Report
by the Comptroller
and Auditor General

HM Treasury

PFI and PF2
Our vision is to help the nation spend wisely.
Our public audit perspective helps Parliament hold government to account and improve public services.

The National Audit Office scrutinises public spending for Parliament and is independent of government. The Comptroller and Auditor General (C&AG), Sir Amyas Morse KCB, is an Officer of the House of Commons and leads the NAO. The C&AG certifies the accounts of all government departments and many other public sector bodies. He has statutory authority to examine and report to Parliament on whether departments and the bodies they fund, nationally and locally, have used their resources efficiently, effectively, and with economy. The C&AG does this through a range of outputs including value-for-money reports on matters of public interest; investigations to establish the underlying facts in circumstances where concerns have been raised by others or observed through our wider work; landscape reviews to aid transparency and good practice guides. Our work ensures that those responsible for the use of public money are held to account and helps government to improve public services, leading to audited savings of £734 million in 2016.
PFI and PF2

Report by the Comptroller and Auditor General

Ordered by the House of Commons
to be printed on 17 January 2018

This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act

Sir Amyas Morse KCB
Comptroller and Auditor General
National Audit Office
12 January 2018
This report presents information on: the rationale, costs and benefits of the Private Finance Initiative (PFI); the use and impact of PFI, and ability to make savings from operational contracts; and the introduction of PF2.
Contents

Overview  4

Part One
Costs and benefits of private finance procurement  6

Part Two
Impact of private finance procurement  23

Part Three
Introduction of PF2  35

Appendix One
Our evidence base  49

Appendix Two
Response under PF2 to concerns raised by Parliament  50

The National Audit Office study team consisted of:
Will Carruthers-Andrews,
Daniel Fairhead, Roxana Radulescu
and Callum Saunders under the direction of Simon Reason.

This report can be found on the National Audit Office website at www.nao.org.uk

For further information about the National Audit Office please contact:
National Audit Office
Press Office
157–197 Buckingham Palace Road
Victoria
London
SW1W 9SP
Tel: 020 7798 7400
Enquiries: www.nao.org.uk/contact-us
Website: www.nao.org.uk
Twitter: @NAOorguk
Overview

1 This briefing presents information on: the rationale, costs and benefits of the Private Finance Initiative (PFI) (Part One); the use and impact of PFI, and ability to make savings from operational contracts (Part Two); and the introduction of PF2 (Part Three). We present information on the programme as a whole and do not seek to form a view on the model or individual projects. This briefing was prepared prior to the announcement on 15 January 2018 that the construction company Carillion was in liquidation.

2 More than 90% of the government’s capital investment is publicly financed. Since the 1990s the public sector has also used private finance to build assets. The PFI and its successor, PF2, are forms of Public Private Partnerships (PPPs). In a PFI or PF2 deal, a private finance company – a Special Purpose Vehicle (SPV) – is set up and borrows to construct a new asset such as a school, hospital or road. The taxpayer then makes payments over the contract term (typically 25 to 30 years), which cover debt repayment, financing costs, maintenance and any other services provided.

3 The government reduced its use of PFI after the 2008 financial crisis, as the cost of private finance increased. Parliament also became increasingly critical of the model. In 2011, HM Treasury consulted on reform. It made some changes and relaunched the model as PF2 a year later. So far, two departments, the Department of Health and Social Care and the Department for Education, have used PF2.

4 There are currently over 700 operational PFI and PF2 deals, with a capital value of around £60 billion. Annual charges for these deals amounted to £10.3 billion in 2016-17. Even if no new deals are entered into, future charges which continue until the 2040s amount to £199 billion.\(^1\)

---

\(^1\) This is based on HM Treasury’s PFI and PF2 database which covers all the operational PFI and PF2 projects, in addition to all the projects in procurement, as at 31 March 2016. The 2017 dataset was due to be published by HM Treasury in December 2017, but this was not available at the time of publication.
Although we do not form a view on the value for money (VfM) of PFI and PF2 there are some key points which have emerged from our work which we would like to highlight:

- **PF2 is similar to PFI**
  The fundamentals of the financing structure and contract remain the same.

- **Increased transparency**
  Data on forecast and actual PF2 equity returns will be published for all PF2 deals. However this does not apply to other non-PF2 PPP deals, and data on the cost of debt is not published.

- **Budgetary and balance sheet incentives remain**
  As part of the PFI reform HM Treasury considered removing incentives, unrelated to VfM, which have driven the use of private finance but it chose not to. If capital and cash budgets are insufficient, private finance may be the only investment option for public bodies.

- **Lack of data on benefits**
  There is still a lack of data available on the benefits of private finance procurement.
Part One

Costs and benefits of private finance procurement

1.1 This part sets out the rationale, benefits and costs of the Private Finance Initiative (PFI).

Private finance for public sector projects

1.2 The Infrastructure and Projects Authority (IPA) has identified a need for more than £300 billion of investment in social and economic infrastructure in the five years to 2020-21. The government can pay for infrastructure in several ways. In the past, the majority of finance for infrastructure investment came from tax receipts and/or government borrowing, and the government still plans to spend 1.0% to 1.2% of gross domestic product (GDP) each year on economic infrastructure between 2020 and 2050. However, a significant proportion of the planned infrastructure will also be privately financed. One private financing route is a Public Private Partnership (PPP) such as PFI and PF2. There are over 700 PFI and PF2 projects in the UK. Over the last 20 years capital investment using PFI and PF2 has averaged around £3 billion a year – this is relatively small in comparison to publicly financed government capital investment which currently amounts to around £50 billion a year.

1.3 The fundamental difference between conventional public procurement and PFI procurement for capital investment relates to which party raises finance for the asset’s construction (Figure 1). In conventional procurement the private sector is still involved (private contractors build the asset) but the public sector provides the finance. When the public sector procures an asset using PFI, a private company – a Special Purpose Vehicle (SPV) – is formed and it raises finance from debt and equity investors to pay for construction. Once the asset is constructed and available for use the taxpayer makes ‘unitary charge’ payments to the SPV over the contract term, usually 25 to 30 years. This charge includes debt and interest repayments, shareholder dividends, asset maintenance, and in some cases other services like cleaning. These payments will be agreed at the start of the contract and some or all of them will be linked to inflation. All of these aspects remain in the PF2 model which replaced PFI in 2012 (see Part Three); the costs and benefits of PFI discussed in this section also apply to PF2.

Figure 1
Comparison between private finance and conventional procurement

### Conventional procurement

- **HM Treasury**
  - Raises funds through borrowing (issuing gilts) and taxation
  - Allocates capital budgets

- **Department**
  - The department will pay a large upfront payment to the construction contractor. The department is also likely to contract for other services, such as facilities management, once the asset is built.

- ** Contractors**

- **Capital project (e.g. school or hospital)**

### Privately financed procurement such as PFI

- **HM Treasury**
  - Debt (around 90% of capital investment)

- **Special Purpose Vehicle (SPV)**
  - Share capital and shareholder loans
  - Unitary charge

- **Department**
  - The department will pay a large upfront payment to the construction contractor. The department is also likely to contract for other services, such as facilities management, once the asset is built.

- **Contractors**

- **Capital project (e.g. school or hospital)**

- **Equity** – including shareholder loans (around 10% of investment)
  - Return to shareholders
  - Senior debt (bank loans or bonds)
  - Interest and debt repayment

- **The SPV will contract with construction and facilities management firms and other suppliers. It will use the private finance raised to pay for construction. The main construction contractor is likely to be an initial equity investor and other contractors and suppliers may be equity investors too.**

Source: National Audit Office analysis
1.4 HM Treasury made the introduction of PFI possible in 1989 when it retired the ‘Ryrie-Rules’ (which had discouraged public sector projects from being privately financed) and announced that it would allow additional privately financed investment in roads. In 1992, the use of PFI was extended to other sectors and the name ‘Private Finance Initiative’ was used for the first time. Other changes were later introduced to allow for PFI to be used within local bodies, for example the Department of Health and Social Care provides a Deed of Safeguard for PFI health deals which guarantees PFI payments.

Potential benefits of PFI

1.5 In general, HM Treasury discourages public bodies from borrowing privately, as the government can raise finance at a lower cost than the private sector. However, it makes an exception for PFI owing to the potential of PFI to provide efficiency gains in the delivery of a project. HM Treasury considers that the risk transfer to the private sector can result in benefits which can outweigh the higher financing costs. The potential for efficiencies and improved outcomes for the public sector under PFI include:

- **Certainty over construction costs**
  There is a strong incentive for the private sector to build assets to budget as it bears the risk of construction cost overruns.

- **Improved operational efficiency**
  As the SPV is responsible for operating the asset it has an incentive to consider how it can reduce long-term running costs at the outset.

- **Higher quality and well-maintained assets**
  PFI requires assets to be well maintained during the contract period. This could provide benefits for users of these assets and also lead to longer asset lives.

Some of the evidence on these benefits, and whether they could or have been replicated with other forms of procurement, is discussed below.
Construction costs

1.6 Our previous work found that project managers reported that PFI projects were delivered within budget more often than non-PFI projects. As part of this 2017 study we surveyed 11 government departments. Responses showed cost certainty was generally seen as a benefit of PFI (five of the eight departments that responded to this question considered that certainty over construction costs was better under PFI). Increased certainty about price does not necessarily mean that the cost the public sector pays for construction is lower: the Treasury Committee found that some PFI projects charge higher prices for construction to cover unforeseen costs. Prices can still increase in PFI projects, particularly before final terms are agreed at financial close. Our report on PFI in housing reported significant capital cost increases compared to initial estimates.

1.7 Some assets will be more complex than others to build – around two-thirds of all PFI projects are ‘accommodation’, for example schools, which are considered as having the lowest construction risk. In order to understand the impact of private finance procurement on construction costs it is important to compare similar projects. The Department for Education is currently collecting data and developing methodology and has, so far, found that the financing route has little or no effect on the construction costs of schools being built as part of the Priority School Building Programme (PSBP).

1.8 Some of these benefits can also be achieved without the use of a long-term private finance contract. The use of fixed-price contracts for publicly financed projects can be effective in reducing cost overruns. The risk of construction cost overruns could also be transferred using a shorter private finance contract that only covers the construction period but this option has never been pursued in the UK under PFI contracts.

