contract, Thirteenth Report of the Committee of Public Accounts
June 2003 HC 203	PFI Refinancing Update, Twenty-Second Report of the Committee of Public Accounts

In November 2005, the PAC took evidence on the refinancing of the Norfolk and Norwich PFI Hospital and will be publishing a report in Spring 2006.

Treasury guidance

July 1999	Treasury guidance on standard contract terms included some guidance on refinancing but not the requirement for the mandatory contractual sharing of refinancing gains
July 2002	OGC Guidance note on Calculation of the Authorities' Share of a Refinancing Gain
September 2002	Refinancing of Early PFI Transactions Code of Conduct
July 2003	Calculation of the Authorities Share of a Refinancing Gain
July 2003	PFI: Meeting the Investment Challenge
April 2004	Standardisation of PFI Contracts (SoPC) Version 3 (earlier versions: July 1999, September 2002)
February 2005	Application Note – Value for Money in Refinancing

Summary previsions of key refinancing guidance

1 Refinancing of Early PFI Transactions – Code of Conduct

2 OGC guidance note – Calculation of the Authority's share of a refinancing gain

3 Application Note – Value for Money in Refinancing

4 Standardisation of PFI Contracts Version 3

1) Refinancing of Early PFI Transactions – Code of Conduct

Adherence to the Code of Conduct (the Code) is voluntary. It was negotiated by representatives of OGC with a selection of key participants in the PFI contracting market and with the involvement of the Treasury. The Code was introduced retrospectively to transactions signed before the introduction of the mandatory refinancing provisions contained within SOPC2 and to date has been widely and possibly universally accepted.

The Code applies to all refinancings implemented after 30 September 2002, on transactions signed up to 30 September 2002. In the Code the private sector undertakes to:

- consult authorities on proposed refinancings, and to undertake all refinancings on an open and transparent basis; and
- share the refinancing gain 70 per cent/30 per cent or follow existing gain sharing arrangements in the contract; however if the Authority accepts higher termination liabilities it should receive 30 per cent of the gain.

The Code supports mutually beneficial refinancings but an Authority is not obliged to accept increased termination liabilities as part of a refinancing. Instead, the Code specifies that the Authority must consider value for money in optimising the value gain for both parties.

2) OGC guidance note – Calculation of the Authority's share of a refinancing gain

The OGC Guidance note (the Guidance) was negotiated with the private sector as part of the acceptance of the retrospective gain sharing arrangements under the Code of Conduct.

The Guidance enshrines, in broad terms, the concept that a refinancing gain is generated from the difference between the distributions to investors before and after the refinancing using a recommended discount equal to the internal rate of return to shareholders (equity IRR) from the original financial model. The Guidance includes an agreed methodology to establish the size of gain including identifying allowable transaction costs that can be deducted from the gross gain. The Authority is only entitled to share in the refinancing gain if the contractor is projected to achieve the original base case equity IRR.

Once the gain had been calculated the Authority must decide whether to take its gain over time as a reduction in the unitary charge or as a lump sum. The Guidance sets out how to calculate the revisions necessary to correctly size the gain if taken over time; relevant factors include the effects of a lower tax bill paid by the contractor (the contractor makes less profit), the need for less new senior debt and the payment of implied interest to the Authority for deferring its gain.

The Guidance uses NPV as the measure to determine the refinancing gain.

3) Application Note – Value for Money in Refinancing

The provisions of the Application Note do not alter or replace any other existing guidance. The Application Note is designed to clarify interpretation and assist Authorities in applying guidance rigorously and consistently. It concentrates on four key issues:

- the implications of increased termination liabilities should be a key focus for Authority evaluation. The Authority's starting point for value for money analysis of a refinancing involving increased termination liabilities should be to compare the proposal to a refinancing without increased termination liabilities. The difference in the authority's gain-share between the two scenarios can then be evaluated against the increase in potential liabilities. The evaluation should also consider the time profile of potential liabilities;
- evaluating the effects of higher levels of senior debt on the drivers of value for money in the original project including the extent and profile of remaining shareholder incentives over the life of the contract; the effects of a new financial structure on the financial flexibility of the contractor to manage its routine risks and the ability of the contractor to withstand major project risks;
- cautioning Authorities that changes to the profile or indexation of the Unitary Charge payments should only be considered when clear value for money grounds exist. Such changes are separate to the refinancing and should only be considered because the new regime will fit the Authorities needs more closely not because such changes would of themselves increase the size of the gain from a refinancing;
- recommending that Authorities do not extend the original contract length unless there is clear evidence to the contrary and doing so is justified on a separate stand alone basis. Increasing the size of the refinancing gain by extending the contract length and thereby easing any possible affordability constraint cannot be justified as an end in itself.

4) Standardisation of PFI Contracts Version 3 (SOPC3)

SOPC 3 was introduced in April 2004 as an update to SOPC2. For all contracts signed after 1 October 2002 the Authority shares any refinancing gain 50 per cent/50 per cent.

Chapter 35 in SOPC3 focuses on refinancing including a description of the key principles underlying the Government's approach, a synopsis of issues for consideration by an Authority and detail on the exemptions to gain sharing. Model Refinancing Provisions are included to assist the development of standard drafting. Calculation of a refinancing gain is discussed including reproducing the Guidance in 2 above.

APPENDIX TWO

Study scope and methodology

Study scope

The objective of this study was to provide an update on PFI debt refinancing and the PFI equity market. A key part of the examination of debt refinancing was a consideration of how the new arrangements for the sharing of refinancing gains are working.

An issue analysis approach was adopted to design the scope of the study. After initial research and meetings with public sector stakeholders such as the Treasury (which has responsibility for PFI policy), Partnerships UK (PUK) and other government departments, a series of high-level audit questions were set. The main questions were:

- Is the voluntary code for sharing debt refinancing gains, where applicable, being applied properly?
- In what circumstances are gains excluded from the gain sharing provisions of the code?
- Is the 50/50 sharing for new deals working properly for those recent projects which have undertaken a refinancing?
- In what ways is the maturing PFI market affecting the use of equity capital in PFI projects?

For each of the top level questions, a subsidiary group of questions was developed to direct our work and analysis. On the questions relating to debt refinancing the subsidiary issues included how the level of debt refinancing gains secured by departments compared with the OGC's expectations when the voluntary code was launched and a consideration of the risks facing authorities from debt refinancings. The examination mainly focussed on trends in debt refinancing activity across government and accordingly did not seek to verify all aspects of the refinancings of individual projects. The examination did, however, include a limited review of how the gains on certain transactions had been calculated.

On the questions relating to the development of the PFI equity market the examination considered the extent to which changes in the equity investors in PFI deals were occurring but did not examine the underlying share transactions as these were between private sector companies and there was no requirement to involve the public sector in these transactions.

The study scope included the collection of data on completed debt refinancings, including information about investors' internal rates of return following refinancing, specifically requested by the Committee of Public Accounts.

Study methodology

The National Audit Office team

The study methodology drew on the NAO's knowledge of PFI refinancing obtained from a number of previous examinations of PFI refinancing (Appendix 1). The study team included staff with experience of project finance.

The survey

A survey of PFI projects was conducted in order to collect key data needed to answer the questions which had been identified as a result of the issue analysis. The PUK database of PFI projects was used as the source information from which to select our samples. The projects selected for the survey were:

- All projects which PUK had identified as refinanced;
- All major projects (with a capital value greater than £50 million) that reached financial close before October 2002 and consequently were covered by the Code sharing arrangements;
- Small projects (with a capital value less than £50 million) that reached financial close prior to October 2002 sampled to ensure that projects of key shareholders (with an interest in more than one project) were included in the survey; and
- The ten largest projects to reach financial close after July 2002 and which consequently were subject to the new 50/50 sharing guidance.

In total, our survey covered 123 projects out of approximately 700 PFI contracts that had been let as of December 2004. The survey sample was biased towards those projects which were most likely to have experienced refinancing activity. The survey responses were then analysed and follow up interviews with project teams conducted where necessary. Details of the responses to the survey are set out in Appendix 9.

Further work undertaken

A series of interviews was conducted with key private sector stakeholders; the financial advisors KPMG and PricewaterhouseCoopers, the banks HBOS and Dresdner Kleinwort Wasserstein (DrKW), the insurance company MBIA, and the PPP Forum (a private sector industry body representing PFI funders and contractors).

We discussed the developments in the PFI equity market with the Treasury and PUK, undertook a website review of secondary market funds and met with the following funds: Innisfree, Hendersons and SMIF (see Appendix 4).

APPENDIX THREE

PFI Projects in the Survey

The four samples making up our survey.

SAMPLE ONE

Refinanced projects

Project name	Returned
Department for Education & Skills	
Barnhill School	Yes
Bridlington Group Schools Project	No
Cardinal Heenan (VA) School	No
Debden Park High School	Yes
Haringey Group Schools Projects	No
Jews Free School	No
Sheffield Group NDS/PPP Pilots – Phase 1	Yes
Sir John Colfox County Secondary School	Yes
Department for Culture, Media and Sport	
Royal Armouries Museum Restructuring[1]	
Department of Health	
Calderdale and Huddersfield NHST Centralisation of Acute Hospital Services	Yes
Chichester Priority Care Services NHS Trust – Reprovision & Development of Locally Based Mental Health Services	No
Darent Valley Hospital[2]	
Norfolk & Norwich University Hospital	Yes
Princess Royal University Hospital, Farnborough	Yes
Home Office	
HMP & YOI Ashfield	Yes
HMP Altcourse (Fazakerley)	Yes
HMP Dovegate	Yes
HMP Lowdham Grange	Yes
HMP Parc	Yes
STC Hassockfield	Yes

Project name	Returned
Office of the Deputy Prime Minister	
Heart of the City Offices	Yes
London Fire	Yes
North Wiltshire District Council – Council Office Accommodation	Yes
Tyne and Wear Fire	Yes
Inland Revenue	
Newcastle Estate Development	Yes
HM Customs and Excise	
HM Customs & Excise IT Infrastructure PFI	Yes
Department for Transport	
A19 Dishforth to Tyne Tunnel DBFO	Yes
A30/A35 Exeter to Bere Regis DBFO	Yes
A50/A564 Stoke–Derby Link DBFO	Yes
A69 Carlisle to Newcastle DBFO	Yes
M1–A1 Link Road (Lofthouse to Bramham)	Yes
M40 Junctions 1 to 15	Yes
Second Severn Crossing	Yes
Department of Trade and Industry	
Antartic Survey Shipping Services	Yes
Department for Environment, Food and Rural Affairs	
Brooklands Avenue, Cambridge	Yes
Ministry of Defence	
Central Scotland Family Quarters – Bannockburn	Yes
Joint Services Command and Staff College	Yes
Medium Support Helicopter Aircrew Training Facility (MSHATF)	Yes

NOTES

1 The Royal Armouries PFI-type project ceased in 1999.

2 Darent Valley had been the subject of a NAO report in 2005 and information about the project had already been collected.

