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HM Treasury

Financing PFI projects in the credit crisis and the Treasury's response

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National Audit Office

HM Treasury

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Amyas Morse
Comptroller and
Auditor General

National Audit Office

22 July 2010

This report examines the effects of the credit crisis on privately financed government infrastructure projects, the Treasury's response and the challenges ahead.

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This report can be found on the National Audit Office website at www.nao.org.uk/infrastructure-financing-2010

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Summary

Introduction

1 Economic and social infrastructure forms the backbone of economic activity in the United Kingdom, and enables the delivery of public services across the country. The term infrastructure encompasses social and economic sectors such as communications, education, energy, health, transport, waste and water.

2 In the five years to April 2010 approximately £30 billion per year was invested in UK infrastructure. Future investment is forecast in the range of £40-50 billion per annum until 2030. Investment is financed in a range of ways:

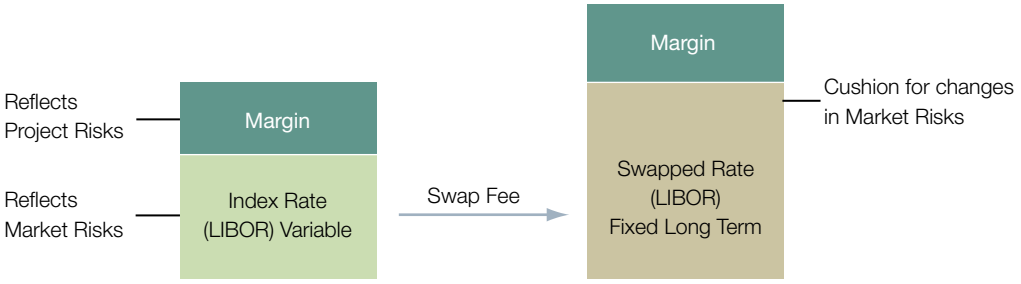
- Finance can be provided by private companies, but with some form of explicit public regulation or implicit public support. Examples include the water and energy sectors, which are largely privately owned and financed.
- Finance can be provided by public resources only, or for large one-off projects such as the Olympics, with a mixture of public and private resources.
- Finance can also be provided under the Private Finance Initiative (PFI) or other forms of Public Private Partnership (PPP). Sectors of economic and social infrastructure provided in this way include, for example, new hospitals and some roads.

3 PFI projects are long-term contractual arrangements between public authorities and private sector companies with project financing raised by private companies. Project finance means that the financing is provided for a sole project, through a special company set up for the purpose. Departments generally conclude that the contract offers value for money when the benefits associated with the transfer of project risk outweigh any additional PFI financing cost.

4 PFI projects typically use around 90 per cent debt finance and 10 per cent equity finance. The debt portion of this financing can be provided by bank loans and/or bonds. The banks and bond holders receive interest on their loans related to risks. Interest charged on a bank loan is usually a combination of two parts, the reference rate (usually the interbank rate) and the loan margin (**Figure 1**). The interbank rate reflects general market risks, while the loan margin reflects project specific risks. Variable rate bank loans are swapped to fixed rates to provide stable monthly payments over the project life.

Figure 1

This shows how a variable rate loan is converted to a fixed rate and the composition of loan interest costs



NOTES

1 LIBOR means the London Inter Bank Offered Rate (see Glossary) which is similar to base rate, but usually higher to reflect risk of bank failure.

2 A swap fee is payable to convert a variable rate loan to a fixed rate loan. Short-term rates can often exceed long-term rates during the life of a project.

Source: National Audit Office

5 Bond finance is where a loan is split up into many identical bonds which saving institutions can trade in public markets known as capital markets. Credit Rating Agencies analyse individual project and finance structure risks and publish a rating as a guide to investors. Before the credit crisis, the purchase of credit insurance could improve the rating of the bond, thus making the risks acceptable to non-specialised lenders such as pension funds.

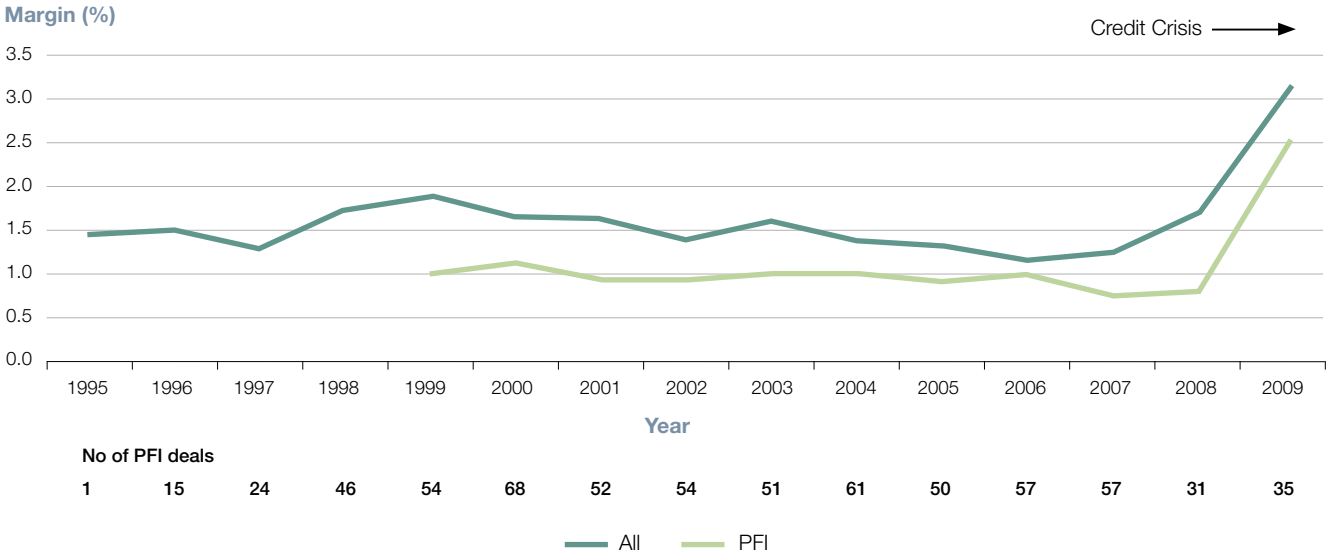
6 In late 2007, market confidence in the providers of this credit insurance collapsed, leaving PFI projects in the United Kingdom without access to capital markets.

7 The bank loan market, however, continued to function. Banks can make loans while they have sufficient reserve capital (see Glossary) to allocate against them. To keep making new loans banks must free up reserve capital by selling existing loans, in whole or in part, to other banks or raise new capital. This process is known as syndication. The collapse of Lehman Brothers in September 2008 led to a halt in loan syndication, continuing throughout 2009. This limited the ability of banks to make new PFI loans.

8 The equity finance is provided by a project's contractors and financial institutions. It typically comprises a mixture of shares and shareholder loans. Equity finance is known as risk capital because, generally, the equity will be lost first if the project company fails. The shareholder loans are higher risk as their repayment in a failure is junior to the external debt, known as senior debt, which is repaid first.

Figure 2

Average international project finance loan margins compared to PFI



NOTES

1 The margins are averages based on monthly data.

2 Numbers in bold are the number of PFI projects financed in that year.

Source: National Audit Office and project finance chart based on data from the Infrastructure Project Finance Benchmarking Report 1995-2009 further description at http://infrastructureeconomics.org/2010/02/09/project-finance-benchmarking-report/

Scope

9 This report examines the effects of the credit crisis on privately financed government infrastructure projects and the Treasury's response. Although unable to control conditions in the financial markets, the Treasury sets guidance on how departments assess value for money and approves significant projects. It therefore was responsible for coordinating the Government's response to the financial crisis and mitigating its impact on infrastructure procurement. In particular, the report sets out:

- how the Treasury responded to the impact of the credit crisis on the **availability and terms** of finance for PFI contracts;
- the impact of the credit crisis on the **cost** of finance for PFI contracts; and
- the challenges ahead.