---

7 Comptroller and Auditor General, PFI in Housing, Session 2010–11, HC 71, National Audit Office, June 2010, paragraph 2.4.
8 Comptroller and Auditor General, HM Treasury, The choice of finance for capital investment, National Audit Office, March 2015, paragraphs 1.10, 2.6 and 2.7.
9 See footnote 8, paragraph 1.10.
Operational efficiency

1.9 Our work on PFI hospitals found no evidence of operational efficiency: the costs of services in the samples we analysed were similar. Some of those data are more than 10 years old. More recent data from the NHS London Procurement Partnership shows that the cost of services, like cleaning, in London hospitals is higher under PFI contracts. The Department of Health and Social Care considers these costs may not be comparable owing to the risk transfer of the PFI contracts and the potential for differing cleaning standards between contracts. Departments who responded to our 2017 survey question considered that operational costs were either similar or higher under PFI (four departments provided a response to this question – three considered operational costs were higher under PFI and the other department considered they were the same).

1.10 The public sector could combine contracts for construction of an asset with other services such as long-term maintenance and cleaning. However it normally chooses not to do so and under PF2, services such as cleaning and catering will usually be excluded from the contract (paragraph 3.8).

Asset quality and maintenance

1.11 PFI contracts stipulate that buildings have to be maintained to a specified standard: part of the unitary charge covers asset maintenance. Our previous analysis has shown that the contractually agreed standards under PFI have resulted in higher maintenance spending in PFI hospitals. Public bodies have the ability to reduce maintenance spending in non-PFI assets, but this is much more difficult to do under a PFI contract. Respondents to our 2017 survey tended to consider that maintenance standards were higher under PFI.

1.12 Guaranteed maintenance standards and spending can be achieved without the use of private finance by entering into long-term maintenance contracts, or ring-fencing maintenance funds. However, this is not common practice and current pressures on public sector budgets are resulting in significant reductions in maintenance spending on non-PFI assets in some sectors. For example between 2014-15 and 2015-16, health trusts reported an increase in the critical infrastructure maintenance backlog of more than 50% to £2.3 billion. Less funding is available to address this maintenance backlog – in 2015-16 and 2016-17, HM Treasury allowed the NHS to move more than £1 billion of funding allocated for capital investment to pay for day-to-day spending.

---

11 See footnote 10.
12 Four of the Five departments that were able to respond considered maintenance standards were higher under PFI.
1.13 The IPA told us that one of the benefits of PFI was that if problems with a building emerge, for example due to poor initial construction work, this will be the responsibility of the private sector, not the public sector. It notes that problems in Edinburgh PFI schools and fire safety defects discovered in PFI hospitals were being resolved by the SPVs responsible for the building.

Private finance can be attractive to government in the short- to medium-term and may be public bodies’ only option for investment

1.14 Each year HM Treasury publishes data on every PFI and PF2 project, including the capital value and future unitary charges. However, most private finance debt is off-balance sheet for National Accounts purposes. This results in short-term incentives for the government and public bodies to use private finance procurement. This is because private finance:

- **Results in lower recorded levels of government debt and public spending in the short term**
  Unlike conventional procurement, debt raised to construct assets does not feature in government debt figures, and the capital investment is not recorded as public spending even though it is for the public sector.

- ** Allows public bodies to invest in capital projects when they do not have sufficient capital budgets**
  HM Treasury’s budgeting rules mean that most private finance deals do not score upfront against budgets: costs are spread out over time. Five of six departments that were able to answer our survey question said that their capital budgets would not have been sufficient to cover new investment had they not used PFI. PFI was also the only option for some capital investment projects undertaken by departments.

---

13 HM Treasury publishes data on all PFI and PF2 projects that have either reached financial close, are under construction or currently operational. The dataset includes information such as the date of financial close, the capital value of projects and the anticipated future unitary charge payments such as capital, interest and service costs, over the life of each project. The data are provided by government departments and updated on an annual basis. HM Treasury does not audit these data.

14 Most PFI debt is scored as off-balance sheet under the European system of accounts (ESA), which determines government debt levels. However, under the International Financial Reporting Standards (IFRS), used to produce departmental financial accounts and the Whole of Government Accounts, most PFI debt is on-balance sheet.
1.15 Private finance increases departments’ budget flexibility and spending power in the short term, as no upfront capital outlay is required. But departments face a long-term financial commitment – any additional investment will need to be paid back. For example, in the first 12 years of PFI use in the health sector, PFI resulted in extra capital investment for the Department of Health and Social Care (the Department) of around £0.9 billion each year on average: £0.5 billion a year more than the average annual spending of the Department on operational PFI projects over the same period. However, in recent years PFI has been used much less by the Department and the operational PFI contracts, which cost over £2 billion a year, have reduced the Department’s budget flexibility (Figure 2).15 Most government capital investment is publicly financed: HM Treasury provides the cash to public bodies and manages any debt or interest payments centrally. However, when private finance is used for investment, departments have to use their own cash budgets to repay debt and interest. HM Treasury told us that public bodies had to analyse and be satisfied that future costs were affordable over the life of a contract (25–30 years). However this may be a challenge for public bodies given that HM Treasury only provides certainty over their budgets to a maximum of five years in advance.

1.16 The Office for Budget Responsibility’s (OBR’s) July 2017 fiscal risks report cited the use of off-balance sheet vehicles like PFI as an example of a “fiscal illusion”. Most PFI debt finance raised to construct the asset is transparently reported to Parliament, where the debt is considered to be on-balance, via departmental financial statements and the Whole of Government Accounts (WGA).16 The debt is recorded as a financial liability but as noted by the OBR “most public and political attention, and the government’s fiscal rules, still concentrate on the National Accounts measures of PSND (Public Sector Net Debt) and PSNB (Public Sector Net Borrowing)”, which does not reflect fully PFI liabilities (see paragraph 1.14).17 PFI can be attractive to government as recorded levels of debt will be lower over the short to medium term (five years ahead) even if it costs significantly more over the full term of a 25–30 year contract.

---

15 There are many pressures on departmental budgets; however PFI deals are contractual commitments that are very difficult to reduce (see paragraphs 2.7–2.9).
16 Departmental financial statements are produced using the International Financial Reporting Standards (IFRS). These rules classify nearly all PFI/PPP assets as “on-balance sheet”, for financial accounting and reporting purposes. This is because assets and liabilities are recorded on the balance sheets of whichever entity is deemed to have effective control. Ongoing payments such as interest and the service charges are expensed as current spending as they are paid, therefore most of the £199 billion future unitary charge payments are not yet reported to Parliament in the financial statements. The Whole of Government Accounts (WGA)—a consolidation of all the audited accounts across the public sector—is also produced using IFRS. The IFRS rules differ to the rules used to produce departmental budgets and PSND (see Figure 18).
The Private Finance Initiative (PFI) increases budget flexibility in the short term but in the long term budgets are constrained by the annual PFI payments. As assets are built under PFI, departments benefit from capital investment outside of capital and cash budgets. Payments by the public sector are only made once the asset is operational. They increase as more assets are built and with inflation. Additional capital investment made possible through PFI.

Notes:
1. The additional annual capital investment has been estimated by taking the capital value of Department of Health and Social Care projects from HM Treasury’s PFI database and assuming the investment took place within around two years after the date of financial close.
2. The Department of Health became the Department of Health and Social Care in January 2018.

Source: HM Treasury PFI database; National Audit Office analysis.
There are additional costs and challenges associated with private finance procurement

1.17 Private finance procurement results in additional costs compared to publicly financed procurement, the most visible being the higher cost of finance. The 2010 National Infrastructure Plan estimated an indicative cost of capital for PFI as 2% to 3.75% above the cost of government gilts.\(^\text{18}\) Data collected by IPA on PFI and PF2 deals entered into since 2013 show that debt and equity investors are forecast to receive a return of between 2% and 4% above government borrowing.\(^\text{19}\) However, some 2013 deals, agreed when credit market conditions were poor, projected an annual return for debt and equity investors of over 8%; this was more than 5% higher than the cost of government borrowing at the time.\(^\text{20}\) Small changes to the cost of capital can have a significant impact on costs – as an illustration: paying off a debt of £100 million over 30 years with interest of 2% costs £34 million in interest; at 4% this more than doubles to £73 million (Figure 3).

**Figure 3**

Illustrative total cash cost of repaying a 30-year loan in equal annual instalments

Small changes to the cost of capital can have a significant impact on the cost of repaying a loan

<table>
<thead>
<tr>
<th>Total debt and interest repayment (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
</tr>
<tr>
<td>250</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing costs/project cost of capital (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td>Capital repayment</td>
</tr>
<tr>
<td>Source: National Audit Office analysis</td>
</tr>
</tbody>
</table>

---


\(^{19}\) These returns are the base case project IRR (Internal Rate of Return) after tax estimated at the time of financial close.

\(^{20}\) Four social housing PFI deals in 2013 recorded returns of more than 8% for debt and equity investors in the financial close forms provided to HM Treasury.
1.18 There are other areas where the private finance model can result in additional costs and also ways in which it differs to the approach HM Treasury would usually recommend. These include:

- **Insurance**
  HM Treasury recommends that the public sector self-insures as it considers the government is best placed to pool these risks but the PFI/PF2 model requires the SPV to take out buildings and business interruption insurance.

- **Cash management**
  The PFI structure means that SPVs hold surplus cash to meet the requirements of lenders. HM Treasury normally discourages holding any excess cash in commercial accounts. We estimate that they hold more than £4 billion collectively. Interest paid on these balances will be factored into the unitary charges paid by the public sector.

- **Costs of external advisers**
  The complex nature of private finance procurement means there is a greater need for both the public sector and potential bidders to use advisers.

- **Fees to lenders**
  Arrangement fees are typically about 1% of the amount lent but can be as high as 2%. In some cases fees are also paid to credit rating agencies.

- **SPV management and administration fees**
  With a PFI/PF2 deal, there are costs associated with the SPV, such as company management and production and auditing of accounts. These amount to around 1% to 2% of the total PFI payment.

