

Performance of PFI

1996 - 2010: lessons learned

May 2012



Series introduction

This series of papers will examine how the UK can secure much needed investment in its social and economic infrastructure in the coming years.

Achieving this is important. Infrastructure has been highlighted as a primary driver for economic growth, as well as a means to deliver the UK's goal of a hi-tech, low carbon and globally competitive economy. However, the UK is acknowledged to have both a shortfall in quantity (estimated by some at £434 billion) and quality (the UK was recently ranked 28 for the overall standard of its infrastructure by the World Economic Forum), hampering efforts to achieve these goals.

The timing of this series is also important in relation to proposed solutions to the UK's infrastructure challenges. At the UK level, the National Infrastructure Plan is moving from its formative stage to delivery. Infrastructure solutions in the Devolved Nations are also taking shape, with examples, such as the formative Welsh Infrastructure Investment Plan being developed.

Developing sustainable models and sources of funding and financing for these proposed solutions, -especially in tough economic times with a restricted public purse- will require new thinking. Helping to identify these new models and sources of funding and financing and removing the blocks and challenges to them is the aim of this ACE investment into infrastructure series.

This series of papers will explore a range of options available to government as it looks to secure investment and raise the UK's standing for infrastructure standards. These include the development of the Green Investment Bank, the potential for pension fund investment, new public-private finance models and alternative methods.

Abstract

This paper is the first of a new series of infrastructure financing papers from ACE. It looks at 15 years of Private Finance Initiative experience in the UK. The paper establishes the lessons learnt, both positive and negative, that must inform new thinking on project financing if the public and private sectors, and most importantly the taxpayer, is to get the best possible value for money.

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Key findings

Reviewing the PFI model

- PFI's lack of public trust demonstrates that there needs to be a clear and transparent link between capital liabilities, operational liabilities and the expected rates of return for private companies within financing public projects.
- Within the review of the PFI procurement model Government must look to retain the benefits that a successfully procured PFI project can deliver as it develops new financing models.
- The focus of the debate must be to develop a successful public-private model moving forward, ensuring efficient investment in the UK's long term economic growth.

The effect of the recession and financial crisis

- The financial crisis and recession have had a significant effect on the financial sector. Lending has been constrained, confidence between banks, consumers and business has been shaken.
- There have been significant changes in the cost of capital; the cost of government borrowing; the difference between the two; the private sector's ability to raise funds; and attitudes to risk. These factors call into question the assumptions within the PFI model, resulting in a weaker less sustainable case for its usage.
- New issuance in a range of primary debt markets, global issuance of leveraged loans and issuance of high-yield corporate debt have all undergone a challenging year in 2011. This means it has been harder for companies to raise funding.
- The financial crisis has changed attitudes to risk, with companies moving towards cash rich positions, paying off debt and re-enforcing balance sheets. This has fed through into the PFI model, with fewer companies able to take on the risks, and raise the finances required to make projects successful.
- A continuing aversion to risk will impact on the long term growth and investment potential of projects in the UK from the private sector. However, it is important to recognise that attitudes to risk are also aligned with the pricing of finance. For example, the recent decision of RWE and EON to abandon their UK nuclear build programme shows how difficult it is to raise finance given uncertainty with regards to risks, earnings and policy.

Scale of PFI

- If all capital liabilities relating to PFI contracts were included into national debt, the OBR found that as of March 2010, these additional elements totalled a little under £35bn, or around 2.5 per cent of GDP. This implies that the private financing for public projects is sustainable as it forms a small part of the UK's overall GDP.
- The widening of the differential in cost between private and public financing (highlighted by poor lending to business and low levels of confidence) is important. As this gap widens the number of projects that qualify as representing value for money will fall unless projects can demonstrate additional savings (such as lower operating costs and greater efficiency) that offset the increased cost of financing.
- Interestingly, a simple analysis of PFI since 1996 suggests that PFI has continued to improve in terms of the price government pays in relation to the capital expenditure spent.
- Setting aside any detailed analysis, it does not seem to be the case that the current levels of PFI liabilities are in excess of what the UK could afford given PFI as a delivery method. This indicates that any new finance model should be capable of sustaining that level of investment.