The report does not consider the value for money of individual projects, nor does it address the remit of Infrastructure UK, the new body established to coordinate the Government's approach to the infrastructure challenge. The report does, however, make recommendations on issues that Infrastructure UK should address.

Key findings

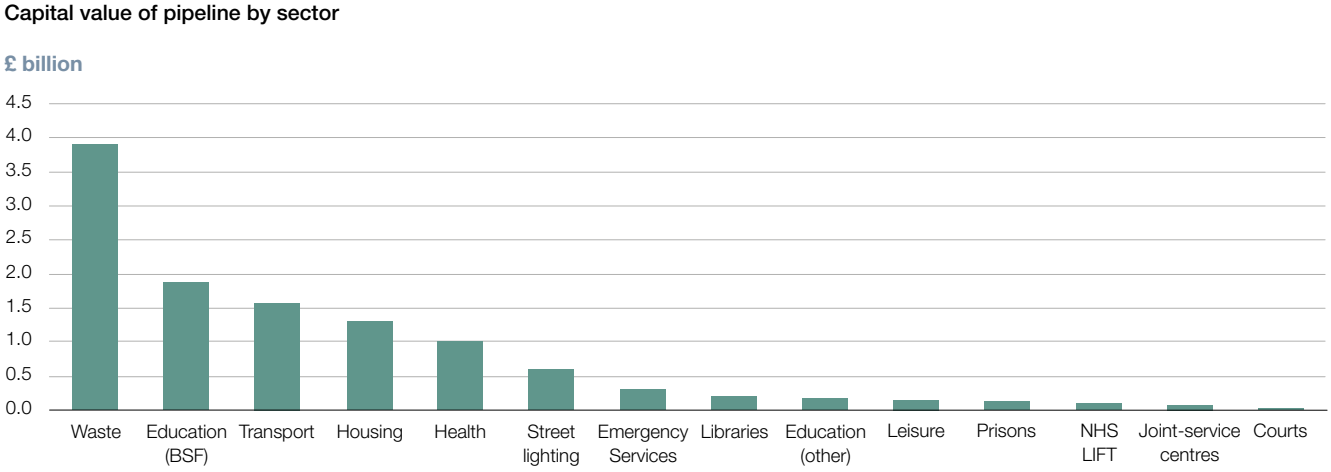
The Treasury's response to lower availability of finance

10 The Treasury's role in establishing the PFI market contributed to reductions in the risk margin of private debt finance between 1999 and 2007. Over this period, the establishment of the PFI market and the availability of bank finance lowered financing costs as bank competition increased. Departments took advantage by letting around 300 contracts with relatively low financing charges. The part of the interest cost relating to project risk, the PFI loan margin, averaged around one per cent, or less. These rates were lower than intern ational project loan margins which averaged 1.7 per cent from 1994 to 2008 (**Figure 2**).

11 As the credit crisis took hold in autumn 2008, debt finance became increasingly unavailable. As a result of market conditions, largely outside the Treasury's control, first bond finance, and then bank finance, became severely restricted. But as the UK economy entered recession, the Government had a significant pipeline of infrastructure projects, with an investment value exceeding £13 billion (**Figure 3**).

Figure 3

The investment value of UK infrastructure projects notified in the Official Journal of the European Union as at March 2009



NOTES

1 Building Schools for the Future (BSF) is a secondary schools investment programme.

2 Local Improvement Finance Trusts (LIFT) finance primary medical care projects.

Source: HM Treasury

12 The Treasury was concerned about the macroeconomic impact of the withdrawal of debt finance. With debt finance increasingly unavailable, individual contracts became harder to finalise. The Treasury feared that, as a result of this potential slowdown in new PFI contracts, the opportunity to stimulate the economy through new infrastructure would be lost. In addition, important benefits, for example, improved school facilities and dealing with road congestion, depended on the completion of planned PFI projects.

13 The Treasury therefore sought to maintain a flow of signed PFI contracts. The overarching Government policy in late 2008 was that the pipeline of PFI deals should reach financial close promptly, to stimulate national and local economies, and create jobs. The Treasury followed this policy whilst continuing to apply standard PFI value for money tests.

14 Bank lending was so restricted in late 2008 that, despite Treasury encouragement, no sizeable contracts could be let. In September 2008, the Treasury asked the European Investment Bank to step up its lending to infrastructure projects which the Bank did. The Treasury, however, did not set PFI lending targets for UK banks when they received government support during that winter. The Treasury initiated internal discussions about such targets but did not pursue them because the banks concerned were a sub-set of the PFI lending market and because PFI lending was only a small part of the issues facing the Treasury in relation to its banking support. In early 2009, there continued to be insufficient bank debt for larger projects because banks did not resume lending as expected.

15 The Treasury helped to reactivate the lending market for infrastructure projects by setting up its own finance unit. In March 2009, the Government rapidly set up The Infrastructure Finance Unit to address the scarcity of debt finance. The unit's role was to be available to provide government loans to infrastructure projects, on commercial terms, so shortfalls in the amount of available bank finance could be met.

16 In April 2009, The Infrastructure Finance Unit helped to finalise a large waste treatment and power generation project. The unit provided a £120 million loan to complete a £582 million financing package for a waste treatment and power generation project in Greater Manchester. The Treasury's participation in this loan, on the same terms as commercial banks, is intended to be temporary and reversible.

17 The Treasury's willingness to lend improved market confidence and subsequently around 35 government infrastructure projects have been agreed without any further public lending. The Infrastructure Finance Unit has not made any further loans. But since its establishment, around 35 projects have been agreed. There is therefore some evidence that the unit improved market confidence. In addition, the availability of government loans provided some competitive tension to the banks in a market which, since 2008, had lacked competition on loan financing terms.

The cost of finance

18 We found that as a result of the credit crisis, the total interest cost of bank finance increased by one-fifth to one-third. In the 35 projects agreed after the establishment of The Infrastructure Finance Unit, we found that the part of the cost relating to loan margins on PFI deals, which had been 1 per cent or less, widened significantly to around 2.5 per cent on average (**Figure 4**). Some, for example, the complex Greater Manchester Waste project, will rise to more than 3 per cent in stages over the project life. The increased loan margins resulted in substantial increases to the cost of finance (Figure 4).

19 These increases occurred despite the fall in short-term borrowing rates and little change in the intrinsic risk profile of projects. The fall in the underlying short-term bank lending rate (the base rate) to 0.5 per cent only had a slight impact on PFI deals. This is because the private sector fixes the interest cost on their long-term PFI borrowings. This fixed interest rate, currently around 4 per cent, reflects the risk of future changes in interest rates and is a market factor that is not specific to PFI.

20 In line with policy on acting to stimulate the economy, the Treasury gave priority to closing deals at the prevailing market rates, even if this meant paying more and banks carrying less risk. In addition to charging higher margins, the banks have sought to de-risk their lending to projects following the credit crisis. They renegotiated their lending terms with preferred bidders, through: lowering the proportion of debt in projects; increasing cover ratios (see Glossary); requiring the private sector to inject risk capital earlier; and placing more onerous conditions on when the private investors can withdraw cash from the project.

Figure 4
Comparison of interest costs on PFI projects

	Standard Deals		Large Deals		
	Pre crisis	Post crisis	Pre crisis	Post crisis	
Key costs	Sample projects (2007)	School sample (2009)	FSTA (March 2008)	GMW (April 2009)	M25 (May 2009)
Level of project risk	Various	Low	High/medium	High	Medium
Interest rate margin (%)	0.79	2.51	1-1.15	3.25-4.50	2.5-3.5
Total interest cost (%)	5.9	6.9	5.9-6.1	7.7-8.91	6.9-7.9
Increase post crisis (minimum) (%)	–	+18	–	+31	+17

NOTES

1 The indicative level of project risk shown above illustrates the fact that the projects are not directly comparable. The change in interest margin percentages partly reflects this.