1.19 The higher cost of finance, combined with these other costs, means that overall cash spending on PFI and PF2 projects is higher than publicly financed alternatives. The Department for Education has estimated the expected spend on PF2 schools compared with a public sector comparator (PSC). Our analysis of these data for one group of schools shows that PF2 costs are around forty per cent higher than the costs of a project financed by government borrowing (Figure 4 overleaf). The Treasury Committee undertook a similar analysis in 2011, which estimated the cost of a privately financed hospital to be 70% higher than the PSC.22

---

21 National Audit Office analysis of a sample of SPV companies.
22 See footnote 8.
Figure 4
Estimated cash flows of a privately and publicly financed project

The cumulative cash costs of a group of PF2 schools are around forty per cent higher than the costs of a project financed by government borrowing.

Cumulative cash costs (£000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PF2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Benefits needed to offset higher costs of private finance procurement

Notes
1. Cost estimates taken from data prepared by the Department for Education to compare costs of a group of privately financed (PF2) schools with a public sector comparator (PSC).
2. Interest costs for the PSC have been modelled using an amortising loan with an interest rate of 2.5%. The 30-year government borrowing costs were 2.5% at the time of financial close of this project and the average life of the project debt was less than 20 years.

Source: Education Funding Agency; National Audit Office analysis
Flexibility

1.20 In our 2017 survey departments reported that operational inflexibility was a drawback of PFI (five out of six departments able to provide an answer to our survey question considered operational flexibility worse under PFI). HM Treasury does not normally allow departments to enter contracts lasting longer than seven years; however, PFI contracts often last over 25 years. The PFI structure means that changes in contracts can be expensive with lenders and investors charging administrative and management fees. For example, additional capital works of approximately £60,000 in a local authority PFI school increased to over £100,000 once fees were factored in – the local authority challenged this and the SPV agreed to reduce some of the management and approval fees although bank fees of £20,000 will still have to be paid.

1.21 Department of Health and Social Care papers similarly highlight that some trusts with PFI facilities have to use alternative forms of procurement for capital variations. Government can also be locked into paying for services it no longer requires: for example, Liverpool City Council is paying around £4 million each year for Parklands High School which is now empty. Between 2017-18 and the contract end in 2027-28, it will pay an estimated £47 million, which includes interest, debt and facilities management payments, if no changes are made to the contract.23 The school cost an estimated £24 million to build.

1.22 Some of these problems have been taken into consideration for new PF2 deals. The PSBP PF2 deals include a variation mechanism that aims to reduce the cost and complexity of variations. New PSBP PF2 deals also include a partial termination mechanism to address the risk that schools will not be needed during the contract term – compensation paid to investors under partial termination would be at a slightly lower level than compensation paid in a full termination scenario.
Cost premium for risk transfer

1.23 One of the challenges of long-term PFI and PF2 contracts is the need to price costs far into the future. Lenders will want to ensure that future costs are not underestimated to ensure that they get their money back. The Department of Health, in a paper on PFI prepared for HM Treasury in 2012, noted that “there is an inbuilt incentive to price cautiously for lifecycle risk, requiring the build up of significant reserves. This may not necessarily result in optimum value for money for the public sector, although data illustrating out-turn costs for lifecycle is scarce”.24 It also reported that bidders were currently pricing the cost of insurance at a 20% premium to the market price in order to provide protection against future price rises.25 To mitigate this, HM Treasury introduced insurance gain-share arrangements in the standard PFI contract (paragraphs 2.12–2.13). There are also other risks, for example potential tax increases, that investors may factor into the prices they bid at the outset. These risks may not materialise and in some cases subsequent changes, such as reductions in corporation tax rates, have increased rather than reduced investor returns.26

Overall performance of PFI has not been quantified

1.24 HM Treasury has noted that the higher cost of private financing means that the economic case for the model rests on achieving cost savings in the construction or operation of the project; or through the delivery of a qualitatively superior project.27 For PFI to offer value for money (VfM), these benefits must exceed the higher financing and other additional costs (see Figure 4). Understanding and quantifying the level of benefits is therefore important. Although some of these benefits are estimated when departments enter into new PFI deals and assess the VfM of PFI compared to alternatives, HM Treasury has not collected any outturn data in order to quantify them. The IPA and HM Treasury told us that the lack of quantification of benefits is also a problem with other non-PFI projects.

1.25 The Committee of Public Accounts has previously highlighted the lack of data available to assess the actual efficiency of PFI.28 We have also reported that we have been unable to identify a robust evaluation of the actual performance of private finance at a project or programme level.29 This is still the case although the Department for Education is currently collecting data to make comparisons between privately and publicly financed schools and it told us that this will be a long-term exercise.

25 The Department of Health Private Finance Unit provided a paper to HM Treasury following the call for evidence on PFI in November 2011; however it was not published along with other submissions as it was not a formal submission of evidence.  
26 The UK corporation tax rate has fallen since 2007-08 (when it was 30%). In 2016-17 it was 20%.  
1.26 As well as assisting decision-makers examining the VfM of potential private finance projects, an improved understanding of the costs and benefits of PFI and PF2 could be used by the HM Treasury and the IPA to make improvements in the procurement and operation of assets, whether they are privately or publicly financed. In particular it would be useful to understand whether or not the maintenance standards guaranteed under PFI result in materially better assets which last longer and whether or not this could be replicated by ring-fencing maintenance funds, or entering into long-term maintenance contracts, for publicly financed assets.

The VfM assessment process favoured PFI

1.27 A robust VfM assessment is important for all public sector investment decisions. Any public body procuring an asset which will be privately financed has to compare the VfM of private finance against a public sector comparator (PSC). It has an incentive to show that private finance offers better value for money than the PSC as unless alternative capital funding is made available the project is unlikely to proceed. We previously concluded in our 2013 report Review of the VfM assessment process for PFI that these VfM assessments have features which favour and advantage PFI in comparison to a publicly financed approach. HM Treasury considers that these projects are rigorously tested to ensure that they are forecast to provide VfM. HM Treasury disagrees with the NAO’s criticisms of the VfM assessment process and a full explanation of its position can be found in our 2013 report.30

Cash flow timing and discount rate

1.28 To compare the costs of alternatives, it is important to consider the timing of payments. Future payments are discounted to a present value so that comparisons can be made. Private finance deals allow repayment of the upfront investment to be spread over time – future repayment of debt and interest are reduced through discounting. In our previous work we remodelled the VfM assessment to allow for the fact that the government can also issue debt and spread out repayments. Making this change resulted in a reduction in the costs of the public sector comparator. In the majority of cases this also meant the assessment outcome changed to show that the public finance option was best value.31

31 See footnote 30, paragraph 3.22, Figure 6.
1.29 Making changes to the discount rate applied to future costs can also affect which financing route is assessed as VfM. The VfM assessment compares private finance costs with a government discount rate of 3.5%, which is 6.09% with inflation, known as the Social Time Preference Rate (STPR), which is higher than government’s actual borrowing costs (Figure 5). The higher the rate applied, the lower the present value of future payments. For example a payment of £100 in 12 years will have a present value of just £49 when discounted by the STPR. Discounting using a lower discount rate, which compares private finance with the actual cost of government borrowing, results in fewer private finance deals being assessed as VfM.  

1.30 Using a fixed discount rate, set in 2003, means that the VfM assessment does not reflect the additional cost of private finance above the prevailing cost of government borrowing. In the current low-interest-rate environment it is possible to privately finance projects below the 6.09% rate. When this is the case private finance will be assessed as costing less than public finance even though the actual long-term cash costs of debt servicing and repayment will be higher than government debt costs. HM Treasury does not consider the cost of government borrowing to be relevant in making financing decisions on PFI and PF2 deals. However, other countries, such as Germany and the United States, do compare the cost of private finance with government borrowing costs when assessing financing options like PFI.

Other adjustments

1.31 We have criticised the use of adjustments in the VfM assessment model, such as “optimism bias” and “risk transfer”, that were not evidenced and increased the relative cost of the public sector comparator more than the private finance option. An important part of these adjustments relates to the benefits of transferring construction risk but there is little evidence that overall construction cost is lower under PFI (paragraphs 1.6–1.7). Another adjustment was for tax – we noted that the estimate of additional tax paid under PFI was significantly higher than the estimates of the total tax paid in other more accurate financial models. 

---

32 See footnote 30, paragraph 3.21, Figure 6.
33 See footnote 30, paragraphs 10 to 14.
34 See footnote 30, paragraphs 3.30 to 3.35, Figure 8.
Figure 5
Government cost of borrowing compared with the government discount rate

The government’s discount rate has been higher than the actual cost of borrowing for the last 19 years – higher discount rates result in more Private Finance Initiative (PFI) deals being assessed as better value for money than a public sector comparator.

**Notes**

1. The government cost of borrowing represents the yearly average cost of government borrowing using a generic 20-year government gilt. The yields are based on the last price per day during the day, averaged out per trading calendar year.
2. The real Social Time Preference Rate (STPR) of 3.5% has been adjusted to a nominal rate using GDP deflator at market prices.
3. Value-for-money quantitative models used by departments will often apply a long-term average inflation rate of 2.5% to the real STPR, resulting in a discount rate of 6.09%.
4. The real STPR was 6% prior to 2003 when it was lowered to 3.5%.

Source: National Audit Office analysis; Bloomberg; Office for National Statistics
Withdrawal of VfM assessment

1.32 In response to the Treasury’s Committee conclusion that there was a flawed VfM appraisal process, HM Treasury said it was reviewing the approach to VfM assessment and intended to publish revised guidance in 2012. It made a similar commitment to the Committee of Public Accounts. In December 2012, as part of the launch of PF2, HM Treasury formally withdrew the VfM assessment spreadsheet and guidance and promised to publish an updated version of both in 2013. In 2014 HM Treasury wrote to the Treasury Committee and explained that it would now not be publishing a new VfM spreadsheet but would be publishing the delayed guidance by the end of 2014. However HM Treasury did not do so. HM Treasury told us that it expects public bodies to use The Green Book: Appraisal and Evaluation in Central Government guidance for all investment decisions.