SAMPLE TWO

Projects whose capital value is > £50m

Project name	Returned
Department for Constitutional Affairs	
Hereford & Worcester Waste Management Project	No
Department for Education & Skills	
Birmingham Group Schools	No
Cornwall County Council – Grouped Schools I PFI Project	Yes
Kings College London and UMDS	No
Kirklees Group Schools Project	Yes
Lambeth Secondary School Project	No
Liverpool Group Schools Project	Yes
Speke Forward Learning Centre	Yes
Wirral Group Schools Project	No
Department for Environment, Food and Rural Affairs	
Surrey Waste PFI – Quest in search of waste management Solutions	No
Department of Health	
Barnet General Hospital Modernisation	Yes
Dudley Group of Hospitals NHS Trust Redevelopment and Rationalisation of Sites	Yes
Hereford County Hopsital	Yes
James Cook University Hospital	No
King's College Hospital New Block	No
North Cumbria Acute Hospitals	Yes
Queen Elizabeth Hospital, Greenwich	Yes
University College London Hopitals Site Rationalisation	Yes
University Hospital of North Durham	Yes
West Middlesex University Hospital DBFO	Yes
Worcester Acute Hospitals NHS Trust New District General Hospital	No
Wythenshaw Hospital	Yes
Department for Transport	
A1(M) Alconbury to Peterborough DBFO	Yes
A13 Thames Gateway	Yes
A130 (A12–A127)(LA)	Yes
Birmingham Northern Relief Road (M6 Toll)	Yes
Connect	Yes
Croydon Tramlink	Yes
Docklands Light Railway – Extension to Lewisham	Yes

Project name	Returned
Department for Transport *continued*	
Heavy Equipment Transporters (HET)	Yes
Medium Support Helicopter Aircrew Training Facility (MSHATF)	Yes
Midland Metro Line One	Yes
Northern Line Trains	Yes
Nottingham Express Transit	Yes
Power Supply	Yes
Prestige	Yes
Traffic Control Centre	Yes
Department for Work & Pensions	
Employment Service IT Partnership	No
PRIME (Private sector Resource Initiative for Management of the Estate)	Yes
Foreign and Commonwealth Office	
Foreign and Commonwealth Office Telecommunications Network (FTN)	Yes
Government Communications Headquarters	
GCHQ New Accommodation Project	Yes
Her Majesty's Treasury	
Redevelopment of the Treasury Building, Government Offices Great George Street (GOGGS)	Yes
Home Office	
Quantum	Yes
Inland Revenue	
Strategic Transfer of the Estate to the Private Sector (STEPS)	Yes
Ministry of Defence	
Army Foundation College (AFC)	Yes
Attack Helicopters – Apache Simulator Training	Yes
Defence Fixed Telecommunications Service (DFTS)	Yes
Defence Helicopter Flying School (DHFS)	No
German White Fleet	No
MoD Main Building Refurbishment	Yes
Naval Communications	Yes
Tornado GR4 Simulator	Yes

SAMPLE THREE

A selection of small projects

Project name	Returned
Department for Constitutional Affairs	
Derbyshire Magistrates' Courts	Yes
Hereford and Worcester Magistrates' Court	Yes
LIBRA IT System for Magistrates' Courts	Yes
Manchester Magistrates' Courts	Yes
Resource Accounting and Management Information Service for Lord Chancellor's Department and the Court Service (LOCCS)	Yes
Department for Education & Skills	
Highlands School DBFO	No
Lammas Community School	No
Miltoncross School DBFO	Yes
Nottingham – New College (ex Clarendon College)	No
Sandhill View School	Yes
Swanscombe Community Schools	Yes
Westlands & Homelands Schools Project	Yes
Department for Transport	
Doncaster interchange	Yes
Department of Trade and Industry	
Electronic Government through Administrative Re-engineering (ELGAR)	Yes
Department of Health	
Birmingham Ambulatory Care Centre	Yes
St George's Healthcare NHS Trust – Cardiothoracic & Neurosciences Development	Yes
Home Office	
PASS Project	Yes
Inland Revenue	
Manchester Inland Revenue Accommodation Project	Yes
Ministry of Defence	
Defence Animal Centre (DAC)	Yes
Office of the Deputy Prime Minister	
Bournemouth PFI Library Project	Yes
Cornwall Fire Stations	Yes

SAMPLE FOUR

Recent large projects to which the 50:50 guidance applies

Project name	Returned
Department for Environment, Food and Rural Affairs	
East London Integrated Waste Management	No
Deptartment of Health	
Coventry & Warwickshire NHS Trust – Coventry New Hospitals Project	Yes
Derby City City General Hospital Acute Services Reconfiguration	Yes
Oldchurch Hospital Site Rationalisation	Yes
Department for Transport	
A1 Darrington to Dishforth	Yes
Department for Transport *continued*	
Deep Tube Lines – Bakerloo, Central & Victoria Lines (BCV)	Yes
Deep Tube Lines – Jubillee, Northern & Piccadilly Lines (JNP)	Yes
Newcastle & North Tyneside – Street Lighting	Yes
Sub Surface Lines (SSL) – District, Circle, Metropolitan, East London & Hammersmith & City	Yes
Ministry of Defence	
Skynet 5	Yes
Colchester Garrison	Yes

Totals

Surveys returned	102
Surveys not returned	20
Total projects surveyed	**123**
Percentage response	**83**

APPENDIX FOUR

Secondary Market Funds

The following information about Secondary Market Funds has been drawn from information made publicly available by the funds.

Henderson Global Investors

Henderson's PFI Secondary Fund invests in existing shareholder interests, being equity, shareholder loans and subordinated debt, of PFI and PPP concession companies in Europe, with a principal focus on the more developed UK PFI market. The primary objective of the Fund is to provide investors with a strong income stream, from the first year of investment, and stable capital values. The Fund primarily invests in operational assets and the team will seek to improve the return over time on these assets through a range of value enhancement strategies. PFI investments which the fund owns in various infrastructure sectors include a 30-year concession contract to treat wastewater for a 700-hectare area between Dundee and Arbroath, at the mouth of the Tay estuary in East Scotland. Senior officials include Paul Woodbury (Partner) with over 20 years of experience in privatisation, corporatisation, restructuring, project finance and business operations in the infrastructure sector globally.

Infrastructure Investors (I^2)

The I^2 Fund is an English Limited Partnership created to invest in the equity of existing operational infrastructure projects in the United Kingdom and European euro currency countries with a view to creating a diversified low risk portfolio. Barclays Private Equity and Société Générale participated in the initial £300m closing of the Fund in November 2003. On 10 June 2005 3i became the new Limited Partner and joined the Fund with an additional investment of £150m. I^2 has now achieved its target commitment of £450m. The I^2 Fund is keen to invest in UK PFI projects and will consider investments in single project companies or groups of projects; whether by way of direct interest or an interest held through a holding entity. I^2 has 38 investments with £230m invested across a wide range of sectors including health, education, transport, utilities, accommodation and equipment. The chairman of the fund is Sir Adrian Montague CBE who, from 1997 to 2001 held senior positions concerned with the implementation of the Government's strategy for involving the private sector in the delivery of public services, first as Chief Executive of the Treasury Taskforce, and then as Deputy Chairman of Partnerships UK plc.

Innisfree

Innisfree was established in 1995 and is one of the leading infrastructure investment groups in the UK investing in PFI and PPP infrastructure projects. Innisfree provides a channel for institutional investors to invest in PPP/PFI assets. Acting also as a bid sponsor and developer, Innisfree uses its extensive experience to support the development, structuring, negotiation and closing of projects and thereafter their ongoing management. Innisfree is currently involved in bidding and managing investments in some 60 projects with an overall capital value of £10 billion providing investment opportunities of over £580 million. Innisfree is structured as a private equity group and has £885 million of funds under management. Total current investment commitments amount to £484 million in 50 projects with an overall capital value of £7.9 billion.

Innisfree M&G PPP LP

The Innisfree M&G PPP LP is a secondary market PFI equity fund which M&G manage on a joint venture basis with Innisfree Limited. The £175 million fund was established in 2002 and has a portfolio of 24 investments in the operational stage. The fund is a long term holder of the assets providing investors with a cash yield through to the end of the concession life of the projects.

Secondary Market Infrastructure Fund (SMIF)

SMIF are one of the largest European infrastructure investment and management groups, providing liquidity to infrastructure project investors and developers in the UK PFI/PPP market. SMIF was established in October 2001 and now has over £285 million invested in thirty-seven business assets, the largest asset manager in the UK PFI/PPP market place. It is looking, at minimum, to acquire £500 million of interests in infrastructure assets in the UK and Western Europe prior to December 2007. Following acquisition, SMIF intends to improve the performance of infrastructure assets, with particular expertise in the financial restructuring of such projects, and will seek to enhance value for its shareholders. SMIF acquisitions include four health sector acquisitions for circa £40 million. SMIF is a UK Limited Partnership managed by five partners: William Doughty, Ian Gethin, Paul McCulloch, Robert Rees and Barry Williams.

A number of banks and PFI contractors also have a portfolio of equity investments in PFI projects.