2 The Future Strategic Tanker Aircraft (FSTA) project raised funding of £2.5 billion. Greater Manchester Waste (GMW) borrowed £582 million.

3 The increase post crisis will rise with stepped increases in the interest rate margin if refinancing (see Glossary) does not take place.

Source: KPMG and National Audit Office

21 Our analysis shows that the higher financing costs increased the annual charge of typical PFI projects by 6 to 7 per cent (Appendix Two). Riskier PFI projects experienced a larger increase. For example, we estimate that the increase in the financing charges of the Greater Manchester Waste project added 12 per cent to its annual contract price (Figure 11 on page 25). To address this, in October 2008 the Treasury increased the public sector share of any future reductions in debt costs from 50 per cent to 70 per cent.

22 We estimate that between £500 million and £1 billion of higher cost has been locked in, partly offset by the increased public sector share of refinancing gains. The higher end of this range reflects the difference between current PFI bank rates and low rates prior to the credit crisis. Although departments can now press investors to refinance, any refinancing requires careful judgement and will depend on future market conditions. We doubt whether more than half of the current higher financing costs might be recovered.

23 Higher financing costs eroded the value for money advantage that departments attribute to PFI. Departments initially seek assurance on the value for money of PFI procurement by comparing alternative ways of providing the same results. Although we have often expressed concern about these calculations, the typical estimate of the PFI cost advantage lay in the range of 5 to 10 per cent (and some cases we have audited showed smaller savings). We estimate that financing rate changes increased the annual contract charge by around 6 to 7 per cent. This finding suggests an increased risk to value for money resulting from the credit crisis. Given the Government's policy objectives for stimulating the economy, we accept, however, that delays from resubmission of individual business cases might have put the policy at risk.

24 Although the Treasury and departments took steps to assess the impact on the value for money of projects, there were limitations to their assessment. Despite the higher financing costs the Treasury and departments considered that all 35 contracts let in 2009 continued to represent value for money. The Treasury relied on the normal review processes for PFI projects and a review by Partnerships UK of the expected effect of higher bank risk margins on a sample of projects. There were, however, limitations to this approach, as:

- although the Partnerships UK review, commissioned by the Treasury, was useful analysis, it did not cover all projects let or all aspects of financing costs. In addition, the Treasury monitored actual financing terms, but did not have a full analysis of the impact of the higher rates on the cost of projects that closed in 2009;
- some schools projects did not fully reassess their business cases, using out of date guidance which had said an updated quantitative analysis was only necessary if costs increased by 25 per cent; and
- the value for money assessments for the M25 and Greater Manchester Waste projects continued to rely on assumptions, from earlier business cases, that high savings in future whole life costs would not be available under conventional procurement.

Challenges

25 The Treasury, through Infrastructure UK, faces a number of challenges to identify the best funding models for projects now being developed. The Treasury has formed Infrastructure UK to oversee infrastructure investment in the UK, including aspects of Government capital spending. It will face important challenges regarding the prioritisation of projects and procurement methods given the large deficit in the public finances and the increased cost of using private finance.

26 There are alternative financing options to PFI. Projects such as the Olympics and Crossrail have relied on, or will be using, a greater input of public money. There were other financing options, and although these would not have been likely to achieve the Government's policy objectives in 2009, they could be relevant in future:

- The French government guarantees 80 per cent of the debt, once a project is operating successfully, to reduce the use of bank risk capital and therefore financing costs. The disadvantage is that this approach is not a temporary or reversible intervention and retains some operating project risk for the public sector.
- The not-for-profit European Investment Bank (EIB) is generally able to make funding available on more favourable terms (such as margins and fees) than commercial banks. Some European countries have used public loans in a similar manner.

Conclusion on value for money

27 We have assessed how the Treasury managed the risks to value for money, rather than examining individual projects. Departments' ability to finance the existing programme was in doubt until the Treasury set up The Infrastructure Finance Unit and reactivated the lending market. Our value for money conclusion relates to projects actually financed in 2009. However, we accompany that conclusion with a warning on value for money for subsequent projects.

28 On projects financed in 2009: It is our opinion that in the circumstances the extra finance costs of projects financed during 2009 were value for money. We take this view because the overarching policy priority to provide economic stimulus severely limited the scope for the Treasury to do more than they did to protect public value while ensuring that the programme of PFI projects was moved forward. In reaching this view we considered the fact that the financing margin being paid had widened significantly, and that banks renegotiated lending terms which resulted in an increased cost of risk for the public sector. We regard this as having been offset to some extent, and as far as was reasonably achievable in all the circumstances, by the increased refinancing gain share terms obtained by the Treasury.

29 We also considered whether the PFI deals could have been required to submit individual revised business cases, which might have led to some of the least advantageous projects being postponed or discontinued with the effect of improving overall value for money. We concluded that this requirement would have imposed further delay that might have put the policy objectives at risk, and would not therefore be a reasonable yardstick to assess the protection of value for money in the programme. However, having concluded thus positively on projects financed at the height of the crisis, we would expect more exacting criteria to be applied subsequently.

30 **On projects which have yet to be fully developed:** There should be no presumption, based on earlier business case analysis, that continuing the use of private finance at current rates will be value for money. We now expect a thorough project by project review of the forward programme to apply more exacting and narrower criteria than applied to projects financed at the height of the crisis. PFI is less likely to be value for money unless there are substantial and credible savings to offset higher financing costs. The Treasury's formation of Infrastructure UK gives a platform for wider consideration of risks, other funding options and alternative procurement models.

Recommendations

To the Treasury

a **Market disruption, causing a lower availability of finance, has interrupted the Government's infrastructure programme.** The Treasury should analyse the lessons from the past two years. It should use these lessons to prepare a contingency plan for how departments should handle future market disruption affecting procurement plans.

b **There is limited evidence that projects fundamentally re-evaluated their business cases in light of the credit crisis.** Where there are material changes, such as project costs increasing by 15 per cent, the Treasury should require that the department re-evaluate the project. This re-evaluation should assess all the benefits, and potential loss of benefits, of continuing the project in its current form, compared to other available options, including other forms of procurement.

c **Increased reliance on a single type of finance, with reduced competition, promotes inefficiency.** The Treasury should continue to consider how a greater mix of finance sources, with less emphasis on the use of commercial bank loans, can be used to finance infrastructure projects.

To the Treasury and departments

d **Allowing individual projects to negotiate refinancing will lead to variable and overall sub-optimal outcomes.** The Treasury should adopt a portfolio approach to refinancing, with input from the relevant departmental team, so that individual authorities do not exercise any right to a refinancing on a piecemeal basis. During the operating phase of a number of projects, taking a portfolio approach will enhance the public sector bargaining position, reduce transaction costs and increase potential gains. The Treasury should also consider whether the returns to equity investors are aligned with the changed risk allocation in deals that has arisen following the credit crisis.

e **The increase in finance costs, including some reduction in risk borne by banks, makes PFI less likely to be a value for money solution.** In line with Treasury guidance, departments should not presume that a wholly privately financed project offers a solution likely to secure good value for money. During procurement, and in drafting notices for the Official Journal of the European Union, departments should assess a range of financing options, including all public finance or part public and part private finance.

f **The public sector gave greater priority to securing agreed contracts than to negotiating better outcomes.** In such situations, departments should nevertheless make greater use of sensitivity analysis to inform decision-making over negotiation on possible small changes in financing rates and on each request to take on additional project risk.

Part One

The Treasury's response to the effect of the credit crisis on privately financed infrastructure projects

1.1 During 2008, the market capacity for providing bank finance decreased, pricing increased and other terms tightened. **Figure 5** shows the main changes affecting the financing market and the effect on infrastructure projects.