1.33 The Department for Education told us it was waiting for the new assessment model but when it did not emerge it had to develop its own model with the assistance of its financial adviser. The Department for Education’s model, which has been used to estimate the VfM of PF2, continues to use the government discount rate and make “risk transfer” adjustments as was the case in the withdrawn model. However the tax adjustment figure is now based on a more accurate and lower estimate of tax that investors will pay.

36 HM Treasury, Treasury Minutes: Government responses on the Seventy Fifth, the Seventy Seventh, the Seventy Ninth to the Eighty First and the Eighty Third to the Eighty Eighth Reports from the Committee of Public Accounts: Session 2010-12, Cm 8416, July 2012.
37 The Green Book is guidance published by HM Treasury for public bodies on how to appraise proposals before committing funds to a policy, programme or project.
Part Two

Impact of private finance procurement

2.1 This part examines the use of the Private Finance Initiative (PFI) and Private Finance 2 (PF2) and future payments for operational deals. It also provides information on making savings from existing PFI contracts.

The use of private finance procurement (PFI/PF2) has reduced

2.2 Since the PFI was introduced over 25 years ago, the public sector has used PFI and PF2 to build a large number of new assets, such as hospitals and schools. There are currently 716 PFI and PF2 projects either under construction or in operation, with a total capital value of £59.4 billion. In recent years, the government’s use of the PFI and PF2 models has slowed significantly, reducing from, on average, 55 deals each year in the five years to 2007-08 to only one in 2016-17 (Figure 6 overleaf). The total amount of investment in deals achieving financial close has similarly reduced – in the five years to 2007-08 it stood at an annual average of £5.5 billion; in the last two years it has averaged less than £0.5 billion, down from a peak of £9 billion in 2007-8.

2.3 A total of 7 out of the 11 departments we surveyed stated that the main reason for their reduced use of private finance in recent years was “concerns about cost efficiency and value for money”. The government’s decision in 2010 to remove PFI grants to local authorities and to halt the Building Schools for the Future programme, owing to high costs and long delays, also contributed to this reduction.

Departments have significant outstanding PFI commitments

2.4 Despite the reduced use of PFI and PF2 for new investment, the legacy of deals have a long-lasting impact. The public sector will still be making PFI unitary charge payments to private finance companies in the 2040s. Future payments for existing projects are forecast to total £199 billion from 2017-18 onwards – an average of £7.7 billion a year over the next 25 years (Figure 7 on page 25). In 2016-17, total payments amounted to £10.3 billion, of which 58% related to four departments (Health and Social Care; Defence; Education and Transport). These payments cover financing costs (debt and interest payments and a return to shareholders) and operational costs. Public bodies also have to pay for maintenance and operational costs of publicly financed buildings.

38 This is less than the original investment as some deals have been terminated, such as Transport for London PFI deals, and some contracts have ended.
39 Hansard HC, 5 July 2010, cols 47-49.
Figure 6
Capital value and the number of PFI deals over time

Private Finance Initiative (PFI) capital investment peaked in 2007/08 at £8.6 billion and has been on a downward trend since

<table>
<thead>
<tr>
<th>Year deal agreed</th>
<th>Capital value of new investments (£m)</th>
<th>Number of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-91</td>
<td>10,000 -</td>
<td>- 70</td>
</tr>
<tr>
<td>1991-92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992-93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993-94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994-95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995-96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996-97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997-98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998-99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999-00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000-01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001-02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004-05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005-06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006-07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007-08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016-17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes
1. These data do not include data for projects initially procured as PFI projects but which were terminated (e.g. TfL Metronet, Channel Tunnel Rail Link).
2. The Private Finance 2 (PF2) model was launched in 2012.

Source: HM Treasury’s 2016 PFI database; InfraDeals; National Audit Office analysis
Figure 7
PFI past and forecast unitary charge payments

Departments have outstanding Private Finance Initiative (PFI) commitments of £199 billion

Unitary charge payments (£m)

Source: HM Treasury database
2.5 The most recent figures available from HM Treasury show that the health sector has used PFI for more capital investment than any other department (£13 billion) (Figure 8). Health bodies made total unitary charge payments of £2 billion in 2016-17, 1.7% of the total cash budget for the Department of Health and Social Care. This figure masks a significant variation between health trusts—some have no PFI deals whereas those providers that do have PFI deals have unitary charges which vary between 5.6% and 20.1% of turnover.40

2.6 Data used in the Whole of Government Accounts (WGA) records that around half of current annual PFI charges relate to debt repayment and financing costs (interest and dividends). The balance is service charges—the costs of operating and maintaining the asset. The exact split of debt repayment, financing and service charges will vary over time, as debt is repaid, and from project to project.41 The service element of PFI payments increases each year in line with a retail price index (RPI) inflation measure.42 In the case of some health deals, the whole payment, not just the service charge, rises with inflation.43 Between 2000-01 and 2009-10 departmental budgets increased above RPI inflation. However, for the past seven years, overall departmental budgets have fallen in real-terms (Figure 9).

Figure 8
Use of PFI by departmental group

The Department of Health and Social Care has used the Private Finance Initiative (PFI) to generate £13 billion of capital investment—more than any other department

<table>
<thead>
<tr>
<th>Departmental group</th>
<th>Capital value of initial investment (£bn)</th>
<th>Number of projects</th>
<th>Unitary charge in 2016-17 (£bn)</th>
<th>Departmental cash budget in 2016-17 (£bn)</th>
<th>Unitary charge as a percentage of cash budget (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Social Care</td>
<td>13.0</td>
<td>127</td>
<td>2.0</td>
<td>120.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Defence</td>
<td>9.5</td>
<td>41</td>
<td>1.7</td>
<td>35.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Education</td>
<td>8.6</td>
<td>172</td>
<td>1.1</td>
<td>64.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Transport</td>
<td>7.8</td>
<td>61</td>
<td>1.2</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
<td>20.5</td>
<td>315</td>
<td>4.2</td>
<td>127.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>59.4</td>
<td>716</td>
<td>10.3</td>
<td>348.3</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Notes
1. Over half of the ‘transport’ PFI projects are not supported by funding from the Department for Transport (DfT), so comparisons with the DfT’s cash budget are not possible.
2. The figures represent data as at 31 March 2016 and do not reflect changes to PFI deals since this date.
3. Totals may not sum due to rounding.

Source: HM Treasury database

41 For example the majority of the charge for prison PFI deals, which include outsourcing of prison staff, relates to services. On the other hand the charges for PFI schools are primarily made up of debt and finance costs.
42 An RPI or RPIX (which exclude housing costs) index is used.
43 Some hospital PFI deals were financed with inflation linked debt so the financing element also increases with inflation.
Figure 9
Total annual government resource budget increase compared to RPI increases

Over the past seven years the total government resource budget has fallen in real terms

Annual percentage increase (%)

Financial year

Annual RPI increase ▢ Annual Resource Departmental Expenditure Limit (DEL) increase

Notes
1. The Retail Price Index (RPI) is a measure of inflation looking at the change in the cost of a representative sample of retail goods and services.
2. The government budget that is allocated to and spent by government departments is known as the Departmental Expenditure Limit (DEL). DEL is spent on running public services, such as schools and hospitals, and paying the everyday cost of resources such as staff.
3. RPI inflation was zero in 2009-10.

Source: National Audit Office analysis; HM Treasury’s Public Expenditure Statistical Analyses (PESA) data
PFI cost reductions are difficult to achieve

2.7 The government has sought to identify and deliver savings from operational PFI contracts. In July 2011, HM Treasury launched the Operational PFI Savings Programme aimed at delivering £1.5 billion of savings across operational PFI projects. By June 2013, departments had reported £1.6 billion of signed savings. Figure 10 shows the split of the different types of savings achieved. By the end of 2016, public bodies had provided information to HM Treasury reporting a further £1.6 billion of unaudited savings. We have not assessed the additional £1.6 billion of savings as part of this report.

2.8 Some of the identified savings do not actually reduce spending on PFI projects but instead provide other efficiencies, for example through more intensive use of PFI offices. We estimate that the total reduction in unitary charges achieved represents around one per cent of the future total charges for all deals.

2.9 PFI deal structures make it challenging to achieve savings. Rather than dealing directly with suppliers, savings initiatives must often be agreed with the SPV’s management and investors, and in some cases with debt providers. In older PFI contracts, there are sometimes insufficient information access rights, so the public body cannot access cost information unless the SPV owners provide it.

Figure 10
Split of £1.6 billion signed savings from operational PFI deals

34% of operational savings have been generated from terminating Private Finance Initiative (PFI) contracts

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Termination of contract</td>
<td>34%</td>
</tr>
<tr>
<td>Improved asset use</td>
<td>20%</td>
</tr>
<tr>
<td>Sale of surplus assets</td>
<td>14%</td>
</tr>
<tr>
<td>Change in scope</td>
<td>18%</td>
</tr>
<tr>
<td>Use of contract provisions</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note
1 Savings figures represent total signed savings identified by HM Treasury in 2013, of which 80% have been audited by the National Audit Office. The remaining £1.6 billion of signed savings, which have been identified between 2013 and 2016, are not included.

Source: National Audit Office analysis of HM Treasury’s operational savings data

2.10 Contracts have mechanisms which allow savings to be shared (such as the insurance and refinancing gain-share) and market testing and benchmarking provisions to ensure that the public sector is paying a fair price for services. However there is sometimes little incentive for investors to cooperate. Also SPV investors can be unresponsive and in the case of insurance savings some public bodies have told us that the SPVs are not complying with their contractual obligations to share savings.

2.11 Some of the ways that savings (which reduce cash costs) can be achieved, and associated challenges, are discussed below.

Insurance gain-share

2.12 SPVs pay for insurance and pass on the costs to the public sector through the unitary charge. These costs are estimated at the start of the project, which can last up to 30 years. PFI insurance costs have fallen over the last 15 years. This means that public bodies are paying more for insurance than the actual cost, providing a gain to SPV investors. Some PFI contracts include gain-share arrangements, whereby some of the insurance savings, or costs, are passed back to the public body. IPA told us that the introduction of the sharing mechanism was to incentivise PFI contractors to find the best value insurance. The level of savings shared with the taxpayer is dependent on a calculation made by an insurance broker.