APPENDIX FIVE

Previous refinancing recommendations from NAO and PAC reports and the extent to which action has been undertaken in order to meet those recommendations

Recommendations referring to the Public's share in refinancing gains

Recommendation	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
1 Departments should set out unambiguously in their PFI contracts the circumstances in which they would be required to consent to part, or all, of a proposed refinancing. These should include any situation which may have adverse consequences for departments, for example by increasing their termination liabilities.	**1 NAO**	This requirement has been present in the standardisation of PFI contracts since July 2002.
2 Departments should share in benefits that will arise through the successful delivery of a PFI project.	**2 PAC**	Sharing arrangements have been present in the standardisation of PFI contracts since July 2002.
3 Early on in the procurement process, when preparing an Invitation to Tender and when developing the PFI contract, departments should give careful consideration to refinancing issues. They should address whether they should establish within the PFI contract the right for them to share in refinancing benefits.		Sharing arrangements have been present in the standardisation of PFI contracts since July 2002.
4 Given the scale of the improved benefits that have accrued to the consortium from this refinancing, the Service should have sought a more reasonable balance of risk and rewards for both the Service and FPSL. The gains should have been shared more equitably between the consortium and the Service.	**2 PAC**	All projects signed before 30th September 2002 that do not have specific sharing arrangements are now subject to a voluntary sharing arrangement, "Refinancing of Early PFI Transactions Code of Conduct". The code specifies that gains will be shared 30/70 in favour of the contractor. Projects signed after this date are subject to the gain sharing arrangements in the standardisation of PFI contracts where gains are shared 50/50.
5 The experience of privatisations shows that in some cases private sector investors have made much higher returns than they ever imagined. We advocated that such unexpected gains should be shared. Windfall refinancing benefits on PFI projects which have not arisen through a higher than expected standard of service from the private sector should similarly be shared between departments and the private sector. Because deals will not have been priced in anticipation of such gains arising, the prospect of sharing the gains between the public and private sectors will have no impact on the original pricing of the deals.	**2 PAC**	Gains made (other than from a level of service that is higher than expected) from refinancing a PFI transaction are shared with the Authority by reference to the rate of return to equity predicted in the opening financial model. It is more difficult to say that there is no impact on the original pricing of such gains. There is certainly no empirical evidence from the experience of Authorities that pricing has risen but there is anecdotal evidence that primary equity returns have remained static when a maturing market would otherwise assume a deeper and more progressive decline in returns.
6 We look to the National Audit Office to carry out a further analysis at the end of 2001 of the extent to which PFI contracts allow departments to share in refinancing gains so that we can monitor progress on these important issues.	**2 PAC**	This is covered in this current NAO report on Refinancing.
7 Departments should obtain from their contractors sufficient information about their financing to ensure that they are aware of all refinancings for which the benefits should be shared. This information should be sufficient to enable departments to be aware of any significant changes to a project's financing structure and to understand whether or not such changes will create refinancing benefits.	**3 NAO**	The standardisation of PFI contracts has introduced the obligation on the contractor that many elements of a refinancing now require the consent of the Authority. Failure by the contractor to disclose a qualifying refinancing will lead to termination of the contract with limited and unattractive compensation for the contractor.

Recommendations referring to the Public's share in refinancing gains *continued*

Recommendation	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
8 Departments should gather sufficient information to assess whether their refinancing arrangements are increasing value for money to the taxpayer. This needs to take account of any effect refinancing gain sharing arrangements may have on the pricing of contracts and on incentives to contractors to perform throughout the contract period. The OGC should gather feedback from departments on these matters to enable it to assess the effectiveness of the new approach to refinancing that has been adopted across government.	**3 NAO**	The Treasury supports the Committees' recommendation. Departments have an important role to play in determining value for money in refinancing. We are not aware of the arrangements put in place by OGC following this review but Treasury retain an active dialogue with Departments on refinancing. Departments consider whether the refinancings they approve are value for money in the context of the pricing of their primary contracts.
9 It is a good negotiating achievement for the OGC to have established with the private sector that refinancing gains on past PFI deals should be shared 70:30. In respect of past deals which had not provided for refinancing gains to be shared, individual departments would have faced an uphill task in arguing to share them. Acting for government as a whole, the OGC was successful in its determined approach to the private sector. There may be other aspects of the PFI where a central approach might be worthwhile: for example in respect of the banks' standard terms for external finance of PFI deals, or for associated financial instruments.	**4 PAC**	The Treasury welcomed the Committees' findings and continues to review all aspects of PFI policy in the interests of value for money for the taxpayer. In this context the Treasury published a wide ranging program of reform in its paper 'PFI: Meeting the Investment Challenge'.
10 The OGC estimated that the new code sharing refinancing 70:30 on past deals will yield between £175 million and £200 million for the public sector. These impacts are a reflection of the previous work of this Committee and the National Audit Office as well as the more recent work of the OGC. The Treasury should measure the actual impacts from departments applying both the code and also the revised arrangements for new contracts.	**4 PAC**	The Treasury welcomed the Committee's conclusion. The Government continues to monitor the implementation of the Code as part of its wider commitment to safeguard value for money for the taxpayer. In particular, the specialist Refinancing Taskforce has been established with a remit to monitor the ongoing application of the Code, educate departments on refinancing issues and assist them on transactions. To date Government has realised £160m since introduction of the voluntary code, but stresses VfM outcomes rather than gain sharing maximisation, which would otherwise create perverse incentives.
11 A further reason for departments to resist any upward pressure on contractors' prices is the important caveat in the new arrangements: refinancing gains will be calculated after allowing the private sector a return at least equal to what was projected at contract letting. Such a provision protects the private sector from a shortfall in profits, even if due to its own under-performance or failure to project accurately the likely returns from the project.	**4 PAC**	The Treasury agreed that departments should resist upward pressure on prices as a result of the change in refinancing provisions. The only area where pricing could be effected is in the pricing of junior finance instruments (equity and shareholder loans). This area of finance is particularly competitive and it is very likely that market pressure will continue to ensure that the levels of return achieved on these instruments are appropriate.
12 There is a risk that, if there is a change in ownership of a PFI project company, the new shareholders may not feel obliged to share refinancing gains under the new voluntary code, particularly if they have no interest in bidding for future PFI contracts. Where there is to be a change in ownership of a PFI project company in a case in which the department needs to rely on the voluntary code for sharing refinancing gains, the department should seek from the new owners a written assurance that they will comply with the code's principles.	**4 PAC**	The Treasury accepted the Committees' recommendation. While changes in ownership may induce new shareholders to the market who are unaware of the voluntary code, the Treasury would point out that the code applies not only to shareholders, but also the banks that would be providing the finance in each case. On this basis, the likelihood of refinancings occurring outside the code for this reason is unlikely, although not technically impossible.
13 The concept of refinancing gains does not apply so clearly to PFI if financing is provided from a contractor's general finances. The Treasury should monitor whether there is an increase in projects which are being funded in this way. It should take action to share refinancing gains in these projects if there is evidence that contractors are increasingly using such funding arrangements to avoid sharing refinancing gains.	**4 PAC**	The size of PFI projects and the risk transfer involved means that this particular form of financing continues to remain unattractive to contractors, irrespective of the refinancing provisions that may apply. However, the Treasury fully accepts the need to ensure that effective mechanisms are in place to ensure ongoing compliance with the stringent requirements of SoPC in what can be a complex and technical area.

Recommendations referring to Termination Liabilities

Recommendation	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
1 Where departments are likely to be exposed to increased termination liabilities as a result of a refinancing, in the absence of reaching an acceptable agreement on the sharing of refinancing benefits, they should consider whether to limit their risk. They may be able to achieve this by placing a cap on the level of termination liabilities they are prepared to accept, or by requiring the private sector to underwrite the risk themselves or through a third party.	**1 NAO**	Specific guidance for an Authority on value for money in refinancing has now been introduced. The Application Note – Value for Money in Refinancing clarifies interpretation of value for money.
2 There may be a good case for the public sector to make payments to the external financiers on termination of a PFI contract. It is, however, unacceptable that a department should accept without full compensation any risk of having to meet higher termination liabilities as a result of a refinancing which would greatly benefit the private sector shareholders.	**2 PAC**	The Treasury accepts the Committees' recommendation. All qualifying refinancings are now subject to gain sharing arrangements as required by either the voluntary code of conduct on refinancing or the standardisation of PFI contracts.
3 Departments should take early legal advice when developing PFI contracts to limit their exposure to increases in termination liabilities during the contract period. They should develop contracts which unambiguously give them the right to approve any arrangements which might increase those liabilities.	**2 PAC**	This requirement has been present in the standardisation of PFI contracts since July 2002.
4 No department in a PFI deal can afford to relax its guard against perverse incentives which might tempt the private sector side, in adverse circumstances, to cut and run. In this case, such a risk might theoretically arise because the Prison Service's greatest exposure to additional termination liabilities would occur at a time when the private sector shareholders would have received most of the benefits of the refinancing and their company would be facing additional costs. In such a situation, the shareholders might become less concerned about their company's performance at a time when the costs to the Service of terminating the contract would be at their highest.	**2 PAC**	We note the theoretical concern expressed here but take comfort from the fact that the lenders to the project, who generally provide in excess of 90 per cent of the risk capital, have a substantial ongoing interest in the project and would therefore facilitate that the project finance is sensibly structured and risks borne in such a way as to minimise the impact on the equity investor's attempts to cut-and-run.
5 Departments should assess the risk of contract termination, taking account of changes to a consortium's cashflows which are likely to occur during the contract period. This risk assessment should then be used by departments to devise a pattern of rewards and penalties which continue to incentivise the consortium throughout the period of a PFI contract.	**2 PAC**	The risk of additional liabilities for the Authority from contractor default following refinancing has been mitigated by the arrangements put in place in the standardisation of PFI contracts first implemented in July 2002.