The Treasury's initial response to the impact on PFI contracts

1.2 The Treasury's initial response was to evaluate the extent of the impact of financial market disruption on PFI projects. From June 2008, it analysed increasing evidence that the disruption to the credit markets was affecting funding for the PFI market, in terms of both the pricing and availability of project debt. In particular, it concluded that market changes had increased project costs, leading to delays, and putting the overarching policy of stimulating the economy at risk. In addition, if cheaper finance were to become available in the future, the private sector would then gain more benefit from refinancing (see Glossary). Departments were, therefore, already being advised to seek a right to bring about a refinancing and obtain an increased share of any gains. In October 2008, this was made a formal amendment to standard contract terms.

1.3 Banks put up their fees and interest charges to borrowers generally, including PFI borrowers, but most were unwilling to provide long-term loans in greater amounts than about £25 million per project. As a result many PFI borrowers had to take time to assemble a club of five or six banks to do a large deal. Such a deal would previously have involved only one negotiating bank and later syndication on pre-agreed terms at the risk of that lead bank.

1.4 All-in interest charges and other lending terms worsened for PFI deals during 2008, and most notably during 2009. Complex deals, like the M25 project and the Greater Manchester Waste project struggled to form bank clubs for the substantial amounts they needed.

Figure 5
Key events and Treasury response

Period/Date	Key events and Treasury response	Effect on infrastructure projects
December 2007	Last bond issue: Northern Ireland Road II project raises £146 million	Projects, such as the Ministry of Defence's Future Strategic Tanker Aircraft project, change from bond to bank finance
March 2008	Future Strategic Tanker Aircraft financing raises £2,200 million	Bank group formed with eight arranging banks and 15 participants. Interest cost about 6 per cent, up to 1.15 per cent above the then bank cost of funds
September 2008	Lehman collapse	Some banks withdraw, others charge more than 1.5 per cent above cost of funds (some as high as 2.2 per cent) compared with 1 per cent previously. This makes it difficult to procure debt finance to complete contracts. Major projects such as the Greater Manchester Waste project and the M25 are delayed
October 2008	Government provides banks with financial support Treasury notes funding gaps for large or more complex projects	Projects compete with corporate borrowers for scarce bank capacity. Finance cost increases are partially offset by falling underlying interest rates. Government support to the banking sector does not trigger a rapid resumption in lending
November 2008	Treasury proposes a range of possible solutions, including greater EIB involvement	• Increased Authority capital contributions • Authority loans on commercial bank terms • Working Group on medium-term solutions
January 2009	Treasury proposes direct lending – accepted 30 January 2009	Advice leaves open any decision on the lending body, although Department for Transport may act as lender on the M25
March 2009	Ministerial Statement on The Infrastructure Finance Unit	Treasury lends £120 million to the Greater Manchester Waste project which, in April 2009, is the first contract to be let following the credit crisis. Treasury places letter with lending criteria on website in May. The market realises that it is now possible to complete PFI deals in the current market conditions. The M25 contract is let in May 2009 without the need for a departmental loan
August 2009	Treasury Application Note provides new guidance for taking forward private finance projects	No significant change is made in the way that projects are assessed after the Outline Business Case. The intent is to avoid excessive reliance on uncertain financing proposals early in procurements, the flow of new deals is now becoming more established

Source: National Audit Office

1.5 The Treasury approached the European Investment Bank in September 2008, to step up its lending activity to help ease the situation. The Treasury, however, did not set PFI lending targets for UK banks when they received government support during that winter. The Treasury initiated internal discussions about such targets but did not pursue them because the banks concerned were a sub-set of the PFI lending market and because PFI lending was only a small part of the issues facing the Treasury in relation to its banking support. Banks did not resume lending as expected and, between October 2008 and March 2009, only four smaller PFI projects were financed, including two school projects.

The impact on value for money assessments

1.6 The Treasury-chaired Project Review Group was responsible for the scrutiny of business cases for major PFI contracts. Partnerships for Schools undertakes the same role for schools contracts. Both require projects to rework the economic assumptions behind the choice of procurement route, made at the Outline Business Case stage, if there has been market failure or a major change. Current guidance does not contain an actual number to define what constitutes a major change, relying instead on overall judgement. Some projects such as schools, however, took guidance from August 2004 exemplifying major change as an increased cost, in real terms, of 25 per cent.

1.7 In our audits, previous business cases often indicated that PFI projects were expected to deliver savings in the range of 5 to 10 per cent. We have also reported in the past that there were flaws in these comparisons between the PFI price and conventional procurement.[1] An increase in the cost of finance therefore represented an increased risk to value for money, and could have led to reappraisals of the value for money of individual projects. A review of a sample of Outline Business Cases by Partnerships UK estimated, however, that all cases remained value for money at higher bank risk margins of 3 per cent.

1.8 Given the Government's policy objectives for stimulating the economy, we accept that delays from resubmission of individual business cases might have put the policy at risk. We also generally accept the case for absorbing higher financing costs for projects at an advanced stage in 2009, but would still have expected some supplementary analysis of the impact at the project level. In particular, where projects had yet to be fully developed, we would have expected departments to have presented wider value for money assessments to the Treasury on the benefits and disadvantages of proceeding with their PFI projects.[2] Where applicable, this should have included the effect of the public sector taking on greater project risks, where the banks made this a condition of their financing, balanced against lost service benefits from delaying the projects. Such analysis would have improved the Treasury's understanding of the trade-offs involved in accepting higher financing costs, as well as informing future decisions on the use of PFI.

1 See, for example, *Private Finance Projects*, A Paper for the Lords Economic Affairs Committee, October 2009, paragraph 4.9, pages 46-47.
2 An example of this form of analysis is in Appendix Five of this report and can be found at www.nao.org.uk/infrastructure-financing-2010.

1.9 Delayed projects were vulnerable to the credit crisis. The M25 case study, for example, shows a cost increase of over £600 million on a contract which had originally been due to close in February 2008 (Appendix Three).

1.10 One school case, however, illustrates how innovation mitigated the disruptive effect that the credit crisis had on certain projects reaching contract closure. In this project, to build a new school in the London Borough of Newham, the bank supporting the winning bidder withdrew a month before the planned financial close. Partnerships for Schools proposed a solution based on the Local Education Partnership contracting a Design & Build contract, without committed private finance.[3] On an exception basis, the Treasury allowed the London Borough of Newham to conclude this school project on condition that interim grant funding would be replaced by private finance within six months, which was achieved.

The establishment of The Infrastructure Finance Unit

1.11 Following the worsening of the credit crisis in autumn 2008, it became clear that sufficient debt finance, whether bank loans or bonds, was no longer available to privately finance larger government infrastructure projects. The Treasury wished to close the contracts in the pipeline to re-establish the market for government infrastructure projects as part of the broader fiscal stimulus package. The Treasury therefore considered options and developed a contingency plan to establish a lending unit. This unit obtained Government approval at the end of January 2009.

1.12 In March 2009, the Government implemented its plan for the lending unit to ensure that some 110 privately financed infrastructure projects (exceeding £13 billion) would go forward, despite difficulties in raising debt finance. The unit, known as The Infrastructure Finance Unit, was created with the purpose of funding any shortfalls in bank finance on privately financed infrastructure projects. The lending terms would be on the same commercial terms as the banks.

1.13 After ten months of negotiation, with almost all of the available banks, the Greater Manchester Waste project had remained unable to raise the last £120 million to complete its financing. In March 2009, the Treasury agreed to make up this shortfall through a £120 million loan. The Infrastructure Finance Unit subsequently monitored and provided support to a number of other projects but no further loans have been required.

1.14 The Treasury intervention on the Greater Manchester Waste project was timely and helped to reactivate the market. The Treasury chose this project because it clearly met its lending criteria. Raising enough bank finance had proved difficult because the project carried more risk than the average PFI project (see Part Two). The possibility of Treasury loans was not needed on the other large complex deal, the M25 project, as the Department for Transport had already developed a contingency plan to be ready to act as a co-lender to the project. Other projects were smaller and did not appear to have financing gaps or could be grant-funded on a temporary basis, as permitted in the exceptional case of the Newham school.