2.13 A number of public bodies with PFI schools expressed concerns to us about insurance costs and the gain-share agreement (Figure 11 overleaf). In one case, the SPV eventually agreed to return over £100,000 of withheld insurance savings after being unable to provide evidence that part of the saving should be withheld. Although insurance brokers owe a duty of care to the public authority they are appointed and paid by the SPV creating the potential for a conflict of interest. Local Partnerships told us that the problem started with one particular insurance broker – HM Treasury and the IPA has spoken to this firm, but the practice continues. Insurance costs can be significant – in some legacy PFI school deals, insurance costs can be as high as 5% of the unitary charge. The Department for Education told us that in the new PF2 deals, insurance costs are closer to 1.3% of the unitary charge.

45 Insurance gain-share arrangements can be found in PFI deals signed after 2007 under version 4 of the Standardisation of PFI Contracts (SoPC).
Most contracts have value testing clauses (benchmarking and market testing) for some services, such as cleaning, to ensure the public sector is paying a fair price. However, this can cause costs to increase as well as decrease. We have previously reported that following value testing the cost of existing facilities management services tended to rise above inflation in PFI hospitals and schools – resulting in higher costs for the public sector. In all these cases the SPV had initially proposed even higher increases. The SPV provides the benchmarking data creating a potential for conflict of interest. Public bodies need to collect their own data to prevent price increases occurring without challenge – this can be difficult for public authorities with limited information on prices charged in other projects. Market testing (which involves re-procuring the services) can be a time-consuming and costly exercise for the public sector, and there is no guarantee that new bidders will emerge. There is no central management or monitoring of benchmarking and market testing.

**Figure 11**

Insurance costs in PFI deals

The government does not usually take out private insurance for its buildings as it considers that it is not generally good value for money (VfM) to do so. However private insurance is used in PFI projects – the financial structure means that buildings and business interruption insurance is required. The Project Agreement sets out the insurance requirements for the duration of the contract and a “base cost” (subject to annual inflation indexation) is agreed and incorporated into the unitary charge paid for by the public sector.

The base cost of insurance included in the unitary charge is in some cases significantly higher than the costs paid by the Special Purpose Vehicle (SPV). This is because SPVs cautiously price the cost of insurance prior to financial close (see paragraph 1.23) and also because the cost of PFI insurance has fallen significantly in real terms over the past 10–15 years – providing a gain for SPV investors.

Most PFI contracts signed since 2000 include an insurance gain share mechanism which allows the public sector to share part of the savings made by the SPV. The calculation is not straightforward and requires input from an insurance broker.

Concerns about PFI insurance were raised with us during our study:

- In many PFI schools the unitary charge includes an insurance cost which is several times higher than the actual cost of insurance.
- Some SPVs are unwilling to share any of the insurance savings that are contractually owed to local authorities and health trusts.
- Some insurance brokers are not complying with the requirements of the Project Agreement, by not providing justification to support deductions made through the sharing mechanism. This means that the SPV is retaining a significantly higher proportion of the sharing mechanism than the calculation within the Project Agreement would allow if properly applied. In many cases this has reduced the amount due to the local authority by six figure values.
- Incorrect calculations, provided by an insurance broker, which lowered the value of the gain to be shared with the local authority by nearly £20,000.

**Note**

1. The insurance gain-share mechanism also means that if the actual cost of insurance was significantly higher than the base cost the public sector would pay part of the additional insurance costs; however this has not yet happened as until now the base cost of insurance has been higher than the actual costs.

Source: Local Partnerships; information supplied by local authorities; National Audit Office analysis

**Benchmarking and market testing**

2.14 Most contracts have value testing clauses (benchmarking and market testing) for some services, such as cleaning, to ensure the public sector is paying a fair price. However, this can cause costs to increase as well as decrease. We have previously reported that following value testing the cost of existing facilities management services tended to rise above inflation in PFI hospitals and schools – resulting in higher costs for the public sector. In all these cases the SPV had initially proposed even higher increases. The SPV provides the benchmarking data creating a potential for conflict of interest. Public bodies need to collect their own data to prevent price increases occurring without challenge – this can be difficult for public authorities with limited information on prices charged in other projects. Market testing (which involves re-procuring the services) can be a time-consuming and costly exercise for the public sector, and there is no guarantee that new bidders will emerge. There is no central management or monitoring of benchmarking and market testing.

46 Comptroller and Auditor General, *Benchmarking and market testing the ongoing services component of PFI projects*, Session 2006-07, HC 453, National Audit Office, June 2007, Figure 15.
Refinancing gain-share

2.15 When projects become operational, or market conditions improve SPVs can refinance debt to reduce interest costs. Changes were made following recommendations by the Committee of Public Accounts to ensure that any gains made from refinancing were shared with the public sector. The decision to refinance rests with the SPV, not the public sector. There have been twelve projects so far that have reported savings to HM Treasury as a result of refinancing.

2.16 The M25 PFI deal was agreed in the wake of the financial crisis and so has high financing costs which are due to increase. While these increased financing costs will not affect the unitary charge that the public sector pays, there is a potential for savings for both the public sector and the SPV should lower financing costs be achieved through refinancing. Highways England stand to gain the majority of any refinancing savings achieved. In 2010, we estimated it could recover around £100 million through refinancing. However, the net amount of savings may be reduced due to the high cost of breaking interest rate swaps. The SPV has been exploring refinancing the deal since 2014; however, this has not yet happened, even though it could yield savings for taxpayers and the SPV. The SPV investors have the final say on whether a refinancing should go ahead, and so far commercial terms have not been agreed with the SPV.

Scope changes

2.17 Scope changes can provide cost reductions in PFI contracts but these also entail the public sector agreeing to a reduction in the type or standard of service provided. There is little incentive for an SPV to agree to these changes unless it improves its profit margin or return on investment. Nevertheless these types of changes can reduce cash costs. Queens Hospital Romford reduced its unitary charge by around two per cent through renegotiating service terms. This included reducing the number of hot meals provided each day from two to one. The Ministry of Defence also reported savings, which were achieved by reducing facilities management standards in some of its living and working accommodation.

48 The bank debt for the 2009 deal was priced at London Interbank Offered Rate (LIBOR) plus 250 bps (basis points – that is, 2.5% above LIBOR). This increased to LIBOR plus 300 bps in 2017, and is due to increase to LIBOR plus 350 bps in 2020.
49 The Highways Agency, which was replaced by Highways England in 2015, negotiated a 50–90% share of refinancing gains, depending on the size of the gain.
50 The estimated saving was based on market conditions in 2010. The level of savings are dependent on market conditions at the time the refinancing takes place.
51 Comptroller and Auditor General, Procurement of the M25 private finance contract, Session 2010-11, HC 566, National Audit Office, November 2010, paragraph 2.19.
Contract termination requires significant upfront funding

2.18 Most departments told us that they would be interested in buying out their PFI deals, but this requires upfront funding and is rare. PFI deals that were financed with bank debt use financial instruments called interest rate swaps. These replace a variable interest rate with one that fixes the interest rate for the life of the contract. Fixing interest rates provides cost certainty for public bodies as it means the unitary charge will not increase if interest rates increase. Most PFI deals were agreed before 2008 when interest rates were significantly higher than currently. As interest rates have fallen, these swaps have become ‘out of the money’ for the SPV, so any public body wishing to terminate a PFI deal would need to cover the cost of the swap breakage fee. Our analysis of the largest PFI deals shows swaps would cost more than £2 billion to break, on average an additional 23% on top of the outstanding debt of these deals. The SPV equity investors would also need to be bought out, and in most cases this would require a compensation payment (Figure 12).

2.19 Over 10 years ago, HM Treasury recognised the risk that interest rate swaps could make terminating PFI deals difficult. However, public bodies had little option but to agree to PFI contracts that used interest rate swaps. Public bodies and the PFI companies didn’t want to be exposed to interest rate movements. HM Treasury was not willing to provide protection against future interest rate movements.

2.20 Although terminating deals requires significant upfront funding it has been done in the past. For example, Transport for London (TfL) terminated three deals achieving reported savings of £476 million, which are some of the largest that have been recorded. These deals included break clauses that could be applied part way through the contracts and helped reduce the cost of the termination. Most PFI deals do not include these break clauses. In 2014 Northumbria Healthcare NHS Foundation Trust bought out a PFI hospital deal. IPA told us that they have significant doubts about the value for money of the Northumbria PFI termination. Both of these organisations have borrowing powers that government departments do not have.

52 A total of 9 out of 10 departments that provided a response to the question said they would be interested in buying out PFI deals if funding was available and it provided value for money in the long term.
53 Lower interest rates also mean that bond-financed deals would need to compensate bond holders at a premium to the outstanding value of the debt under the ‘Spens clause’. Also see National Audit Office, HM Treasury, The choice of finance for capital investment, March 2015.
54 As part of this study we reviewed SPV accounts (years ending December 2015 and March 2016) of the 75 largest PFI deals by capital value. These 75 SPVs represent approximately half of the capital value and half the unitary charge payments of all operational PFI deals. A total of 33 disclosed the use of interest rate swaps. These 33 projects had total outstanding debt of £10.0 billion and swaps that were £2.3 billion out of the money.
56 Comptroller and Auditor General, Savings from operational PFI contracts, Session 2012-13, HC 969, National Audit Office, November 2013, Figure 7 and paragraph 4.7.
Figure 12
Compensation on public sector termination of contract

The compensation calculations are complex and will vary from project to project

Upon public sector default or voluntary early termination, Private Finance Initiative (PFI) and Private Finance 2 (PF2) contracts provide detail of the compensation for investors. The standard contract form guidance used since 2004 requires compensation for:

Debt holders
- the amount of debt outstanding; plus
- the cost of terminating hedging arrangements (such as interest swaps) in the case of bank financed deals or in the case of bond financed deals a premium to allow investors to get a similar return from investing in another bond (known as the ‘Spens clause’).

Equity investors
The level of compensation to be paid to equity investors (including equity provided in the form of shareholder loans) will depend on the calculation chosen by the investors when the deal was initially agreed. This will be one of the following:
- the return expected at the start of the contract compared to actual return so far. If the investors have already achieved the return there will be no compensation required; or
- the expected return for the remaining part of the contract; or
- the market value of the equity and shareholder loans – assessed as if the contract was to continue to run.