Key numbers

Performance comparison over fixed time periods; efficiency gains have been made

- A comparison of the first five year period (1996-2000) of PFI procurement to the period 2001-2005 shows there was an improvement in the relative performance of PFI projects. There was a decrease from £1 of private capital resulting in £7.5 of unitary payments, to £1 of private capital costing £4.03 in unitary payments.
- A comparison between the period 2001-2005 and 2006-2010 we find that this probable efficiency gain has deteriorated, from £1 of private capital resulting in £4.03 of unitary payments, to £1 of private capital costing £5.43 in unitary payments over the life of the PFI project.
- The simple ratio analysis again shows a slight change in the range of the results. However, this analysis also suggests that PFI has continued to improve in terms of price government pays in relation to the capital expenditure spent, thus showing that the government has continued to improve PFI in terms of its value for money over the entire period.

Government department performance; is varied but as the number of projects delivered increases there does appear to be efficiency gains

- There is a significant degree of variation between the performances of government departments.
- Linear analysis shows that departments vary significantly with the Department of Communities and Local Government achieving £1 capital investment for £2.69 in unitary payments over the life of the project, whereas the Ministry of Justice saw £1 capital to £11.53 paid in unitary payments.
- When using a more simplistic average ratio of capital to unitary payments comparison the relationship between the capital expenditure and unitary payments varies more significantly than in the linear model. The average ratio varies from £1 capital investment resulting in £3.43 of unitary payments, to £1 capital being invested for £23.10 in payments.

PFI capital investment performance by scale; is consistent despite project size

- Linear analysis of projects by size of capital expenditure for all projects, (below £500m, £250m, £100m and £50m) reveals that for every £1 the private sector invest in capital government would expect to pay between £5.13 and £5.47 in unitary payments (a single annual or monthly charge for the services it receives under the contract).
- Overall the results of this study suggest that across the different capital bands the model for PFI is robust given that it delivers similar results across all expenditure ranges from projects of a capital investment value of below £50m to those in excess of £500m.

The history of PFI

The history and operation of PFI

The formulation of the private finance initiative delivery model began back in 1992, with the aim of accessing private funding, and creating closer partnerships between the public and private sectors.

The concept of PFI was relatively simple. As long as the public sector could achieve sufficient risk transfer and efficiencies as a result of transferring the project to the private sector, this would offset the higher costs of capital. This would also transfer construction risk, and encourage whole life costing given that it would affect the return the private sector makes.

Under this model of PFI private investors would receive returns on their investment by:

- Putting in place a charge for the service to consumers
- A combination of private and public funds (such as charges, loans etc.)
- The sale of the service back to the public sector, over a defined period with contractual agreements for performance.

This is channelled through a Special Purpose Vehicle, as is described below:

- “In a typical PFI project, the private sector party is constituted as a Special Purpose Vehicle (SPV), which manages and finances the design, build and operation of a new facility. The financing of the initial capital investment (i.e. the capital required to pay transaction costs, buy land and build the infrastructure) is provided by a combination of share capital and loan stock from the owners of the SPV, together with senior debt from banks or bond-holders.”

Exploring the evolution of PFI since 1992

Generally it can be seen that in the period following the introduction of PFI, reports generally commented on methods of improvement to the PFI model. These include data on PFI projects being kept in one location; standardisation of the value for money (VfM) assessment model; and the formation of specific groups and committees within government to ensure that the PFI model was run efficiently to help deliver the optimal VfM.

Prior to the review in 1997 views were mixed with some claiming that PFI provided value for money whilst others outlined that the benefits could be attained under traditional procurement with a lower cost of capital.

The recession and financial crisis have further influenced opinion on PFI with recent papers questioning the VfM of PFI.

This has been a result of a growing difference between the rate at which government can borrow verses that of the private sector on the open market.

- For example, the Workplace 2010 scheme in Northern Ireland aimed to have a number of buildings taken into private ownership, refurbished and rented by the public sector. This has had to be abandoned after difficulties with reduced property values and the availability of private finance.

Issues such as the long term affordability and manner in which investments are recorded have been raised. Should procuring under a PFI scheme be included in the calculation of national debt?

It is a liability. However, the government has not had to borrow to fund the capital investment and given that the project is financed out of operational expenditure, if the situation were to occur where outgoings were in excess of income it would be recorded as public borrowing.