Recommendations referring to the equipping of the public sector to deal with refinancings

Recommendations linked to Guidance	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
1 Refinancings are complex financial arrangements. Departments will need to consider the implications of refinancings on a project by project basis. There are, however, principles which should guide departments and strategies which can help departments apply the principles. They are that: (a) appropriate benefits should go to those bearing risks; (b) benefits from reducing costs in a developing market should be shared if they have not already been reflected in the contract price; (c) it is reasonable for departments to seek compensation for any increased exposure to termination liabilities arising from a refinancing; (d) substantial refinancing gains to the private sector may threaten the perceived value for money of the project; (e) a refinancing should not jeopardise the stability and success of the long term contractual relationship between a consortium and a department; and (f) if the private sector seeks to improve its returns by renegotiating parts of a PFI contract it is reasonable for departments to seek a share of refinancing benefits.	**1 NAO**	These principles are now reflected in the guidance on the standardisation of PFI contracts.
2 Better guidance is needed to help departments address refinancing issues and how the benefits of refinancing should be shared.	**2 PAC**	There are now four complementary guidance documents available to departments: ■ Standardisation of PFI contracts (version 3, 2004) ■ Refinancing of Early PFI Contracts – Code of Conduct (November 2002) ■ Calculation of the Authorities' Share of a Refinancing gain (July 2003) ■ Application Note – Value for Money in Refinancing (Feb 2005) Additionally departments can seek help and interpretation of guidance from the Refinancing Taskforce and the Treasury.
3 Although PFI contracts with a capital value of approximately £17 billion had been let by July 2000, there was no central guidance on refinancing until July 1999, by which time most of those contracts had been let or were under development. The Treasury should aim to anticipate future issues where departments may require guidance rather than simply producing guidance in response to situations which have already developed. It should consult external experts and the National Audit Office about emerging issues where central guidance would be helpful.	**2 PAC**	Noted. *NAO additional comment: The Treasury has presented a number of guidance documents as set out in Appendix 1 and noted in the response given in 2 above.*
4 Many PFI projects, particularly where contracts were let in the early stages of the development of the PFI, are likely to be refinanced. The National Audit Office's analysis shows, however, that only 24 per cent of PFI projects surveyed included arrangements whereby departments are entitled to share in refinancing gains. The Treasury and the PFI Policy Unit in the Office of Government Commerce (OGC) should therefore complete their planned updating of the central guidance on refinancing as a matter of priority.	**2 PAC**	These projects will now be subject to the voluntary code of conduct. *NAO additional comment: The Treasury followed up the voluntary code of conduct (issued in September 2002) with an Application Note (issued in February 2005) to help Authorities, and their Contractors who bring forward Refinancing proposals, to undertake a thorough analysis.*

Recommendations referring to the equipping of the public sector to deal with refinancings *continued*

Recommendations linked to Guidance *continued*	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
5 All departments must give careful consideration to refinancing issues when they develop contractual arrangements with PFI consortia, taking account of the lessons from the Fazakerley prison refinancing and further guidance which the Treasury and the OGC may develop.	**2 PAC**	This requirement has been present in the standardisation of PFI contracts since July 2002.
6 The OGC should take steps to ensure departments are fully aware of the issues covered in the new OGC guidance. Refinancing issues are complex and our work has shown that departments may not always recognise situations that give rise to refinancing gains. Departments need to: better understand the situations that could give rise to refinancing benefits; to be able to compute correctly their share of refinancing gains; and to manage the risks attached to making the new arrangements work effectively. As well as carrying out its plan to encourage departments to follow the new OGC guidance and to consult PUK on refinancing matters, the OGC has agreed that this issue should also be addressed as part of the new Successful Delivery Skills training programme for the public sector. It also proposes to arrange seminars for departments to improve their awareness of the issues involved and to share experience.	**3 NAO**	We do not have the background to comment on OGC's response to the Committee's recommendation, however the OGC guidance has now become the default mechanism for calculating refinancing gains. We have no evidence of resistance by contractors to implementing the calculation methodology of the OGC guidance. The Refinancing Taskforce is available to departments to answer questions on interpreting calculation guidance. *NAO additional comments:* ■ *OGC was originally responsible for issuing PFI guidance but this is undertaken by the Treasury* ■ *The NAO now engages with the Treasury to deliver joint seminars to departments on financing issues.*
7 Where a complex area of new central policy is to be introduced, initial feasibility work should be undertaken to establish a realistic timetable for the implementation of the policy. If this indicates that a long period will be needed to develop the new central policy, or the guidance that departments will need to implement the policy, the Treasury and OGC should consider carefully whether departments should be given interim guidance. It may be helpful to outline the issues that departments will need to keep in mind pending the finalisation of the new policy and how it will be implemented.	**3 NAO**	Noted. Policy is set in a dynamic environment that both anticipates future and addresses historical or current needs.
8 To date, departments have had to rely on contractors notifying them about planned refinancings. 21% of public sector project teams did not have information about their contractors' current financing arrangements. Departments should include in future PFI contracts the right to receive information on their contractors' financing arrangements and any material change to those arrangements.	**4 PAC**	The Treasury agreed with the Committee's recommendation. Standardised Contracts (SoPC) require the contractor to inform the Department of any actions that could fall within the description of refinancing. The fact that failure to comply can result in the contractors' loss of the contract for minimal equity compensation means that there are strong incentives to ensure that the Department is kept properly informed on refinancing issues.
9 The new guidance and voluntary code are both complex and the outcome of negotiations. It is possible therefore that there will be scope for contractors to avoid sharing refinancing gains. The OGC and PUK consider it unlikely that contractors would risk their reputation by exploiting such loopholes. Nevertheless, departments will need to be vigilant and should use the audit rights over refinancings which are being written into new contracts to ensure that they receive the correct share of all refinancing gains to which they are entitled.	**4 PAC**	The Treasury agreed with the Committee's recommendation and has remained vigilant in ensuring that the work of the Refinancing Taskforce combined with high penalties for non-compliance continues to safeguard department's financial interests. Furthermore there is no evidence of PFI contractors ignoring the Code.

Recommendations referring to the equipping of the public sector to deal with refinancings *continued*

Recommendations linked to Advice	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
1 As in the case of Fazakerley, when faced with the refinancing of an existing project, departments should enlist the help of experienced legal and financial advisers. This can assist departments in understanding the full implications of the refinancing proposals and in establishing the best way to approach any negotiations.	**1** **NAO**	The Treasury agrees with the Committees' recommendation. This principal is espoused in extant guidance.
2 Although this was the first major refinancing of a PFI project, the Service chose not to make greater use of its adviser, NM Rothschild & Sons (Rothschild), in determining a negotiating strategy, and did not ask Rothschild to participate in the negotiations. Given the complexities of PFI refinancing and the potential financial consequences, departments should make appropriate use of experienced advisers in developing, and participating in, refinancing negotiations.	**2** **PAC**	The Treasury agrees with the Committees' recommendation. This principal is espoused in extant guidance.
3 Given the complexities and specialist nature of refinancings, departments should seek advice on refinancing matters from suitably experienced advisers including OGC and PUK as appropriate. Advice should be taken, initially, when reviewing bids and financing proposals to identify the scope for refinancing and should always be sought when faced with any refinancing situation (including situations that may have been described as a "financial restructuring").	**3** **NAO**	The Treasury agrees with the Committees' recommendation. This principal is espoused in extant guidance.
4 Refinancings are complex and the potential risks and benefits are often very large, particularly in early PFI deals. It is essential, therefore, that public sector project teams take timely experienced advice. Available sources for advice include departmental Private Finance Units and the Treasury Refinancing Taskforce which provides guidance on policy aspects of refinancings. The Taskforce should be consulted on a regular basis as refinancings are being negotiated. Departments should also take advantage of the training on refinancing issues which the Taskforce is able to provide to project teams.	**5** **NAO**	The Treasury agrees with the Committees' recommendation and is in regular liaison with departmental private finance units and the Refinancing Taskforce to ensure that they remain proactive in this regard.
Recommendations linked to Skills		
1 Whilst the new guidance on sharing refinancing gains is welcome, the new arrangements can only work effectively if departments equip themselves to pursue refinancing gains. To date, departments have not been good at recognising refinancings and understanding their complexities. Departmental staff involved in managing PFI contracts will need specific training to enable them to recognise when refinancing situations may have arisen, so that they can seek expert advice on how to handle them.	**4** **PAC**	The Treasury agreed with the Committee's recommendation and has endeavoured to ensure that the Refinancing Taskforce continues to include education as one of its central roles. Departments and other public bodies are encouraged to make full use of the Refinancing Taskforce, which has been established as a centre of expert advice to educate departments on refinancing issues and assist them on transactions. The Refinancing Taskforce continues to hold training seminars for central government departments, Private Finance Units and Local Authorities.
2 To obtain the share of refinancing gains to which they are entitled, departments will need to manage their PFI contracts actively. There is evidence that a number of refinancings have occurred without departments noticing them. Recognising that refinancings are complex, departmental officials cannot all be expected to become experts in these matters, but officials concerned with managing PFI contracts should be trained sufficiently to identify when they need to call in expert help.	**4** **PAC**	Departments and other public bodies will continue to be encouraged to make full use of the Refinancing Taskforce, which has been established as a centre of expert advice. Alongside it's role of educating the public sector, the Taskforce will continue to monitor refinancing actions and provide advice to departments where necessary. The Treasury will ensure that the Refinancing Taskforce continues to include education as one of its central roles.

Recommendations referring to the approach by the department or project teams to negotiations

Recommendation	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
1 Where a department has the flexibility to negotiate over refinancing benefits, it should ensure that it prepares a robust but reasonable negotiating strategy. This should be grounded on sound principles and should contemplate the alternative, for both the public and private sector parties, in the event that a negotiated agreement cannot be reached.	**1 NAO**	The Treasury agrees with the Committees' recommendation. This principal is espoused in extant guidance.
2 Departments should consider linking at least part of their advisers' remuneration to the outcome of any negotiations to which the advisers contribute. This will create an incentive for the advisers to help departments achieve the best possible outcome.	**1 NAO**	This approach of remunerating advisers is restricted to application where there is no subsequent conflict with the advisor opining on the value for money of concluding a transaction whilst also receiving a success based fee or a value based fee.
3 Departments should ensure that they are aware of and use the full strength of their negotiating position when dealing with requests to vary the terms of PFI deals.	**2 PAC**	The Treasury agrees with the Committees' recommendation. This principal is espoused in extant guidance.
4 When assessing alternative PFI bids, departments should take into account the various revenues which shareholders of a consortium can earn from a PFI project, the likelihood of a refinancing occurring and how this may affect the balance of risk and reward, for both the procuring department and the service provider.	**2 PAC**	In assessing alternative PFI bids a department will make the broadest evaluation of value for money, whether that includes the likelihood of a subsequent refinancing will be subject to the specific factors surrounding the bidder and the project in question.
5 The opportunity for refinancing benefits appears, in part, to arise from the successful delivery of a PFI project. PFI deals should therefore reflect the benefit of the improved financing terms that are likely to arise through the successful delivery of the project. The benefit may be secured through the pricing of the deal or through a share of subsequent refinancing gains.	**2 PAC**	The principal of reflecting refinancing benefits (at the risk of the contractor) is espoused in Standardisation of PFI contracts.
6 As a source of such expertise, Partnerships UK has established a refinancing taskforce to provide support to departments faced with refinancing situations. It would be prudent for that taskforce not to rely solely on departments to spot refinancings, so the taskforce will need to be proactive in approaching departments where market knowledge suggests refinancing situations are likely to occur.	**4 PAC**	The Treasury agreed with the Committees' recommendation and has given the Refinancing Taskforce a mandate to be proactive in approaching departments where market knowledge suggest refinancing situations are likely to occur.
7 In theory, contractors might respond to the new arrangements for sharing refinancing gains by making compensating increases to their prices. In practice, competitive pressures and the uncertainty as to the timing and amount of refinancing gains might make it hard for contractors to put up their prices. As a further protection from that risk, departments could seek, in addition to the main bid in line with the new refinancing guidance, a variant bid from contractors on how they would price the contract to include the benefit of refinancing gains within the contract price.	**4 PAC**	The Treasury agrees with the Committee's conclusion. The competitive bid process minimises the opportunity for the contractor to manipulate Equity Rates of Return, which decide at what level sharing begins during the bid process.