Other considerations
Any cash held by the Special Purpose Vehicle (SPV) will be netted off these amounts.

If there are redundancy payments these will also need to be paid.

Arrangements may need to be made to replace services provided under the contract with new suppliers or in-house provision.

As the PFI structure relies on debt more than equity the cash amount required to pay off debt holders is likely to be higher than the amount required to buy the equity. Another option for the public sector wanting to gain full control of a project, but requiring less cash up-front, would be to buy the equity. The public sector could then decide to refinance the debt at a later date if appropriate. This would likely require negotiation with the equity holders as the investors would be under no obligation to sell.

Note
1 The compensation payments set out above are those included in the standard contract form guidance in issue since 2004 (SOPC 3). Earlier PFI deals may have different arrangements for compensation and contracts can depart from the standard form. It is therefore not possible to know the terms and conditions of compensation on termination unless the underlying contract is reviewed.

Source: PFIPF2 standard contract documents from 2004 onwards; National Audit Office analysis
Capability and expertise

2.21 Public bodies often do not have the in-house capability or expertise to effectively manage and identify savings from complex PFI contracts. The long-term nature of PFI contracts means that, in some cases, the officials who negotiated the deals have moved on, resulting in a loss of expertise – 85% of PFI payments in 2016-17 relate to procurement decisions made over 10 years ago and 42% relate to decisions made over 15 years ago. Also, because there are very few new PFI and PF2 deals in procurement, departmental private finance units, and the PPP teams located within HM Treasury and IPA are much smaller than they were in the past.

2.22 Our survey found that 8 out of 11 departments had engaged external consultants to help find savings. Some health trusts have used consultants who are paid a proportion of the savings ‘identified’, even though these savings are very difficult to deliver in practice. There is no centralised coordination of efforts to make savings – NHS trusts are free to engage with different consultancy firms for savings advice. This may reduce the chance that lessons can be learned and shared across the public sector. However the Department of Health and Social Care does run PFI forums for NHS trusts with input from PFI experts from the IPA. Local Partnerships, which is jointly owned by HM Treasury and the Local Government Association, has also worked with a number of public sector bodies seeking to make savings. Public bodies are not obliged to use Local Partnerships and also may not have resources available to pay for this service.
Part Three

Introduction of PF2

3.1 This part considers the government’s Private Finance Initiative (PFI) reform, and the introduction of Private Finance 2 (PF2).

Consultation on reform of PFI

3.2 The government’s concerns with PFI, which included the model being “too costly, inflexible and opaque”,57 prompted the Chancellor of the Exchequer and HM Treasury officials to consider ending its future use.58 However instead, in December 2011, HM Treasury launched a call for evidence regarding its reform. HM Treasury did not analyse the PFI model or collect any data to determine its cost and benefits. There was also no formal business case that set out the reasons why the model should be reformed. The factors that contributed to government’s decision to launch the call for evidence were outlined in ministerial submissions and included:

- **Higher private financing costs**
  In the aftermath of the 2008 financial crisis, the availability of long-term private finance from commercial banks reduced. Where it was available it was expensive, making PFI’s value-for-money (VfM) case more difficult to justify.

- **Continued criticism of the PFI model**
  PFI was criticised in the media and by Parliament including by the Committee of Public Accounts and the Treasury Committee, which both published reports in 2011.

- **Addressing uncertainty in the PFI market**
  In the 2010 Spending Review the coalition government reviewed investment decisions and cancelled some proposed PFI projects. While there was still investor interest in PFI projects, the lack of announced projects created market uncertainty between 2010 and 2011. Reforming the PFI model was seen as a way of addressing this uncertainty.

---

3.3 The objective of the PFI reform was to create a model which was less expensive, provided access to a wider range of financing sources, such as pension funds, allowed for greater flexibility, cheaper and accelerated procurement and greater financial transparency. The call for evidence ran from December 2011 to February 2012 and received 155 respondents ranging from industry representatives to local councils. The only government department to formally respond was the Department for Education; however, HM Treasury was unable to provide us with this evidence. The Department of Health did provide a paper to HM Treasury outlining its views on PFI which was not published.

3.4 In 2012, HM Treasury considered and rejected the option of bringing all historic PFI project debt onto the government’s balance sheet and including PFI investment in departmental capital budgets. HM Treasury papers note that the Chancellor was initially inclined to make this change. However, this option was eventually rejected, in part because of the perceived risk that the UK’s credit rating would be downgraded.59 The UK has been one of the most common users of off-balance sheet Public Private Partnerships (PPPs), such as PFI and PF2, across Europe. UK off-balance sheet PPPs represent 1.7% of GDP, the third-highest in Europe and the highest among the European economies in the G7 (Figure 13). HM Treasury wanted to ensure that PF2 continued to provide an off-balance sheet investment option.

Changes under PF2

3.5 In December 2012, 12 months after the consultation process had started, HM Treasury launched Private Finance 2 (PF2) as the successor to PFI. There have been a number of changes (Figure 14 on page 38), however the fundamental characteristics of PFI remain unchanged in the PF2 model: the private sector finances, builds and maintains an asset and the public sector pays an annual fee for 25 to 30 years. Before the launch of PF2 there had been four iterations to the standard PFI contract. The first PF2 projects which progressed were PF2 schools – the contract and project documents used for these deals are slightly altered versions of PFI documents, demonstrating the limited changes between PFI and PF2.

3.6 One of the key changes announced in HM Treasury’s PF2 launch document was not implemented. Higher levels of equity (20% to 25%) and lower levels of debt were originally planned in order to make PF2 debt lower risk, thereby encouraging investors such as pension funds to invest in PFI debt and reducing debt costs. As at September 2017, there were six PF2 projects – five education and one health. All of these projects are financed with equity levels in the region of 10% and debt in the region of 90% – the same financial structure as PFI deals. No pension funds or other new investors have invested in PF2 debt, although a number of pension funds bid in the debt funding competition for the Midland Metropolitan Hospital PF2 deal. HM Treasury and Infrastructure and Projects Authority (IPA) told us that the need for lower levels of debt became unnecessary as the lending market improved.

59 At the time of the PFI reform, the UK held the top credit rating from the major rating agencies (Moody’s, S&P and Fitch). However, in 2013 Moody’s and Fitch downgraded the UK and in 2016 so did S&P.
The UK has the third highest number of off-balance sheet PPP projects across Europe.1

Note
1 The following countries spend 0% of GDP on PPPs: Bulgaria, Czech Republic, Germany, France, Italy, Latvia, Lithuania, Luxembourg, Poland, Romania, Slovenia, Finland and Sweden.

Figure 14
Comparison between Private Finance Initiative (PFI), Private Finance 2 (PF2) as per the HM Treasury launch document and PF2 in its current form

<table>
<thead>
<tr>
<th>No or limited change</th>
<th>PFI</th>
<th>Original PF2</th>
<th>Current PF2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance structure</td>
<td>90% debt, 10% equity</td>
<td>75% debt, 25% equity</td>
<td>90% debt, 10% equity</td>
</tr>
<tr>
<td>Contract length</td>
<td>25 to 30 years</td>
<td>25 to 30 years</td>
<td>25 to 30 years</td>
</tr>
<tr>
<td>Budgetary treatment of PFI capital investment</td>
<td>Upfront capital costs not included in departmental budgets</td>
<td>Upfront capital costs not included in departmental budgets</td>
<td>Upfront capital costs not included in departmental budgets</td>
</tr>
<tr>
<td>Restrictions on equity returns or sales</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Soft services (such as cleaning and catering)</td>
<td>Included in early PFI deals but not in recent deals</td>
<td>Usually exclude (but option to include)</td>
<td>Usually exclude (but option to include)</td>
</tr>
<tr>
<td>Key changes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public sector equity</td>
<td>Not required</td>
<td>Required</td>
<td>Required</td>
</tr>
<tr>
<td>Publication of equity returns</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equity funding competitions</td>
<td>No</td>
<td>Encouraged/optional</td>
<td>Encouraged/optional</td>
</tr>
<tr>
<td>Public sector keeps risk of: Change in law, utilities costs, site contamination</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Limited tendering phase</td>
<td>No</td>
<td>18 months maximum</td>
<td>18 months maximum</td>
</tr>
<tr>
<td>Changes introduced/reversed to ensure PF2 remains an off-balance sheet vehicle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifecycle fund gain-share</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Refinancing gain-share</td>
<td>At least 50%</td>
<td>At least 50%</td>
<td>No more than 30%</td>
</tr>
</tbody>
</table>

Source: National Audit Office analysis of HM Treasury documents
3.7 Another change was the introduction of a control total in order to limit off-balance sheet commitments arising from PFI and PF2 deals. The control total covers all existing PFI and PF2 contracts sponsored by central government, and includes all payments made under these contracts, such as debt, interest and future service costs. The control total limits PFI/PF2 commitments to £70 billion, in nominal terms, across the five-year period from 2015-16. HM Treasury first reported on the progress against this target in Budget 2016. It reported that forecast cumulative PFI/PF2 spending from 2015-16 to 2019-20 was £51.7 billion, therefore leaving significant headroom for further investment. The Treasury Committee has previously been critical of this control total, reporting that it fails to remove the budgetary incentives to use PFI over conventional government procurement, at least until the £70 billion cap has been reached.

3.8 Some of the changes introduced in PF2 could be, and were, pursued under PFI and did not require any change to the contract. For example, PF2 usually removes services, such as cleaning and catering, from most new contracts in order to improve flexibility and reduce costs. However, many PFI deals already excluded soft services: only one of six NHS PFI schemes being procured in the period just before PF2’s launch included these services. Also the decision to limit the tendering process to 18 months, unless the Chief Secretary to the Treasury agrees otherwise, could have been implemented under PFI.

3.9 However there were some changes that required amendments to the standard contract. The most significant was the introduction of public sector equity and the requirement to publish more information on equity returns. This is outlined below.