3 See National Audit Office *The Building Schools for the Future Programme Renewing the secondary school estate,* February 2009 for an explanation of the Local Education Partnership role.

1.15 Although helpful in moving projects in the pipeline towards contract closure, Treasury lending created increased risks for the public sector parties. Public sector lending also caused some concerns for the private sector about information sharing (**Figure 6**).

1.16 During the onset of the credit crisis from autumn 2008 through to summer 2009, the Treasury amended refinancing provisions and continued to apply existing guidance to departments on how they were to consider value for money issues on PFI contracts. Rather than issue additional guidance, the Treasury focused on getting procurements moving again and later on the formation of its lending unit. A guidance note on eligibility for Treasury loans was issued in May 2009, and an Application Note on PPP projects in current market conditions was issued in August 2009. The latter did not make material changes to the tests that should determine value for money in the financing conditions that had arisen following the credit crisis because the Treasury believed its value for money guidance remained sound.

Figure 6
The main risks and concerns related to Treasury lending

- If the project failed then the Treasury might lose part or all of the money it had lent. As the economy was in recession there was a higher risk of project failure due to service deliverers running into financial difficulties than before the credit crisis. This risk was mitigated by hiring staff with appropriate professional experience.
- There was the potential for conflicts of interest within government over decision-making if a project ran into difficulties. The procuring department would be seeking to protect service delivery, and if the project had to be terminated it would expect the banks to share in any losses that would arise. The Treasury, as lender, would be motivated in the opposite direction to ensure that it recovered as much as possible of the money it had lent. This risk was mitigated by a governance structure including a credit committee and a steering group with some independent members.
- The commercial banks lending to the project would be concerned that the Treasury, as lender, might receive information about the department's intentions for the project which had not been communicated to the banks. The Infrastructure Finance Unit is, however, treated in the same way as any commercial lender in terms of access to information.

Source: National Audit Office

Other options for limiting project costs

1.17 There were other financing options, and although these would not have been likely to achieve the Government's policy objectives in 2009, they could be relevant in future.

- The French government guarantees 80 per cent of the debt, once a project is operating successfully. Although this can reduce financing costs by several million pounds, it increases public sector exposure to operating risks. Large projects in France have struggled to reach conclusion on this basis since 2008, and none closed in 2009.
- The not-for-profit European Investment Bank (EIB) is generally able to make funding available on more favourable terms (such as margins and fees) than commercial banks. Some European countries have publicly owned banks playing a similar role. Lending at similar rates was not pursued because the Treasury considered government lending should be temporary and reversible. In a future refinancing, it would be difficult to sell such loans to other parties to recover the original funding.

Part Two

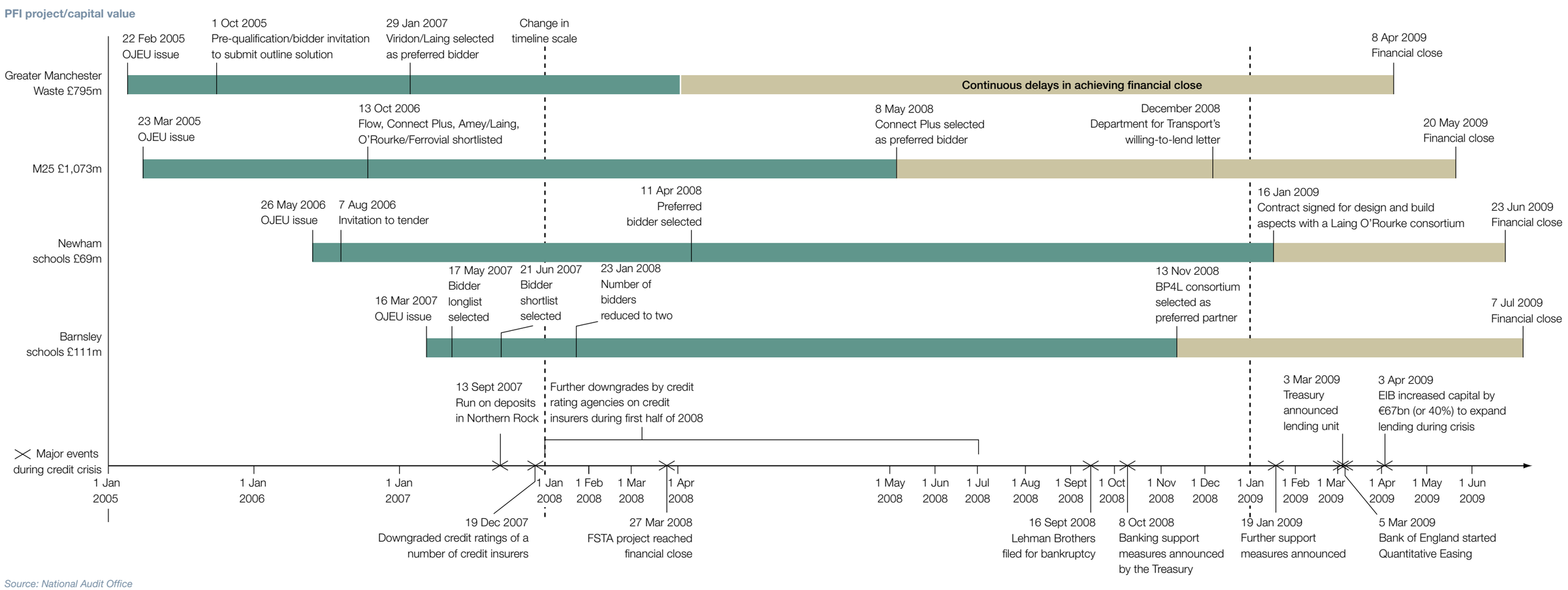
The effect of the new financing terms on contracts let since the credit crisis

2.1 During 2008, the market capacity for providing bank finance decreased, pricing increased and other terms tightened. **Figure 7** shows the main changes in the financing market and their effect on the timing of the infrastructure projects we reviewed.

2.2 Helped by the Treasury's establishment of its lending unit, confidence improved, market activity resumed and 35 delayed projects closed between March and December 2009 (**Figure 8** overleaf).

2.3 Where private finance has been used since the credit crisis, however, the cost was always more expensive than before, generally by around one per cent. The fact that the base rate is currently at an all time low has not fully offset the higher loan margins that banks are charging. This is because the cost of a fixed interest loan, as with government borrowing over 20-30 years, reflects future interest rate expectations. These rates are lower than two years ago but the reduction has not been sufficient to offset the significantly wider loan margins now charged by the banks (**Figure 9** overleaf).

Figure 7
Timeline of key events affecting case examples after notice in Official Journal of the European Union (OJEU)



Source: National Audit Office

Figure 8
PFI deals concluded April to December 2009

Deals	Capital Value (£m)
Greater Manchester Waste PFI	631
M25 project (whole life present cost £3,360 million)	1,073
20 PFI school projects	1,396
12 other PFI/PPP deals	1,795
Total	**4,895**

Source: National Audit Office

Figure 9
Increase in loan margins applied by the banks

	2007	2009	June 2010
Borrowing rate (%)	5.1	4.46	4.18
Schools margin (%)	0.6	2.55	2.23
– annual interest cost for a typical £20 million school project	£1.1m	£1.4m	£1.3m
Waste project margin (%)	1.2	Above 3	–
– annual interest cost for a typical £190 million waste project	£10.8m	£14m	–

NOTE
1 Project values shown above relate to the amount of senior debt and the annual interest cost reduces as loan repayments are made.

Source: National Audit Office analysis

2.4 The increased financing costs since the credit crisis have come after a period in which around 300 PFI contracts were let at relatively low financing rates when compared to other types of project financing, as shown earlier (Figure 2 on page 6). The low rates reflected the successful establishment of the PFI market and availability of bank lending which encouraged competition in the financing terms.