Recommendations referring to the approach by the department or project teams to negotiations *continued*

Recommendation	Report Source	Treasury response on the extent to which action has been undertaken in order to meet the recommendation[1]
8 Authorities must assess the changes in risks and rewards to both them and their private sector partners that will arise from a refinancing before agreeing it. In particular authorities should: ■ determine that the private sector parties will still be adequately incentivised to perform well over the remainder of the contract after the refinancing; ■ not agree to extend a PFI contract without very careful analysis of the quantifiable and non-quantifiable benefits and disbenefits of the contract extension including the implications of being contractually committed to a particular PFI project company for longer periods; ■ assess carefully the value for money case for accepting refinancings involving increases to the private sector borrowings and increased termination liabilities to the public sector. Although a low expected probability of termination may suggest that refinancing benefits in return for increasing termination liabilities will be value for money this has to be weighed against the consequence that, should termination be appropriate, it may be expensive to effect, particularly where the liabilities have become greater than the capital cost of the project. Where refinancing proposals would result in increased termination liabilities authorities should explore with the private sector what refinancing terms would be available with no increase to termination liabilities; and ■ consider carefully the options of taking their share of the refinancing gain as a lump sum or over time. This should take into account that the lump sum option can give certainty of receipt of the refinancing gain and mirrors the private sector's approach to immediately realising refinancing gains but may require the private sector to increase its debt. The decision on how to take the refinancing gains should always be based on value for money considerations but there may also be accounting and financing issues for public authorities to consider.	**5 NAO**	Items 1-3 were fully addressed in the Treasury guidance "Application Note – Value for Money in Refinancing". The voluntary code of conduct identifies the options and mechanisms for an Authority when deciding whether it wishes to take its share of the gain as a reduction to the unitary charge, a lump-sum gain or as an increase to the scope of services.

NOTES

1 In respect of PAC recommendations (sources 2 and 4), the Treasury comments were those set out in the Treasury minute response to the PAC recommendations.

NAO/PAC Report:

1 The Refinancing of the Fazakerley PFI Prison contract HC 584 Session 1999-2000

2 The Refinancing of the Fazakerley PFI Prison Contract, Thirteenth Report of the Committee of Public Accounts HC 372 (HC 995-I (1999-2000)

3 PFI Refinancing update HC 1288 Session 2001-2002

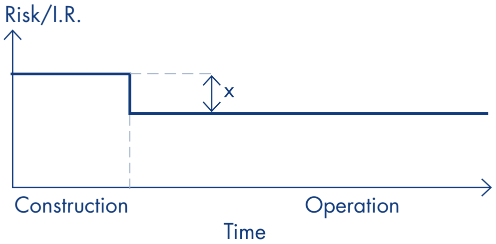
4 PFI Refinancing update, House of Commons Committee of Public Accounts Twenty-second Report HC 203 Session 2002-2003

5 Darent Valley Hospital: The PFI Contract in Action HC 209 Session 2004-2005

6 The Refinancing of the Norfolk and Norwich PFI Hospital: how the deal can be viewed in the light of the refinancing HC 78 Session 2005-2006

APPENDIX SIX

The Source and Sharing of Refinancing Gains

Source	Reason for Gain
Maturing PFI market Confidence in the market has increased as projects have proved successful. There are now more banks and monolines involved in the refinancing of PFI deals.	As the market has matured there has been more competition to provide finance and less perceived risk in PFI investment. This has meant that better rates of finance have become available for new PFI projects at their inception, and for older PFI projects at their point of refinancing.
End of construction phase 	As the construction phase of the project comes to an end the inherent risk in the project drops, meaning that better terms of finance can be secured. In the graph to the left 'x' represents the difference between the risk in the construction and operational phases of the project. It also represents the difference in the level of interest rates which can be secured in the two phases.
Better underlying rates of interest which can reduce the debt repayment on a loan in the case where the contractor has not hedged.	The interest rate spread and underlying rates change over time.
Increased borrowing	Increasing borrowings (beyond what is actually required for the project) allows the private sector to accelerate the benefits to their shareholders by enabling them to pay out inflated dividends shortly after refinancing. The private sector companies may find themselves able to borrow more for a variety of reasons, for example; the market has matured; the project has been successful to date; there has been a general fall in market interest rates, the lengthening of the borrowing period. An increase in the project's debt means an increase in termination liabilities for the public sector, and therefore the private sector requires permission from the public sector before it can proceed to increase its borrowings. The Treasury has advised that authorities must carefully consider the balance between the gains which they are to receive and the extra risk which they will accept if they agree to an increase of private sector debt during refinancing.
Contract extension	Contract extensions are perceived to generate future savings (rather than the current gains derived from the sources discussed above). These future savings are assumed on supposition that the cost of the services secured now, by extending the contract, will be cheaper than those which would be available in the future. Contract extensions are closely tied to the gains which can be derived from increasing debt. By extending the contract the private sector is also able to extend the term of their debt and hence they are able to borrow more. For this reason the extension of a contract and the increase of debt often go hand in hand.

Shared with the authority?	Effect on deals under the Voluntary code	Effect on deals under the 50:50 guidance
	Gains increase	Gains decrease
Yes	As the market becomes more mature greater refinancing gains arising from this factor will be seen as the interest rates which banks/monolines are now prepared to offer will be lower than when the market was immature. 30% sharing	Now that the market has become more mature we are likely to see lower refinancing gains arising from this factor as the interest rates which are initially offered will be relatively lower. There are still some sectors, for example waste management, where the market remains immature and in these areas there may still be opportunities to derive larger refinancing gains in the future. 50% sharing
Yes	There are potentially large gains to be made from older projects. Historically risks at construction were viewed as much higher than those at operation meaning that a great drop in costs can be achieved at refinancing. 30% sharing	The overall risk of PFI projects is now viewed as lower, and the difference perceived in risk levels between construction and operation has also narrowed somewhat. Many new deals now have a stepped interest rate included from the outset so as to automatically drop rates after the successful completion of the construction phase. This means that in general there are now greatly reduced benefits available from this factor during refinancing. 50% sharing
No – Where the contractor explicitly bears the interest rate risk following financial close and then benefits at a refinancing from better available rates, the contractor is entitled to keep that part of the gain.		
Yes	The gains received by the public sector will vary according to the magnitude of the increased borrowing. 30% sharing	The gains received by the public sector will vary according to the magnitude of the increased borrowing. 50% sharing
Yes		

APPENDIX SEVEN

Methodology for NAO estimates of the public sector gain to be received under the voluntary code

Estimates were calculated for four different scenarios:

Scenario 1	There will be no further refinancings and hence no further gains.
Scenario 2	The refinancings which go ahead will not involve the increase of termination liabilities.
Scenario 3	Projects will refinance with the same average gain in relation to capital value that has been seen thus far since the introduction of Code.
Scenario 4	Projects will refinance with the same kind of gain, in relation to capital value, that was seen in the refinancing of the Norfolk And Norwich PFI Hospital.

The calculation of estimates for scenarios 2-4 relied on the same basic methodology; isolating the body of projects which were felt to be viable for future refinancing under the Code and identifying their capital value. The capital value of the projects was felt to be an important part of the calculation as, *ceteris paribus*, the larger the capital value of a project the larger the refinancing gain produced from it might be.

To identify the viable projects, the PUK database of all PFI projects was taken as a population and using information held on the database, in conjunction with information gathered as part of NAO refinancing surveys conducted in 2002 and 2004, projects were excluded on the following basis;

Total population of PFI projects at July 2005 held on PUK database	**688**
Less: Projects signed after the code was introduced, and therefore not falling under the voluntary code.	(167)
Less: Remaining projects which are bond, part bond or corporately financed, and as such unlikely to refinance (bond) or exempt from gain sharing (corporate).	(27)
Less: Remaining projects which have been refinanced already.	(42)[27]
Less: Remaining projects with a capital value of less than £10m, and as such unlikely to be profitable to refinance on an individual basis.	(230)
Less: Remaining projects with a contractual sharing mechanism, and hence not falling under the Code.	(64)
Those projects thought to be viable for refinancing	**158**

After these exclusions a body of 158 projects remained, with a total capital value of £7 billion. This formed the basis of the calculation for the scenario 2-4 estimates.

Scenario 2

We applied an average interest rate saving of 0.5 per cent per annum, discounted at 15 per cent over a 30 year concession, to the total capital value figure of £7,137 million. As a result, the public sector share of the total interest saving on an NPV basis was £80m.

27 Figure available from PUK's database listing refinanced projects at the time of the analysis in July 2005.

Assumptions:

1 We have assumed that the capital value of the projects is equal to the bank debt which will be refinanced, and that the level of debt will for simplicity remain constant throughout the life of the project.

2 The figure of 0.5 per cent is a typical savings figure, which we based on data used to calculate the interest rate saving in the Norfolk and Norwich refinancing.

3 The discount rate of 15 per cent per annum is a typical discount rate figure, which we based on data used to calculate the refinancing gains in the refinancing of Darent Valley Hospital.

4 Projects have a 30 year concession remaining.

As part of a sensitivity analysis we re-calculated the estimate assuming an interest rate saving of 0.7 per cent, which gave a predicted gain to the public sector of £113 million. However, it is possible that many of the projects would not be allowed to break swaps agreed as part of their original financing without incurring penalties, which would reduce the gains generated or might in some cases make undertaking the refinancing unprofitable. For this reason we feel that our assumed interest rate saving of 0.5 per cent gives a fair estimate, given that in practice a proportion of the projects could be unlikely to refinance.

Scenario 3

We calculated the average percentage of a project's capital value represented by the refinancing gain produced in Code refinancings which had reached financial close by 31/12/04. This percentage, 14 per cent, was then used in conjunction with the figure of £7,137 million to calculate the gains to the public sector.