**Increasing transparency over equity investor returns**

Public sector equity stake

3.10 Under the PF2 model, the government will take a minority equity stake in all deals – typically 10% of the equity. This should improve transparency, as the public sector will have a seat on the board. The IPA will manage this investment. This will require careful management as the public sector will be both an investor and a customer. In the past, some PFI school projects included a public sector equity stake; however, it is now required for all new deals. The government chose to sell its stake in these PFI school projects to raise funds, and the IPA told us there is no guarantee that PF2 equity stakes would not be sold in the future.
3.11 The equity stake allows the government to share in project risk and returns. However it is unclear why the public sector is willing to take on the risk of equity (which is most exposed to project performance) rather than the lower risk of debt. If there are any problems, equity holders will suffer before debt holders are affected. If the government is confident that it will receive a return from its equity investment this would imply that it believes the debt holders (who receive a premium on government gilts) have a very low-risk investment. The low-risk nature of the debt investment in PFI was noted in some of the responses HM Treasury received in the call for evidence for reform of PFI and is also reflected in the performance of PFI debt: we are not aware of any operational PFI deals where the debt holders have suffered loss once the asset is constructed and operating. In some countries such as France and Germany, the public sector often guarantees PPP project debt and cash flows post-construction. This can lead to a significant reduction in the overall cost of finance, and therefore savings for the taxpayer, but the public sector is exposed to a lower risk compared to holding equity during the construction phase. IPA told us that the public sector equity stake was not designed to reduce costs but was for the purposes of increased transparency.

Equity returns

3.12 In some PFI deals, equity investors have been able to generate high investment returns, particularly when equity was sold after construction. For example our analysis of a recent equity sale in the M25 PFI contract showed that, over an eight-year period, equity holders have realised returns of around thirty-one per cent a year (Figure 15). This high return on the sale is likely to be because the new investor is willing to have a lower return as the project is in a lower risk operational phase, but may also mean that the project is more profitable than originally forecast. High equity returns realised during a sale do not mean that the costs for the public sector have increased. However, there is risk that high equity returns may represent inefficiencies in the initial pricing of contracts, although the NAO has not specifically examined if this was the case under the M25 PFI deal. The Committee of Public Accounts has criticised the level of investor returns achieved on some projects and the NAO has previously concluded that inefficient pricing of equity has contributed to high returns. As part of the development of the new PF2 model HM Treasury considered several options to address concerns about the high level of equity returns. These included a cap on returns, introducing a restriction on the amount of equity that could be sold, and an equity gain-share mechanism. However, HM Treasury documents stated that these options were rejected as they could potentially reduce investor demand.

---

60 In France a mechanism called cession Dailly can be used to effectively guarantee up to 80% of project cash flows after construction. In Germany the Forfallierung mit Einredeverzicht can be used to guarantee some or all of the debt after construction.

61 Comptroller and Auditor General, Equity investment in privately financed projects, Session 2010-12, HC 1792, National Audit Office, February 2012
Figure 15
Case study: Equity sale of M25 project equity

In 2009 Highways England signed a 30-year private finance contract for widening two sections of the M25 motorway, and maintaining the entire 125 mile length of the road, including the Dartford Crossing. The project had a total capital investment value of around £1 billion.

The winning bidder was Connect Plus (M25) – it had four shareholders: Balfour Beatty and Skanska both had a 40% stake and Atkins and Egis both had a 10% stake.

At the start of the project the four shareholders invested a nominal amount for the share capital of the company and during construction phase provided shareholder loans which amounted to £200 million in total. The rest of the initial investment was provided in the form of bank loans.

Between 2009-10 and 2015-16 the shareholder loans had paid out total interest of £113 million and dividends (which started in 2013-14) of £44 million.

In 2016-17 two of the original investors, Skanska and Atkins, sold their investment amounting to 50% of the project, for £330 million.

Taking into account the timings of the cash flows we estimate an annual rate of return of around thirty-one per cent (including interest, dividends and sale proceeds) over the eight-year period from 2009-10 to 2016-17, on the investment of £100 million.

Highways England is forecast to pay the Connect Plus around £350 million a year on average from 2017-18 until 2039-40 (£8 billion in total). This will pay for ongoing operational and maintenance work, provide a return to shareholders and also repay the bank loans which currently amount to around £1 billion.

Note
1 Highways England are due to pay £8 billion (in nominal terms) cash between 2017-18 and 2039-40 according to the HM Treasury PFI database. This amounts to an average of £350 million per year over the same period. The cash figure for 2016-17 is £265 million.

Source: National Audit Office analysis; HM Treasury PFI database; Connect Plus (M25) financial accounts

3.13 Rather than limiting or trying to regulate equity returns HM Treasury chose instead to increase transparency over returns and also introduce equity funding competitions for one of the PF2 deals. PF2 contracts will require the private sector provider to make actual and forecast equity returns available for publication. Figure 16 overleaf gives data for the six PF2 projects. Under PF2, the government also plans to use a competition for part of the equity stake to reduce returns. The Midland Metropolitan Hospital is the only PF2 project to have used an equity funding competition so far. There were five bidders for a 40% equity stake. The expected return of 8.6%, bid for by the winning bidder, resulted in a reduction in the price of the project equity from 12% to 10%, reducing future costs for the taxpayer.62

62 The winning bidder for the 40% stake was Richardson’s. The government holds 10% of the equity and Carillion, the primary contractor, holds the other 50%.
Figure 16
Equity rates of return across PF2 projects

The North West Priority School Building Programme (PSBP) batch is expected to generate an equity rate of return of 12.4% — the highest of all the new PF2 deals

<table>
<thead>
<tr>
<th>PF2 project</th>
<th>Expected equity rate of return (%):</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSBP schools – South</td>
<td>10.3</td>
</tr>
<tr>
<td>PSBP schools – North East</td>
<td>12.0</td>
</tr>
<tr>
<td>PSBP schools – North West</td>
<td>12.4</td>
</tr>
<tr>
<td>PSBP schools – Midlands</td>
<td>11.7</td>
</tr>
<tr>
<td>PSBP schools – Yorkshire</td>
<td>11.2</td>
</tr>
<tr>
<td>Midland Metropolitan Hospital</td>
<td>10</td>
</tr>
</tbody>
</table>

Note
1. The rates of return for the PSBP schools do not include the equity included in the aggregator (Aggregator Vehicle PLC).

Source: National Audit Office analysis; HM Treasury equity returns data

3.14 While any reduction in the cost of equity provides savings for taxpayers, equity typically makes up just 10% of the financing structure. The other 90% is provided in the form of senior debt. It is therefore important to consider the debt costs in order to calculate the overall return to investors and costs for taxpayers. Information on debt costs and total return to investors is collected by the IPA but is not published. The projected return to investors (debt and equity) after tax for the six PF2 deals agreed so far is between 4.5% and 5% — approximately double the cost of government borrowing at the time these deals were agreed (Figure 17).

3.15 As debt interest is tax deductible, the high levels of debt in the PFI structure (including the use of shareholder loans for the majority of the equity investment) reduce corporation tax payments. New measures introduced in April 2017 will limit the ability of companies to use excessive interest payments to reduce taxable profits. However PPP deals, like PFI and PF2, will be able to elect to be exempt from some of these new rules although in any new deals interest on shareholder loans will not be a tax deductible expense.63

---

Figure 17
Expected rate of return to debt and equity investors of PF2 deals compared with government borrowing costs

The projected return to investors (debt and equity) after tax for the six new Private Finance 2 (PF2) projects is approximately double the cost of government borrowing at the time the deals were agreed.

Expected rate of return to debt and equity investors (%)

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jan 2015</td>
<td>4.94</td>
</tr>
<tr>
<td>1 Feb 2015</td>
<td>4.66</td>
</tr>
<tr>
<td>1 Mar 2015</td>
<td>4.94</td>
</tr>
<tr>
<td>1 Apr 2015</td>
<td>4.75</td>
</tr>
<tr>
<td>1 May 2015</td>
<td>4.72</td>
</tr>
<tr>
<td>1 Jun 2015</td>
<td>4.62</td>
</tr>
<tr>
<td>1 Jul 2015</td>
<td>4.72</td>
</tr>
<tr>
<td>1 Aug 2015</td>
<td>4.75</td>
</tr>
<tr>
<td>1 Sep 2015</td>
<td>4.94</td>
</tr>
<tr>
<td>1 Oct 2015</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Notes
1. The line represents 20-year government borrowing costs, which is a ‘risk free’ rate. The average life of the debt financing these projects is less than 20 years.
2. The PF2 project returns represent the forecast post tax Internal Rate of Return (IRR) in the base case model. The actual returns may differ depending on how the project performs.
3. The Priority School Building Programme (PSBP) will deliver 46 schools, in 5 batches, using PF2.

Source: Departmental financial close forms
Changes are being made to keep PF2 debt off-balance sheet

3.16 Most PFI projects are recorded as off-balance sheet in the National Accounts (Figure 18). This means that PFI debt does not appear in UK debt statistics and the investment does not count as an upfront cost in departmental capital budgets.

3.17 The PF2 schools used an aggregator (Aggregator Vehicle plc) to combine the financing requirements for all its batches of schools, comprising five PF2 projects, which enabled it to reduce transaction costs and access cheaper debt finance from the European Investment Bank (EIB) and Aviva. As the PF2 model was designed to be off-balance sheet under the National Accounts, the government had planned for the aggregator to be classified as an off-balance sheet finance vehicle. However in 2014-15, the Office for National Statistics (ONS) (following the introduction of ESA 2010) classified the PF2 schools aggregator as on-balance sheet – the debt was classified as government debt and the capital investment scored in education budgets. There are no plans to use the aggregator vehicle again. HM Treasury and IPA have told us that the balance sheet treatment of the aggregator was not a relevant consideration in their decision not to use it again.

Figure 18
Eurostat and ESA

What is Eurostat?
Eurostat is the statistical office of the European Union. Its main role is to process and publish comparable statistical information at European level.

European System of Accounts (ESA)
The UK is required to produce a set of National Accounts using the internationally agreed guidance and rules set out in the ESA. Under ESA 95 most PFI projects were considered to be off-balance sheet meaning related PFI debt does not appear in measures of UK government debt such as Public Sector Net Debt (PSND). HM Treasury also chooses to set budgets based on the National Accounts classification so any upfront investment provided under PFI does not feature in departmental capital budgets.