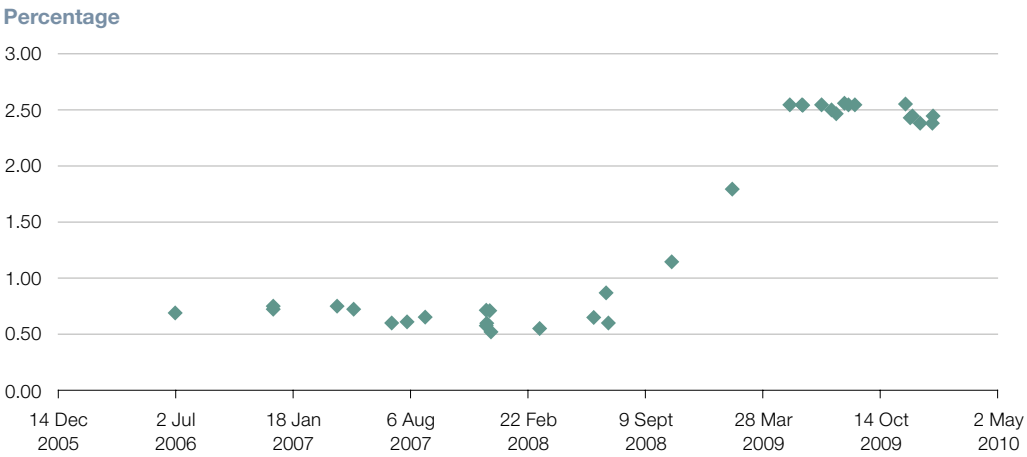
The impact of higher debt finance costs on public sector service payments

2.5 The increased cost of finance has generally been passed through by the private sector service provider to the public authority in the form of an increased monthly payment, known as the unitary charge. In Appendix Two, Figure 15 sets out the impact in real terms, compared to projects that were financed in 2007, and suggests that, on an all-in basis, the extra cost increased by around 5.6 per cent to 7.4 per cent. The financing costs of schools projects, which are fairly typical, moved up sharply at the start of 2009 (**Figure 10**).

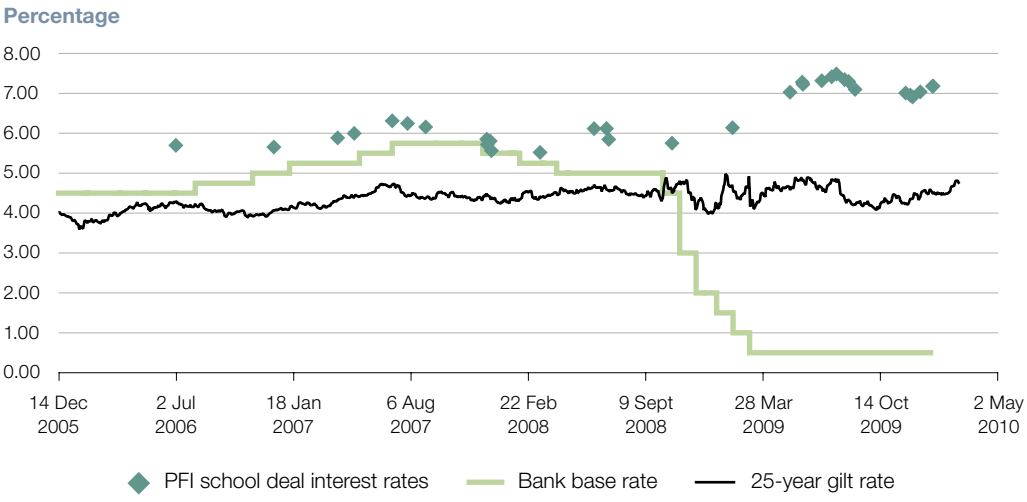
Figure 10

Typical changes, after December 2008, in loan margins and total interest rates, exemplified by Building Schools for the Future (BSF) projects

BSF PFI deals – bank average margins



BSF PFI deals – total interest rates



NOTES

1 The first chart shows the effect on bank margins. The second chart shows the effect on total interest costs. The charts show two main points:

a There was a dramatic increase in bank margins between July 2008 and June 2009. There has been a very slight easing in the margins, moving into 2010.

b The total increase in interest costs (i.e. bank margins + swap rates) is not as great as the increase in bank margins. This is due to the fall in swap rates, by about one per cent, over the same period.

Source: Partnerships for Schools

2.6 The Treasury's approval of the final financing terms for contracts, such as the Greater Manchester Waste project and the M25, demonstrates that it gave priority to agreeing contracts, and that it believed that it faced a lender's market. In such a lender's market, it was not possible to resist price increases, particularly after the Future Strategic Tanker Aircraft (FSTA) financing in March 2008, as shown in **Figure 11**.[4] A similar trend was starting to be visible in other countries. The nearest comparator for the M25, a toll road in Germany obtained project financing in March 2009. That project's total interest cost was about 6.5 per cent, including debt margins of over 2 per cent during construction (M25 2.5 per cent) and early operating years (over 3 per cent after 10 years – M25: 3.0-3.5 per cent).

2.7 On large deals it was difficult, costly and time consuming to arrange bank finance. A very large deal, such as the M25 described in Appendix Three, also resulted in a club of 16 banks eventually taking shares of around £25 million to £65 million each.

2.8 Margin increases have not been the sole impact of any reduced competition resulting from club deals. Based on analysis of projects concluded in 2007 and 2009 (see Appendix Two), banks have also sought to reduce their project risk by lowering the proportion of debt in projects and increasing cover ratios (see Glossary). This increases the risk to investors, who have passed the corresponding cost to the public sector by increasing the unitary charge. The M25 cover ratio originally required cash, at a minimum, exceeding 1.23 times the amount needed in each period to service the debt. The banks increased this coverage requirement to 1.4 times the amount needed to cover the debt. The final M25 contract also resulted in some additional risks being borne by the Highways Agency. The Agency negotiated concessions in return.

2.9 In all types of lending, banks are seeking shorter periods for the repayment of their loans. In the case of PFI, for example, at the time of selecting the Preferred Bidder (July 2008), the planned final repayment of the M25 loans was six months before the end of the concession and it was subsequently increased by three years.

2.10 In the Greater Manchester Waste project, there are progressive step-ups in loan margins after the ninth year (see Appendix Three). The banks chose this structure to increase the likelihood of the private borrower and/or the public authority seeking a refinancing at lower margins. This is preferable to imposing an obligation to refinance the loans at a specified future date.

Future refinancing

2.11 Based on a survey we commissioned with market participants, the consensus view was that they expected margins in three to five years time to be in the range of 1.25 per cent to 1.75 per cent. As such, we have assumed the new debt margin on the refinanced debt to be 1.5 per cent. The potential effect on a typical project is set out in **Figure 12.**

4 National Audit Office *Delivering multi-role tanker aircraft capability*, March 2010, reported in paragraph 18 that "the selection of a PFI solution was made without a sound evaluation of alternative procurement routes to justify why the PFI route offered the best value for money".

2.12 Refinancings will only occur if market conditions improve and if the private sector can be motivated to refinance the projects with revised arrangements that now give most of the refinancing benefit (70 per cent of typical refinancings) to the public sector. Since October 2008, the public authority has a contract right to request a refinancing, which is exercisable once in any two year period.[5] Until that time is judged to be right, the Government is locked into substantially higher financing costs that we estimate to be between £500 million and around £1 billion.

2.13 Taking the illustrated level of refinancing gain, at the four year stage, an aggregate recovery of £400 million might be obtained across the basket of deals concluded in 2009. Although there are some technical factors that could increase the refinancing gain, these are likely to be offset by the private sector's share of the gain and by transaction costs.