(£7,137 million x 14% x 30% = £300 million)

Scenario 4

We calculated the percentage gain in relation to capital value which was represented by the refinancing gain in the Norfolk and Norwich project. The public sector gain was then calculated using this percentage, 27 per cent, in conjunction with the figure of £7,137 million.

(£7,137 million x 27% x 30% = £580 million)

Assumptions

We have assumed, for the purpose of these calculations, that those projects which we have identified as viable for refinancing will all go on to refinance. In practice this may not be the case as, for example, some Secondary Market Fundholders (SMFs) may wish to leave a project unrefinanced in order to maintain an investment which offers a high, long term yield which would be attractive to tertiary market investors such as pension companies.

We have excluded projects with a capital value of less than £10 million from the population of projects assessed as viable for refinancing, on the basis that it is unlikely that they will be profitable to refinance on an individual basis. It may, however, be possible that some of these projects will eventually be refinanced as part of a bundle by SMFs.

The estimates do not take account of when the refinancing will take place within the life of a project. A refinancing which takes place towards the end of the life of a project will, *ceteris paribus*, produce a smaller gain than one which occurs earlier.

In conclusion, these calculations are not a definitive prediction of future refinancing gains that will accrue to the public sector but are designed to aid a better understanding of the potential and likely future gains from refinancing.

APPENDIX EIGHT

Advantages and disadvantages of the public sector taking a refinancing gain as either a lump sum or over time in the form of a reduced unitary charge

	Lump Sum	Over Time (Unitary Charge Reduction)
Advantages	1 Authority benefits immediately from the refinancing (a capital receipt) which it can use to fund additional building work.	1 Early and later years benefit equally as the authority reduces the annual payments on a PFI project which it expects to utilise for the long term. 2 The contractor should be less highly geared as it does not have to borrow to pay the authority's refinancing gain as a lump sum. 3 No accounting issues.
Disadvantages	1 In some departments, such as Health, under resource accounting, taking the gain as a lump sum results in the Trusts/departments having to create a depreciable asset which means an annual charge on the Trusts'/ departments' accounts has to be funded. 2 Authorities may use the lump sum to address short term financial problems at the expense of future service provision. 3 The contractor will have to take on extra loans to fund the lump sum, particularly if the refinancing just involves paying the original borrowings over a longer period. Increased borrowings to fund the lump sum could in turn increase the authority's termination liabilities.	1 May produce a lower refinancing gain as reductions in the unitary charge will reduce debt cover ratios (hence reduce the amount of new debt that can be raised). 2 An authority could be exposed to uncertainty over recovering its share of the refinancing gain if the contract is terminated early. However, this point is dependent on the contractual arrangements for early termination and the reasons for terminating the contract and is probably only applicable to some early PFI projects.

NOTE

In current contracts, if the contract is terminated due to contractor default, the authority will normally pay its termination liabilities based on the market value of the contract, which will reflect the reduced unitary charge.

APPENDIX NINE

Summary of refinancings and related data

Please refer to insert at the back of this report

GLOSSARY

Authority	A public sector body which lets a PFI contract. This may be a government department or an agency of a department.
Discount rate	The percentage rate applied to cash flows to enable comparisons to be made between payments occurring at different times. The rate quantifies the extent to which a sum of money is worth more to the Government today than the same amount in a year's time.
Equity	The capital contributed by the shareholders of a project company. The value of the equity is the value of a company or project after all liabilities have been allowed for. The equity is owned by the shareholders.
Fazakerley Prison	The first major PFI project to be refinanced and was the subject of an NAO report.
Financial models	Spreadsheets designed to predict the most likely financial outcome of a particular set of estimated costs, revenues and fixed and capital charges for delivering a service over time.
Internal Rate of Return (IRR)	The IRR is the discount rate at which the present value of the investors' receipts from a project equals that of their payments, including their initial investment. The IRR percentage return aggregates a series of annual percentages. It does not mean the investors will receive the IRR rate as a constant return each year.
LIBOR	London interbank offered rate. The interest rate at which banks will lend to each other.
Net Present Value (NPV)	NPV is calculated by aggregating the discounted values of a series of future cash flows with the initial investment.
Private Finance Initiative	A policy introduced by the Government in 1992 to harness private sector management and expertise in the delivery of public services, while reducing the impact of public borrowing.
Refinancing	The process by which the terms of the funding (which was put in place at the outset of a PFI contract), are later changed during the life of the contract, to take advantage of reduced risk in the project and often also improved terms and conditions from a more mature PFI funding market usually with the aim of creating **refinancing benefits** for the consortium company.
Rescue refinancing	The refinancing of a project in financial difficulties.
Refinancing benefits	The benefits to shareholders of increasing and/or bringing forward their **returns** from the project as a result of changes to the financing structure of the consortium company.
Returns to shareholders	Payments made by the consortium to its shareholders in the form of dividends and interest on subordinated debt.

Secondary Market

A market in which an investor purchases a security from another investor rather than the issuer, subsequent to the original issuance in the primary market. In the PFI market this tends to take the form of the sale of equity by investors in the project company in many cases to secondary funds that wish to build a portfolio of PFI assets. There is also a secondary market in debt (the syndicated debt market) usually between banks but also to other types of investors.

Securitisation

The original holder of loan assets (the "originator") transfers them to a special purpose vehicle ("asset backed securitisation") in order to capture incremental benefits derived from the lower probability of loss associated with a mixed pool of loan assets rather than an individual loan. Alternatively the originator may transfer only the economic risk and not the assets themselves ("synthetic securitisation"). This is typically done through a financial instrument, such as a credit default swap, and funding relating to the portfolio's risk is raised without using the originator's balance sheet.

Senior debt

Debt that, in the event of bankruptcy, must be repaid before **subordinated debt** receives any repayment. Senior debt lenders take security over the borrowers assets such that they have the highest ranking claim over the assets of the project company compared to all other lenders and investors.

Subordinated debt

Debt over which **senior debt** takes priority. In the event of bankruptcy, subordinated debt lenders receive payment only after senior debt is repaid in full.

Interest Rate Swap

A financial instrument that can be used to change the basis on which interest is paid on an asset or liability, for instance a floating rate is turned into a fixed rate or vice versa.

Authority Voluntary Termination

The amount of compensation payable by the Authority to the consortium's banks in the event of voluntary termination before the expiry date of the contract.

Value for Money (VFM)

The achievement of the optimum combination of whole life cost and quality to meet the user's requirements.

Unitary charge

The single periodic payment due from the Authority to the consortium in respect of the provision and operation of the asset.