In June 2013, ESA 2010 was introduced, replacing the previous set of rules known as ESA 95. ESA 2010 introduced changes that made it more difficult for future Public Private Partnership (PPP) debt, like Private Finance Initiative (PFI) and Private Finance 2 (PF2), to be classified as off-balance sheet. The Office for National Statistics (ONS) – the UK’s independent producer of official statistics – implemented the ESA 2010 rules in 2014. Eurostat published new guidance in September 2016 clarifying the balance sheet treatment changes under ESA 2010 for PPPs.

International Financial Reporting Standards (IFRS)
The ESA differs to how departmental financial statements and the Whole of Government Accounts (WGA) are produced, which use a different set of accounting rules know as IFRS. These rules classify nearly all PPP projects as on-balance sheet.

Implications of leaving the European Union (EU)
Upon leaving the EU, the ONS may have more control over the statistical classification of PFI and PF2 contracts. Whether or not the UK will continue to adopt the Eurostat guidance will depend on negotiations as part of the exiting process.

Source: Eurostat; HM Treasury; National Audit Office analysis
New guidance on balance sheet treatment

3.18 In September 2016, following requests for clarification from UK government officials and other member states, Eurostat published new detailed guidance on how new rules, which made off-balance classification more difficult, should be applied to PPP deals like PFI and PF2. During the reform of PFI, HM Treasury had decided that PF2, like PFI, should remain as an off-balance sheet finance option for the public sector. HM Treasury is planning changes to the PF2 structure to ensure that future projects are recorded as off-balance sheet and excluded from headline debt statistics under the new rules, even though these changes may reduce VfM. The two main subsequent changes to the PF2 model to keep it as an off-balance sheet option are:

- **Reducing the refinancing gain-share**
  PF2 and PFI contracts include a gain-share mechanism, so that the public sector will share at least 50% of any gains made from refinancing debt and deals agreed since 2009 had a 70% share for gains above £3 million. However, under the new Eurostat rules, this increases the chance that the project debt will be recorded as government debt. HM Treasury subsequently changed the standard contract terms for PF2 projects to limit the amount that can be received under the gain-share mechanism to 33%. To mitigate the negative impact that this change could have on VfM, HM Treasury will remove provisions that allow poorly performing contracts to use refinancing to achieve the rate of return they expected at financial close.

- **Removing the lifecycle gain-share mechanism**
  A concern with PFI is that investors overestimate asset maintenance and equipment replacement needs over the project’s life, allowing surplus funds to build up, generating excessive profits (paragraph 1.23). The PF2 model planned to introduce a lifecycle gain-share mechanism so that any unused funds would be shared equally between the Special Purpose Vehicle (SPV) and the public sector. However, this would increase the chance that PF2 contracts would be classified as on-balance sheet. In response HM Treasury has now removed the lifecycle sharing provision from PF2 standard contracts.

HM Treasury acknowledges that these changes could have a moderate negative impact on VfM.
There has been only limited use of PF2

3.19 Since the launch of PF2 in 2012, only six PF2 projects have reached financial close. These are the Priority School Building Programme (PSBP), which will build 46 schools in five batches, and the Midland Metropolitan Hospital. The projects have capital values of £623 million and £297 million respectively. Several projects originally designated for PF2 financing did not proceed. For example, the delivery of additional accommodation to support the Ministry of Defence’s Future Force 2020 was a potential candidate for PF2. However, the Ministry of Defence later deemed it unsuitable for PF2. Similarly, the government initially intended to raise the £1.75 billion of financing for the PSBP using PF2, but this was later reduced to £623 million.

3.20 There remains a lack of clarity over the development of a new pipeline of projects suitable for PF2. In the Autumn Statement 2016, the government announced that a new pipeline would be developed and published but this has been delayed. There are currently no projects in procurement although in July 2017 Highways England published documents outlining plans to use PF2 to finance the £1.3 billion A303 Stonehenge tunnel and roads and the £1.5 billion approach roads to the Lower Thames Crossing.

The European Investment Bank has been involved in financing PF2 and other PPP deals

3.21 PFI and PF2 deals have benefited from European Investment Bank (EIB) financing, which is provided at a lower cost than commercial bank debt. Figure 19 shows that the EIB has provided £758 million of financing for 11 PFI and PF2 projects since 2013. As UK banks are still reluctant to provide long-term infrastructure financing, owing to tighter capital restrictions under the new Basel III requirements, UK privately financed infrastructure deals increasingly rely on investment from overseas banks such as the EIB. The impact that leaving the EU will have on UK access to the EIB financing is uncertain. HM Treasury and IPA have told us that they are actively considering this issue.

3.22 Delivering infrastructure investment using private finance is an important part of the government’s infrastructure plan. As well as using PF2 it also uses other forms of PPP. Over the last five years these other PPP deals have delivered more investment than PF2 (Figure 20 on page 48) and include, for example, local government waste deals, off-shore wind transmission infrastructure, university accommodation, and the Department for Transport’s purchase of rolling stock (accounting for over £6 billion of investment between 2012-13 and 2014-15). These deals, which also often access EIB financing, are similar in structure to PFI and PF2 and have long-term cost implications for taxpayers and consumers. There is less transparency about the costs of these wider PPP deals. HM Treasury used to collate and publish information on these deals but has not done so since 2010. Also, unlike new PF2 deals the expected and actual equity investor returns are not disclosed.

64 Basel III is a set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector.
Figure 19
European Investment Bank (EIB) financing in UK PFI and PF2 projects since 2013

Between 2013 and 2016 the EIB has provided nearly £800 million of financing for UK Private Finance Initiative (PFI) and Private Finance 2 (PF2) projects.

Capital value (£m)

Source: InfraDeals; HM Treasury’s PFI database
Figure 20
Total value of PFI, PF2 and other PPP investment since 2012

Since 2012 capital investment in other PPPs has been higher than the use of PFI and PF2

Capital value (£m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Finance Initiative (PFI)</th>
<th>Public Private Partnerships (PPP)</th>
<th>Private Finance 2 (PF2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-13</td>
<td>3,686</td>
<td>1,591</td>
<td>0</td>
</tr>
<tr>
<td>2013-14</td>
<td>1,472</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2014-15</td>
<td>358</td>
<td>307</td>
<td>439</td>
</tr>
<tr>
<td>2015-16</td>
<td>307</td>
<td>0</td>
<td>1,022</td>
</tr>
<tr>
<td>2016-17</td>
<td>0</td>
<td>129</td>
<td>341</td>
</tr>
</tbody>
</table>

Notes
1. Where the capital values of deals differ between HM Treasury’s PFI database and the InfraDeal database, the values in the HM Treasury database have been used.
2. The value of PPP deals represents total capital value, with some deals being part financed by the public sector in the form of a capital grant.

Source: National Audit Office analysis of InfraDeals and HM Treasury’s PFI database
Appendix One

Our evidence base

1  Our review of the use of PFI/PF2 was reached following an analysis of evidence collected between March and September 2017. Our main methods are outlined below:

Document review

2  We reviewed key documents including:
   •  HM Treasury’s PF2 launch document;
   •  the standard contracts for PFI projects; and
   •  policy documents and joint IPA and HM Treasury submissions to ministers seeking advice on the reform of the PFI model.

Interviews

3  We undertook semi-structured interviews with officials in IPA, HM Treasury, the Department for Education and the Department of Health.

4  We undertook semi-structured interviews with other PFI stakeholders including PFI investors, NHS Foundation Trusts and Local Partnerships.

Survey

5  We conducted a survey of 11 government departments which have more than one PFI deal. The survey covered the availability and analysis of PFI data, savings from operational PFI contracts and the introduction of the new PF2 model.

Quantitative analysis

6  We analysed data from HM Treasury’s PFI database, value-for-money (VfM) assessments, project financial models and financial close forms.

7  We examined the financial accounts of 75 of the largest SPV companies in order of capital value and a sample of the smaller companies for the year ending 31 March 2016 to estimate the cost of breaking interest rate swaps and the levels of cash held in the SPVs.
Appendix Two

Response under PF2 to concerns raised by Parliament

**Figure 21**
Response under PF2 to concerns with PFI expressed by the Committee of Public Accounts and Treasury Committee

<table>
<thead>
<tr>
<th>Parliamentary concerns</th>
<th>Changes made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of data to compare PFI with non-PFI projects</td>
<td>HM Treasury made no attempt to compare PFI with alternatives during the PFI reform process. However the Department for Education has commissioned work to compare PF2 with publicly financed schools.</td>
</tr>
<tr>
<td>Lack of data on equity returns</td>
<td>HM Treasury has committed to publishing expected and actual equity returns for all new PF2 deals. However, this does not include other PPP deals, such as rail rolling stock.</td>
</tr>
<tr>
<td>Flexibility – should consider unbundling service contract</td>
<td>Deals are now less likely to include soft services; however, this is not directly related to the introduction of PF2, and long-term maintenance contracts continue.</td>
</tr>
<tr>
<td>Encourage refinancing / make refinancing easier</td>
<td>Financing for deals is still agreed for whole term. The public sector cannot force refinancing, and most gains will flow to equity owners.</td>
</tr>
<tr>
<td>Encourage more sources of finance such as pension funds</td>
<td>One of the stated intentions of the PF2 model was to encourage a wider range of investors to provide debt for projects. This has not materialised partly because there are very few deals.</td>
</tr>
<tr>
<td>Make savings from legacy projects</td>
<td>The nature of PFI contracts means that savings are very difficult to make. There is no incentive for providers to find/share savings. There is significant interest from public authorities in making savings but little central coordination.</td>
</tr>
<tr>
<td>Flawed value-for-money assessment</td>
<td>The value-for-money assessment tool was withdrawn but new guidance has still not been published.</td>
</tr>
<tr>
<td>Accounting and budgetary incentives driving PFI use</td>
<td>Budgetary and accounting incentives persist.</td>
</tr>
</tbody>
</table>

This report has been printed on Evolution Digital Satin and contains material sourced from responsibly managed and sustainable forests certified in accordance with the FSC (Forest Stewardship Council).

The wood pulp is totally recyclable and acid-free. Our printers also have full ISO 14001 environmental accreditation, which ensures that they have effective procedures in place to manage waste and practices that may affect the environment.