Figure 11
Change in notional unitary charge on large, complex projects

Term	FSTA March 2008	GMW April 2009	M25 May 2009
Level of project risk	High/ medium	High	Medium
Total interest cost (%)	5.9 - 6.1	7.7 - 8.9	6.9 - 7.9
Final repayment (months before end of concession)	24 months	18 months	42 months
Debt finance proportion (%)	86.2	85.2	84.7
Unitary charge increase compared to FSTA (%)	–	12	6

NOTE

1 Although the projects differ, and each has different proportions of operating costs, the unitary charge has been re-scaled, for comparison with the typical £190 million base case in Appendix Two.

Source: KPMG and National Audit Office

Figure 12
Potential refinancing gains on a project with £190 million senior debt and an estimated 'locked-in' cost of £8.6 million

Refinancing Date (years after start of Operations)	Potential Gain (Net present value £m)
Three years	3.52
Four years	3.45
Five years	3.37

NOTE

1 The gain is calculated gross (before sharing) on an original capital investment of £170 million.

Source: National Audit Office

5 Refinancing gains are shared on a sliding scale basis: Up to £1 million – 50 per cent; between £1-3 million – 60 per cent and greater than £3 million – 70 per cent. Both Greater Manchester Waste and the M25 achieved higher shares.

Part Three

The infrastructure challenges in the current economic environment

The challenges to the Government

3.1 The Government faces challenges in planning infrastructure investment in the current economic environment. Infrastructure UK, the new coordinating body established within the Treasury, estimates that the Government needs to continue to encourage substantial investment in new infrastructure, possibly £40-50 billion per annum until 2030.[6] But government departments need to reduce annual spending to assist the public finances; and the cost of using private finance has increased significantly compared with before the credit crisis.

The cost of using private finance

3.2 Our analysis in Part Two has shown the increase in the cost of using private finance compared with before the credit crisis. This increased cost may not be a temporary phenomenon, because one of the primary effects of the credit crisis may have been to change the attitudes to corporate and project risk within banks. As a result, there may have been a long-term increase in the cost of using private finance.

3.3 In addition, a significant problem for banks at the peak of the credit crisis was the mismatch between long-term loans (their assets) funded by short-term borrowing (their liabilities). So although PFI projects are underpinned by revenue from public funds, the combination of long-term loans and remaining risk transfer may have permanently increased finance costs and reduced the number of participants willing to lend in this market.

The establishment of Infrastructure UK

3.4 Infrastructure UK was established after the 2009 Pre-Budget Report to coordinate the long-term infrastructure needs of the UK. Infrastructure UK is a unit inside the Treasury incorporating a number of policy, financing, and delivery bodies to lead work within the Treasury to enable greater private sector investment in infrastructure, and improve the Government's long-term planning and delivery. In the autumn, the Government will publish a national infrastructure plan that will set out priorities for UK infrastructure on a cross-sector basis. Infrastructure UK will also carry out an investigation into how to reduce the cost of delivery of civil engineering works for major infrastructure projects.

6 HM Treasury Strategy for national infrastructure March 2010.

3.5 By consulting stakeholders, Infrastructure UK has identified that there is a significant risk of a gap emerging in the provision of equity capital to large complex infrastructure projects, particularly in the energy sector, within the next few years. This issue compounds the challenges posed by the reduction in availability and increase in cost of debt finance highlighted in this report. Infrastructure UK has also set out to identify the critical interdependencies that impact on economic infrastructure investment needs (**Figure 13**) and will publish an action plan, setting out how the risks and interdependencies will be managed, by spring 2011.

3.6 As a result of the interaction of these issues, there is a need to re-evaluate funding mechanisms across the whole range of public and private infrastructure investment. Some funders may be repaid from public sector payments for services, mostly originating in taxation, and others out of payments by users or consumers (see **Figure 14** overleaf).

3.7 Infrastructure UK recognises that it needs to find ways to maximise funding sources, and in particular to find new ways for infrastructure projects to obtain funding from the capital markets. The main obstacle is that institutions, such as pension funds, do not have the internal credit approval processes and skills to assess the risk and return for investing in project bonds, typically issued with a lower credit rating than BBB.[7] Such investors will only develop this new line of business if they believe that there is a substantial future pipeline of infrastructure projects that carry relatively low repayment risk.

Figure 13
Economic infrastructure

Sector	Significant assets
Water	Water resources (rivers, reservoirs and dams), drinking water distribution (pipes and pumping stations), waste water treatment, sewerage systems, flood and coastal defences.
Waste	Landfill, recycling facilities, waste collection and processing, hazardous waste treatment, energy recovery.
Transport	Roads (strategic and local), heavy rail, light rail, airports, ports, metro systems.
Energy	Gas storage, transmission and distribution, electricity generation (renewable and non-renewable), transmission and distribution.
Communications	Fixed voice and data networks, mobile voice and data networks, satellite networks, television and radio broadcast networks and radio spectrum.

Source: Strategy for National Infrastructure

7 Investments are graded according to methodologies produced by credit rating agencies such as Standard and Poors (Range: AAA to D). Triple B (BBB) is the lowest investment grade rating and indicates a 0.32 per cent probability of default.

Figure 14
Methods of infrastructure funding by sector, with examples

			Energy	Telecoms	Transport	Waste	Water
Public capital							
	User funding	Public industry				commercial waste operations by Local Authorities	Scottish water
	Taxpayer funding	Conventional capital procurement			most roads	municipal waste facilities	flood and coastal defences
Private finance							
	Taxpayer funding	PPP/PFI			M25 widening	municipal waste treatment	Northern Ireland water PFIs
	User funding	Economically regulated private industry	National Grid	BT Openreach	some airports		England and Wales water supply and sewerage
		Other private industry	electricity generation	cable networks	ports	commercial waste disposal	

Source: Strategy for National Infrastructure

Refinancing and secondary market equity sales

3.8 The risk profiles of PFI projects vary considerably during the construction phase making it difficult to refinance a number of projects on a pooled basis. Once in operation, many differences fall away making possible an approach that coordinates the right to refinance by a number of public authorities. This aligns with the interest of lenders in selling loans to free up reserve capital and then support new projects.

3.9 In March 2010, the House of Lords Select Committee on Economic Affairs, in its report *Private Finance Projects and off-balance sheet debt*[8] called for further investigation of any impact on service delivery that may result from the sale of shares by the original private sector investors, known as secondary market sales (See Glossary). Treasury guidance currently permits such equity sales without the sharing of resulting gains with the public sector. The Treasury has yet to publish research on the contribution made by equity investment at various stages in the life of a public private partnership.

8 Published 17 March 2010 (HL Paper 63-I and 63-II).

Appendix One

Methodology

This report examined whether the Government has put in place an economic, efficient and effective strategy for financing public services projects following the banking crisis. The main elements of our fieldwork, which took place between November 2009 and April 2010, were:

Method	Purpose

Banks survey
We commissioned KPMG to survey 40 banks and financial institutions, incorporating all the main PFI lenders, on an anonymous basis.
	To understand:
	• Views of market participants on current PFI issues, in particular:
	  • The appetite for PFI lending.
	  • Credit terms and conditions.
	  • Role of The Infrastructure Finance Unit.
	  • Approaches and lessons learned on major recent transactions.
	  • Future expectations.

Interviews We also held semi-structured interviews with other key stakeholders, including HM Treasury, Partnerships UK, Department for Environment, Food and Rural Affairs (DEFRA), and Partnerships for Schools (PFS), and financial institutions including the Bank of Ireland and the European Investment Bank (EIB).	To identify: • Views of stakeholders.
Benchmarking and modelling of results Using market data provided by KPMG, DEFRA and PFS, we analysed the changes in loan terms between 2007 and 2009. We also commissioned KPMG to analyse the affordability impact of change in financing terms. Using a generic PFI financial model, KPMG's sensitivity analysis illustrates how the change in each variable has led to changes in unitary charge and returns to sponsors.	To identify: • The trends in banks' PFI margins and other terms before and during the banking crisis. • Using sensitivity analysis and the financial model, the relative weight of each 'driver' and the extent of any recoverable costs.