APPENDIX NINE Summary of refinancings and related data

Project Name	Capital Value (£'m)	Date Refinanced	Net present values			Shareholder Parent Company at contract letting	Internal Rate of Return			Total expected cash flows going to the Shareholders over the life of the contract: Before the Refinancing		Just after the Refinancing		What were the borrowings before the refinancing?	What were the borrowings after the refinancing?	Did the termination liabilities increase in line with this increase in borrowings?	What is the maximum increase in termination liabilities? (£'m)	Cash Price of the contract (no discounting, post refinancing over the full life of the contract)	Cash to Investors	The amount the cash has increased or decreased to the investors post refinancing	Length of Contract: What was the length of the contract before the Refinancing? (years)	What was the length of the contract after the Refinancing? (years)
			Total Refinancing Gain (£'m)	Refinancing Share (%)	Refinancing Share (£'m)		At Contract Award (%)	Just before the Refinancing (%)	After sharing gains with the public sector (%)	At Contract Award	Just before the Refinancing	Before sharing gains with the public sector	After sharing gains with the public sector									
Refinancings taking place before the Code												**NR – No return to survey questions**						**Information shown below where provided**				
Colfox School	13	19-May-99	1.90	21	0.40	Jarvis PLC	10.35	NR	NR	£13.4m	NR	NR	£4.5m	£11.9m	NR	yes	Note 7	£91.2m	£55.5m	0	30	30
Royal Armouries Museum - Refinancing	42	Jul-99	0	0	0	Gardner Merchant (Sodexho)	Note 1	Note 1	Note 1	NR	NR	NR	NR	NR	NR	NR						
Altcourse (Fazakerley) Prison	88	Nov-99	10.75	9.3	1	Group 4 (50%) Carillion (50%)	15.85 (13 Note 2)	20.06 (16 Note 2)	40.81 (39 Note 2)	£98.2m	£98.1m	£80.9m	£79.2m	£93.5m	£92.5m	yes						
Ashfield (Pucklechurch) Prison (Note 29)	31	17-Dec-99	1.54	0	0	Serco Limited (50%) WCC (Wackenhut) (50%)	16.31	15.65	16.47	0	NR	n/a	£14.4m	£38m	£38m	no						
Dovegate (Marchington) Prison (Note 29)	48	17-Dec-99	3.20	0	0	Serco Limited (50%) WCC (Wackenhut) (50%)	14.11	14.21	15.43	£29m	NR	n/a	£34.4m	£18m	£21m	no						
Hassockfield (Meadomsley) STC (Note 29)	12	17-Dec-99	0.50	0	0	Serco Limited (50%) WCC (Wackenhut) (50%)	15.15	15.15	14.62	NR	NR	NR	NR	NR	NR	NR						
Lowdham Grange Prison (Note 29)	32	17-Dec-99	1.60	0	0	Serco Limited (50%) WCC (Wackenhut) (50%)	14.93	15.41	16.14	£11.7m	NR	n/a	£11.7m	£33m	£33.5m	no						
Kilmarnock Prison	32	01-Jan-00	1.60	0	0	Serco Limited (50%) WCC (Wackenhut) (50%)	Scotland														25	25
Hillingdon - Barnhill School	27	2000	0.94	0	0	Jarvis PLC	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
Sussex Weald and Downs NHST - Graylingwell Hospital Reprovision - Chichester	27	01-Feb-01	0	0	0	Mill Group	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
A19 Dishforth to Tyne Tunnel DBFO	29	Mar/Apr 01	5.00	33	1.50	Sir Robert McAlpine, Amey PLC, Taylor Woodrow Construction Limited	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	n/a	£977m	£30.2m	£0.3m	25	25
Parc (Bridgend) Prison	79	15-May-01	0.29	0	0	Securicor (40%), Costain (20%), WS Atkins (10%) Skanska (20%), Seifert (10%)	9.58	9.58	9.58	£29.9m	£29.9m	£30.2m	£30.2m	£79.0m	£79.0m	no						
Balfron School	17	01-Jun-01	0.60	50	0.30	Jarvis PLC	Scotland															
Mearns Primary and St Ninian's High School	20	01-Jun-01	0.63	50	0.31	Jarvis PLC	Scotland															
Dundee Ninewells Psychiatric Services	10	06-Jun-01	0.31	100	0.31	Jarvis PLC	Scotland										16	£1,004m	Nil	Nil	Note 11	
Newcastle Estate Development	218	26-Jun-01	21.70	60	13	Newcastle Estate Partnership Holdings Limited	10.05	12.74	15.77	£131m	£148m	£96.5m	£67.9m	£145.9m	£160m	yes		Note 8		Note 10	10	10
HM Customs & Excise - IT Infrastructure PFI	156	01-Jul-01	1.00	0	0	International Computers Limited	14.50	15	15	£507.9m	n/a (Note 4)	£704.2m	NR	£60m	£60m	Note 5						
M1 - A1 Link Road (Lofthouse to Bramham)	210	01-Oct-01	10.70	0	0	Balfour Beatty (50%) Macquarie (50%)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Note 3					
M40 Denham to Warwick	65	Oct-01	8.50	29	2.50	Laing Investments (50%) Carillion (50%)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	21.6	Note 3	Note 3	Note 3	Note 3	Note 3
North Wiltshire DC - Property Rationalisation	10	Nov-01	0.35	5	0.02	Jarvis	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3		Note 9			Note 12	Note 14
Brooklands Avenue, Cambridge	24	24-Feb-02	0.80	50	0.40	Kajima Partnerships Limited, Japan England Insurance Co Ltd, WestWind Capital Partners Ltd	9 Note 28	9 Note 28	9 Note 28	£19.94m real	£19.94m real	NR	NR	£13.5m	£18.7m	Note 6		No change			Note 13	No change
Calderdale Hospital	66	01-May-02	12.00	30	3.60	Bovis Lend Lease, RCO Holdings, HBOS	7.18	NR	7.62	NR	NR	NR	NR	NR	NR	yes						
Joint Services Command and Staff College	88	Jun-02	1.34	34	0.45	Laing Investments (50%) Serco (50%)	18	NR	31.00	NR	NR	NR	NR	£103.3m	£125.1m	yes						
Total			**85.24**		**23.79**																	
Refinancings as part of the voluntary sharing arrangements under the Code																						
A30/A35 Exeter to Bere Regis DBFO	76	07-Nov-02	3.75	0	0	Balfour Beatty plc (67.8%) WS Atkins Limited (32.2%)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR				£0.9m	25	25
A50/A564 Stoke-Derby Link DBFO	21	07-Nov-02	1.05	0	0	Balfour Beatty plc (67.8%) WS Atkins Limited (32.2%)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					28	35
Bute Avenue	45	12-Feb-03	8.00	30	2.50	Vinci MEPC plc	Wales															
Debden Park School	15	31-Mar-03	1.34	30	0.40	Jarvis PLC (50%) Barclays Capital (50%)	14.12	15.53	71.38	NR	NR	NR	NR	£17.5m	£19.8m	Note 20	4					
Dartford and Gravesham Hospital NHS Trust	122	Mar-03	33.40	35	11.66	Carillion (32.5%) Innisfree PFI Fund LP (25%) UME Investment Co. Ltd. (10%) Barclays Capital (32.5%)	21	23	56	NR	NR	NR	NR	NR	NR	NR	89				28	35
Cardinal Heenan (VA) School	8	20-May-03	0.98	30	0.49	Jarvis PLC	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
Central Scotland Family Quarters - Bannockburn	30	10-Jun-03	6.03	30	1.82	Bank of Ireland, John Molem Charterhouse	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
Bridlington Schools	26	10-Sep-03	1.00	30	0.30	Jarvis PLC (50%) Barclays Capital (50%)	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3
Haringey Schools	63	11-Sep-03	3.00	30	0.90	Jarvis PLC (50%) Barclays Capital (50%)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
Brent Jews Free School	9	22-Sep-03	0.80	30	0.25	Jarvis PLC (50%) Barclays Capital (50%)	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3
Heart of the City Offices	18	Oct-03	0	0	0	London & Regional (100%)	14.91	20.20	19.20	£33.3m	£33.5m	£33.3m	n/a	£18.3m	£18.3m	no		£163m	£33.3m	-£0.2m	30	30
Norwich & Norfolk University Hospital NHS Trust	229	12-Nov-03	115.50	30	33.90	Laing Investments(20%) Innisfree (25%) Barclays Private Equity (25%) 3i PLC (25%) Serco Group (through Serco Investments Limited) (5%)	18.90	15.90	60.40	£501m	£464m	NR	£335m	NR	NR	NR	257.3			-£129m	34	39
Bromley NHST - New Hospital	150	21-Apr-04	45.30	31	14.20	Innisfree (42.75%) Barclays (42.75%) Taylor Woodrow Construction (14.5%)	21.75	27.15	70.54	£166.5m	£167.3m	NR	£127.5m	£98.9m (senior debt)	£138.4m (senior debt)	Note 21	Note 22	£497.2m	£125.6m	-£39.8m	30	35
A69 Carlisle to Newcastle DBFO	9	06-May-04	Not Known	0	0	Morrison Construction, Christiani & Nielsen Ltd, Henry Boot Construction, Impregilo SpA, ASTM/SINA, Pell Frischmann	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						
Hairmyres Hospital	92	24-Aug-04	19.58	Note 15	2.74	Innisfree (50%) Kier (50%)	Scotland															
Medium Support Helicopter	100	01-Dec-04	4.81	Note 16	1.35	Serco Limited, CAE Electronics, Vega Group PLC, Charterhouse	14.90	11.85	14.66	£40.04m	NR	£33.52m	£31.74m	£64.08m (Senior Debt)	£76.13m (Senior Debt)	yes	23.1	£350m	NR	£15.3m	20	20
Sheffield Schools	47	15-Dec-04	0.30	100	0.30	Interserve (50%) Innisfree (50%)	11.40	11.40	10.99	£30m Note 29	£30m Note 29	£28.6m Note 29	£28.6m Note 29	Note 18	Note 19	n/a	Note 23	£242.7m	£28.6m	£0.4m	25	25
LB Tower Hamlets Group Schools	89	08-Mar-05		Note 17	-	Babcock & Brown (Ballast were contractor but not a shareholder)																
Laganside Courts	28	15-Jul-05	2.41	30	0.72	Original shareholders Jarvis plc, Karl Northern Ltd and J.H Turkington & Sons Ltd. Current shareholders Karl Northern Ltd and J.H. Turkington & Sons Ltd	Ireland															
Nottingham Express Transit	172																					
Total			**247.25**		**71.53**																	
Refinancings since the Code with a contractual sharing mechanism																						
Second Severn Crossing	331	31-Dec-02	Note 26	Note 26	Note 26	Laing (35%) Vinci	Note 26	Note 26	Note 26	NR	NR	NR	NR	NR	NR	NR						
East Lothian Council - Schools and Community Facilities PPP	45	11-Mar-04		Note 24	-	Ballast Wiltshire, Noble PFI Fund, Forth Electrical Supplies. Ballast were also contractor.	Scotland															
Tube Lines Ltd - London Underground	5484	05-Dec-04	68.55	61	42	Bechtel (33.3%) Jarvis (33.3%), Amey (33.3%)	19.90	19.90	21.48	£1344.97m	£1345m	n/a	£1365.21m	£1803m	£1803m	no	0	Note 25	£20.2m	increased	30	30
Tyne & Wear Fire PFI Project	30	Jan-06	0	0	0	Jarvis Plc, Barclays Private Equity	13.76	0	0	£8.2m	0	0	0	£25.7m	£30.4m	no		£100.1m	0	decreased	25	25
			68.55		**42.00**																	
Total	**8583**		**401**		**137**																	

☐ The light grey cells represent projects that were refinanced but only recently brought to our attention, hence they were not part of our survey and our information on the project is limited.

☐ The dark grey cells are projects outside England. Detailed information was only collected in respect of English projects corresponding to the NAO's area of audit.

NOTES

1 The Royal Armouries PFI-type project ceased in 1999; data on internal rates of return are therefore not available.

2 As disclosed at the time of NAO report on the refinancing.

3 Returned incomplete information.

4 Base cost used.

5 No increase. Alternative source of financing only.

6 Yes, although, this was offset by corresponding reductions in investor's equity.

7 Under the deed of variation the council is only liable to pay a termination sum in the event of default by the council or if the whole of the principal agreement is somehow declared void or unenforceable.

8 Framework. Cash Price reflects predicted spend over contract duration, not committed price, of £704.2m.

9 Over 15 years, the cash price is estimated to be circa £62.6m (circa £4m per annum) or £133.4m over 25 years. The cash figures are inclusive of inflation forecasts but are not discounted. The equivalent figures excluding forward inflation are £47.7m and £92.6m for 15 and 25 years respectively.

10 No material change. Re-financing reflected change in finance source.

11 25 years per building - total contract period 31 years.

12 15 years before first break option. Potentially the contract has a 25-year life.

13 60 years (Contract value renegotiated at year 30).

14 The refinancing took place before full contract/commercial closure, hence no change to term. The term remains 15 years before first break option. Potentially the contract has a 25-year life.

15 30% of gain above base return.

16 Post re-financing IRR below initial IRR with guaranteed MOD gain, which was £1.35m.

17 No gain-share with authority. 'Rescue' refinancing - post IRR lower than base case IRR.

18 Max £55.9m at the end of construction (including shareholder loans)

19 Max £55.9m at the end of construction - profile changed after refinancing with debt repayments being deferred

20 The termination liabilities in the event of the Council's termination did increase. The authority was not clear as to whether the increase was "in line" with the increase in borrowings.

21 The increase in termination liabilities varies over the concession term under all termination scenarios.

22 £110m, in 2018 (in the event of Trust default). However, the accrued refinancing benefits over the full concession term total £288m.

23 £3.58m - reflects maximum position on Authority Default scenario.

24 No gain-share with authority. 'Rescue' refinancing - post IRR lower than base case IRR.

25 No post refinancing updated financial model available to perform this analysis

26 The Second Seven Crossing refinancing was a means of resolving a 'relevant event' under Clause 2.3.2 of the Concession Agreement which arose when The European Court of Justice imposed VAT on road tolls. This consequence of this Act meant that the consortium was unable to generate sufficient cash flow to service its debt and remunerate its shareholders. The refinancing involved a complete change in the capital structure of the project reversing the financial impact of the VAT increase on the consortium. The Department's advisors stated that there was no gain to be shared with the Government and that it was not possible to calculate pre- and post-refinancing IRRs.

27 Nominal sum of sub debt interest and dividends.

28 IRR figures were adjusted to nominal values because the project team supplied real values.

29 The pre-refinancing IRR figure given is a best estimate and may not be a true pre-refinancing model.

The information on completed refinancings set out in this Appendix is based on information contained in responses to the NAO survey and other information sourced from PUK based on information provided to them. The detailed data on individual projects is derived from these sources and has not been audited as part of this examination.

APPENDIX NINE Summary of refinancings and related data *(continued)*

PFI projects ranked according to IRR after refinancing

Project Name	IRR at contract award	IRR just before refinancing	IRR just after refinancing	Multiple	% Change in IRR just before to just after refinancing
Debden Park School	14%	16%	**71%**	4.60	360
Bromley NHST - New Hospital	22%	27%	**71%**	2.60	160
Norwich & Norfolk Health Care NHS Trust	19%	16%	**60%**	3.75	275
Dartford and Gravesham Hospital NHS Trust	21%	23%	**56%**	2.44	144
Altcourse (Fazakerley) Prison	16%	20%	**41%**	2.03	103
Joint Services Command and Staff College	18%	NR	**31%**	1.72	72
Tube Lines Ltd - London Underground	20%	20%	**21%**	1.08	8
Heart of the City Offices	15%	20%	**19%**	0.95	-5
Ashfield (Pucklechurch) Prison (Note 1)	16%	16%	**16%**	1.05	5
Lowdham Grange Prison (Note 1)	15%	15%	**16%**	1.05	5
Newcastle Estate Development	10%	13%	**16%**	1.24	24
Dovegate (Marchington) Prison (Note 1)	14%	14%	**15%**	1.09	9
HM Customs & Excise - IT Infrastructure PFI	15%	15%	**15%**	1.00	0
Medium Support Helicopter	15%	12%	**15%**	1.24	24
Hassockfield (Meadomsley) STC (Note 1)	15%	15%	**15%**	0.97	-3
Sheffield Schools	11%	11%	**11%**	0.96	-4
Parc (Bridgend) Prison	10%	10%	**10%**	1.00	0
Brooklands Avenue, Cambridge	9% Note 2	9% Note 2	**9%** Note 2	1.00	0
Calderdale Hospital	7%	Not provided	**8%**	1.06	6
Tyne and Wear Fire PFI	14%	0% Note 3	**0%**	0.00	0
Colfox School	10%	NR	**NR**	NR	NR
Royal Armouries Museum - Refinancing	This ceased to be a PFI project in 1999.				
Sussex Weald and Downs NHST - Graylingwell Hosp Reprovision - Chichester	NR	NR	NR	NR	NR
A19 Dishforth to Tyne Tunnel DBFO	NR	NR	**NR**	NR	NR
Central Scotland Family Quarters - Bannockburn	NR	NR	**NR**	NR	NR
A69 Carlisle to Newcastle DBFO	NR	NR	**NR**	NR	NR
Hillingdon - Barnhill School	NR	NR	**NR**	NR	NR
M1 - A1 Link Road (Lofthouse to Bramham)	NR	NR	**NR**	NR	NR
M40 Denham to Warwick	NR	NR	**NR**	NR	NR
North Wiltshire DC - Property Rationalisation	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
A30/A35 Exeter to Bere Regis DBFO	NR	NR	**NR**	NR	NR
A50/A564 Stoke-Derby Link DBFO	NR	NR	**NR**	NR	NR
Cardinal Heenan (VA) School	NR	NR	**NR**	NR	NR
Haringey Schools	NR	NR	**NR**	NR	NR
Bridlington Schools	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
Brent Jews Free School	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
Second Severn Crossing	Note 4	Note 4	Note 4	Note 4	Note 4
LB Tower Hamlets Group Schools	Note 5	Note 5	Note 5	Note 5	Note 5
Nottingham Express Transit (Note 5)	Note 5	Note 5	Note 5	Note 5	Note 5

PFI projects ranked according to percentage change in IRR from just before to just after refinancing

Project Name	IRR at contract award	IRR just before refinancing	IRR just after refinancing	Multiple	% Change in IRR just before to just after refinancing
Debden Park School	14%	16%	71%	4.60	**360**
Norwich & Norfolk Health Care NHS Trust	19%	16%	60%	3.75	**275**
Bromley NHST - New Hosp	22%	27%	71%	2.60	**160**
Dartford and Gravesham Hospital NHS Trust	21%	23%	56%	2.44	**144**
Altcourse (Fazakerley) Prison	16%	20%	41%	2.03	**103**
Joint Services Command and Staff College	18%	NR	31%	1.72	**72**
Newcastle Estate Development	10%	13%	16%	1.24	**24**
Medium Support Helicopter	15%	12%	15%	1.24	**24**
Dovegate (Marchington) Prison (Note 1)	14%	14%	15%	1.09	**9**
Tube Lines Ltd - London Underground	20%	20%	21%	1.08	**8**
Calderdale Hospital	7%	NR	8%	1.06	**6**
Ashfield (Pucklechurch) Prison (Note 1)	16%	16%	16%	1.05	**5**
Lowdham Grange Prison (Note 1)	15%	15%	16%	1.05	**5**
Brooklands Avenue, Cambridge	9% Note 2	9% Note 2	9% Note 2	1.00	**0**
HM Customs & Excise - IT Infrastructure PFI	15%	15%	15%	1.00	**0**
Parc (Bridgend) Prison	10%	10%	10%	1.00	**0**
Tyne and Wear Fire PFI	14%	0% Note 3	0%	0.00	**0**
Hassockfield (Meadomsley) STC (Note 1)	15%	15%	15%	0.97	**-3**
Sheffield Schools	11%	11%	11%	0.96	**-4**
Heart of the City Offices	15%	20%	19%	0.95	**-5**
Colfox School	10%	NR	NR	NR	**NR**
Royal Armouries Museum - Refinancing	This ceased to be a PFI project in 1999.				
Sussex Weald and Downs NHST - Graylingwell Hosp Reprovision - Chichester	NR	NR	NR	NR	**NR**
A19 Dishforth to Tyne Tunnel DBFO	NR	NR	NR	NR	**NR**
Central Scotland Family Quarters - Bannockburn	NR	NR	NR	NR	**NR**
A69 Carlisle to Newcastle DBFO	NR	NR	NR	NR	**NR**
Hillingdon - Barnhill School	NR	NR	NR	NR	**NR**
M1 - A1 Link Road (Lofthouse to Bramham)	NR	NR	NR	NR	**NR**
M40 Denham to Warwick	NR	NR	NR	NR	**NR**
North Wiltshire DC - Property Rationalisation	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
A30/A35 Exeter to Bere Regis DBFO	NR	NR	NR	NR	**NR**
A50/A564 Stoke-Derby Link DBFO	NR	NR	NR	NR	**NR**
Cardinal Heenan (VA) School	NR	NR	NR	NR	**NR**
Haringey Schools	NR	NR	NR	NR	**NR**
Bridlington Schools	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
Brent Jews Free School	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information	Returned incomplete information
Second Severn Crossing	Note 4	Note 4	Note 4	Note 4	Note 4
LB Tower Hamlets Group Schools	Note 5	Note 5	Note 5	Note 5	Note 5
Nottingham Express Transit (Note 5)	Note 5	Note 5	Note 5	Note 5	Note 5

NR - No return to survey questions

Figures have been rounded in the first 3 columns in both tables

NOTES

1 The pre-refinancing IRR figure given is a best estimate and may not be a true pre-refinancing model.

2 IRR figures were adjusted to nominal values because the project team supplied real values.

3 This value is a proxy suggested by the project's advisors since there was no pre-refinancing model.

4 The Second Seven Crossing refinancing was a means of resolving a 'relevant event' under Clause 2.3.2 of the Concession Agreement which arose when The European Court of Justice imposed VAT on road tolls. This consequence of this Act meant that the consortium was unable to generate sufficient cash flow to service its debt and remunerate its shareholders. The refinancing involved a complete change in the capital structure of the project reversing the financial impact of the VAT increase on the consortium. The Department's advisors stated that there was no gain to be shared with the Government and that it was not possible to calculate pre- and post-refinancing IRRs.

5 This was a recent refinancing and was not included in our survey.

Figures are calculated using the IRR at contract award and have been rounded.

The following projects were not requested to send us IRR data.

Laganside Courts	Ireland
Bute Avenue	Wales
Kilmarnock Prison	Scotland
Balfron School	Scotland
Dundee Ninewells Psychiatric Services	Scotland
Mearns Primary and St Ninian's High School	Scotland
Hairmyres Hospital	Scotland
East Lothian Council - Schools and Community Facilities PPP	Scotland

Information on returns

Number of Projects surveyed	36
IRR information returned	20
Percentage response	**56%**

In the table of Refinancings (top of this appendix) there are a numbers of projects where the flows to shareholders in cash terms decreased after the refinancing. Set out below is an illustration of this.

Representative Summary Cashflows from a current sample PFI refinancing

	IRR		NPV		Nominal*	
Cashflows pre and post refinancing	Pre	Post	Pre	Post	Pre	Post
Unitary Charge (Assumes gain taken over time as reduction to Unitary Charge)			275	260	540	510
Less: future Capital Costs, Operating Costs and Taxes**			(80)	(75)	(160)	(145)
Equals: Cashflow Available for Debt Service			195	185	380	365
Flows to Senior Debt			(145)	(130)	(235)	(270)
Flows to Shareholders	18%	31%	(20)	(35)	(145)	(95)

Discount rates for NPV calculations

NPVs for flows to senior debt and shareholders have been calculated using the post-refinancing cost of debt and base case cost of equity

Pre financing cashflows	6.09%
Cost of Debt	6.50%
Cost of Equity (base case)	18.00%

NOTES

* Sum of nominal cashflows over project life.

** Future flows exclude initial costs that were largely funded by senior debt.

1 The Authority gain is shown as taken by way of reduction in the Unitary Charge.

2 Additional Senior Debt of £25m will be drawn but post refinancing senior debt cashflows have reduced in NPV terms because whole life costs are more efficient.

3 The initial equity contributed was £17m. The NPV of equity has increased by an upfront payment from the refinancing but the nominal whole life distributions to equity have reduced.