Method	Purpose
Case studies of changes in scope and bank pricing and impact on VFM We identified four case studies which represent significant developments in the PFI market during the credit crisis: • Greater Manchester Waste – the only project in which the Treasury made a loan. • M25 Design Build Finance Operate project. • Newham School. • Barnsley School.	To identify: • Comparison of terms at Outline Business Case stage and Final Business Case. • Whether costs and benefits had been checked or adjusted. • The involvement of The Infrastructure Finance Unit as a lender. • The role of the European Investment Bank as a lender.
Documents Review We reviewed relevant documents including: • Documents, emails and minutes relating to financing infrastructure projects held by the Treasury in the period leading up to setting up The Infrastructure Finance Unit.	To understand: • The rationale for setting up The Infrastructure Finance Unit. • Changes in guidance.
Overseas comparison • We also reviewed documents from the European PPP Expertise Centre (EPEC) on how other countries are funding infrastructure projects. • EPEC/EIB documents.	To understand: • How other countries have responded to the crisis. • Potential savings if the UK were to adopt the French guarantee scheme.
Expert Panel • We established an expert panel who, together, had expert knowledge of the banking and infrastructure/project finance sector, to provide challenge and assurance for the study. The members of the panel were: • Dr Harry Bush, CB, Board Member and Group Director, Civil Aviation Authority • Jeremy Barker, Director, KPMG Corporate Finance • John Layton, CPA • Professor Roger Strange, Professor of International Business at the University of Sussex	To identify: • Challenges to study findings.

Appendix Two

PFI Benchmarking

1 As part of the fieldwork, and under our direction, KPMG have benchmarked changes in the cost of PFI finance. The table at **Figure 15** below sets out the effects on a base case model of a variety of changes, drawing on data taken from a broad sample of actual projects.

Figure 15
Impact on affordability of changes in financing terms from 2007 to 2009

Category	Assumption 2007	Assumption 2009	Annual Unitary Charge (£)	Change in 2009 (%)
'Base Case' model (2007)			33,392	–
Debt amount as a percentage	89.7%	87.7%	33,790	1.19
Swap Rate (variable to fixed)	5.1%	4.3%	32,315	-3.23
Loan margin	0.79%	2.39%-2.59%	36,145	8.24
Arrangement Fee	1.1%	1.57%	33,530	0.41
Commitment Fee	0.38%	1%	33,575	0.55
Interval after final repayment	11 months	15 months	33,487	0.28
Minimum ADSCR/LLCR	1.17x/1.22x	1.19x/1.23x	33,500	0.32
Swap Credit Spread	0.11%	0.25%	33,662	0.81
2009 model (from range of results)	25th Percentile		35,295	**5.7**
	75th Percentile		35,870	**7.4**

NOTES
(see Glossary for ADSCR and LLCR under 'Cover ratios')

1 The unitary charge shown above is based on separately applying the terms & conditions to a typical size deal with a capital cost of £170 million and debt of about £190 million and a rate of return to equity of 12.5 per cent.

2 The sum of the price impacts of each change individually, totalling 8.57 per cent, would be incorrect and greater than the price impact from the base case to the current climate. The reason for a lower result is that increasing the unitary charge, to 'fix' a particular variable, mitigates the impact of other changes.

3 If the unitary charge is held constant, the rate of return to equity falls to 6.55 per cent.

Source: KPMG

Appendix Three

Case Studies

Benchmarking the M25 Design Build Finance Operate Project

1 The single Design Build Finance Operate project for the M25 will widen two sections (38 miles). The 30-year cost includes maintaining the Dartford crossings and operating 250 miles of existing motorway. This cost increased by 23 per cent from a net present value of £2,756 million before the banking crisis, to £3,400 million by the time the financing was complete in May 2009.

2 We estimate that the largest component of the increase faced by the Highways Agency was an increase, arising from debt finance costs, of around 15 per cent compared to market terms available in 2007. This finding is extrapolated from our benchmarking model for typical cost changes on smaller transactions (see Appendix Two).

3 Larger and more complex projects were already facing higher bank costs in March 2008 when the Future Strategic Tanker Aircraft (FSTA) project closed early in the credit crisis (see timeline in Figure 7). The M25 financing terms, when applied to the KPMG model, show a cost 6 per cent greater than that derived when applying the FSTA financing terms. This is similar to the lower end of increases experienced since October 2008 on other PFI projects.

4 We will be reporting separately on the value for money of the M25 project.

Loan margins for the Greater Manchester Waste project

5 The Greater Manchester Waste Authority is the largest waste authority in England, covering 5 per cent of national waste. The 25 year recycling and waste management project includes 36 recycling facilities, across 23 sites, and a waste-fired thermal power station. The project will reduce local waste diverted to landfill by 75 per cent.

6 In addition to £184 million from the European Investment Bank, the banks supporting the project set market pricing for £280 million of lending, leaving a gap of £120 million. The Infrastructure Finance Unit provided this balance on the same terms as the banks.

7 It is difficult to benchmark this pricing, in order to be satisfied that lenders did not behave in an opportunistic manner. Unlike a schools project, primarily providing lower risk accommodation, waste projects involve complex industrial processes which rely on the financial and technical ability of companies to perform inter-related contracts. These higher risks result in higher margins and the most similar deal, which had closed in 2008, had a provisional margin of 2 per cent that was increased to 2.75 per cent in January 2009 at the launch of syndication. Subsequently, at least one bank told Bank of Ireland that it could not expect an approval from its credit committee unless the margin was set at more than 3 per cent.

8 Greater Manchester Waste closed with margins on the following sliding scale:

Construction	3.25%
Completion to Year 9	3.35%
Years 9 to 15	3.70%
Years 15 to 21	3.95%
Years 21+	4.50%

9 The amount of department credit support accorded to this project, as a result of the banking crisis, was increased from £109.5 million to £124.5 million. In January 2007, the second stage review by Partnerships UK commented "It is also apparent from the bids received, that the Authority's original cost assumptions were excessively conservative, hence the considerable affordability headroom".

Additional Appendices Four and Five are at www.nao.org.uk/infrastructure-financing-2010.

Glossary

Term	Definition
Cover Ratios	Ratios that measure the extent to which current and future liabilities to lenders are covered by available cash flows. There is a minimum Annual Debt Service Cover Ratio (ADSCR) and a Loan Life Cover Ratio (LLCR).
Debt service costs	The periodic instalments of loan principal and interest, and associated fees, due from a consortium to its lending banks.
Floating/variable interest rate	A rate of interest which varies periodically, in accordance with a stated market reference, usually the London Interbank Offered Rate (LIBOR).
Interest/lending margin	An additional amount that a bank charges on a commercial loan over and above its own cost of providing the loan. The margin compensates the risk of not having the loan repaid, potentially providing a profit.
LIBOR	London Interbank Offered Rate. The interest rate at which banks will lend to each other, which became difficult to determine at times during the banking crisis.
Refinancing	The process by which the funding terms, put in place at the outset of a PFI contract, are later changed, usually with the aim of creating benefits or **refinancing gains**. Refinancing may be beneficial where project risk has reduced, for example, after the completion of construction.
Reserve Capital	The amount of capital regulators require a bank to hold in relation to its lending based on international guidance produced by the Basel Committee on Banking Supervision.
Secondary market	The market for buying and selling shares in project companies that, usually, have commenced trading.
Swap	An arrangement whereby a loan which has a variable rate of interest (which continually changes in relation to market rates of interest) is exchanged for a loan which has a fixed rate of interest.
Unitary Charge	The amount that the public body contracts to pay each month for the service being delivered. It will cover operations and maintenance, on a whole-life basis as well as the fully financed construction cost.

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