The advantages and disadvantages of PFI as a procurement model:

Advantages

- PFI projects have enabled the government to allocate the risks associated with them to the party that is most suitable and able to manage and therefore efficiently cost their implications. This should improve the overall efficiency of projects and allow for greater certainty for all parties involved.
- PFI has allowed risks such as construction risk that are difficult to manage to be transferred to the private sector. To date PFI as a model has had success in addressing construction risk.

For example, the National Audit office found in their 2008 survey that 94% of projects had been delivered on, with less than five per cent over, price. Demonstrating that the private sector was managing this risk effectively.

- There is encouragement for projects to be delivered on time and on budget given the fixed sums and the private finance sector's payment occurring on delivery of projects.
- PFI has provided another means of project finance and delivery in addition to the government's traditional means of finance.
- The involvement of private finance should encourage the use of best practices within the private sector with regards to risk assessment processes and due diligence.
- PFI should encourage whole life costing, given it reduces the costs of operation and so improves the profits that can be made. This should in turn create a conducive environment for innovation, sustainability, and productivity.

For example, the installation of solar cells, low energy appliances, heat pumps, use of thermally efficient materials etc. The greater the incidence of the maintenance costs the larger the incentive to ensure maintenance costs are efficient, as it directly affects the return of the SPV.

- PFI outlines the standard of service required, and a failure to meet the standard set results in penalties for the private parties involved. This should reduce the volatility that has traditionally occurred in maintenance spending when linked to public and political spending patterns.

For example, poor performance penalties were imposed in the National Insurance Recording System contract extension (NIRS2).

- PFI requires the public sector to specify in detail service requirements. This should make the private sector more critically analyse its provision and performance requirements.

- PFI contracts can encourage long term thinking, encouraging staff training. They can also encourage the development of asset management plans creating a proactive rather than reactive environment for activities such as maintenance.

For example, the widening of the M25 has seen materials maintenance and expertise considered. The decision not to paint retaining barriers has saved money and reduces maintenance significantly. Staff have been trained and the project run in phases that ensure that staff that have gained experience as the project progresses are employed in subsequent stages improving delivery.

Disadvantages

- There is a higher cost of finance, given that the government should be able to borrow at a lower rate. The differential between these rates has also significantly increased given the credit crisis.

For example, government can borrow between 2-3% compared to approximately 8% for the private sector.

There have been difficulties in raising finance recently given this cost. For example, the PFI for Greater Manchester Waste was signed only after HM Treasury stepped in with a £120m loan to complete the deal.

- The demise of the insurance model in the UK has left its PFI model with poorer credit ratings than those of other countries such as Canada, where trust in government and its backing resulted in higher ratings without the need for insurance backing.

For example, in Canada the Abbotsford Regional Hospital & Cancer Centre, has an A category rating. This provides investors with confidence.

- The private sector's motives differ from that of the public sector and so the emphasis may be placed on the delivery of the project rather than long term value for money or wider social benefits.

For example, a number of health trusts such as North Cumbria University Hospitals Trust are considering bringing PFI projects back into public ownership as their annual payments for hospitals funded under PFI weigh on their budgets.

- PFI in itself requires contracts to contain a degree of certainty, reducing the level of flexibility. As such the public sector is tied into terms and conditions for a considerable length of time. This is typically much longer than political or most typical investment cycles. This therefore also increases the period over which a risk such as political uncertainty can occur.

For example, demand uncertainty in the Royal Armouries Museum PFI project resulted in the public sector having to take over the demand risk.

Similarly, the cancellation of the Building Schools for the Future programme has resulted in a loss of confidence by investors and companies.

Another example is that of the political reaction to the nuclear incident in Japan. Whilst not currently being viewed as a PFI type model it has resulted in a loss of investor confidence in the sector. What if the same loss of confidence were to happen in the wind sector?

- It is important to remember that the public sector is paying for risk transfer, and so where inefficiently managed, would be much more effective to undertake the investment directly.

For example, the private/public partnership that was put in place to complete the national NHS computer system encountered difficulties because the private sector was unable to manage the significant risks which were unable to be specified given the complexity of such a project.

- The formation of special purchase vehicles and the changes of ownership that take place make it difficult to calculate where the incidence of risk actually falls within the PFI model.
- There is concern over where the ultimate risk falls, would the public sector actually let a PFI hospital fail? Had this risk truly been transferred?
- The public sector has not always ensured that it shares in the benefits of PFI when they perform above expectations.

For example, when refinancing, some investors have been able to secure returns far greater than those that were expected at the signing of the contract. It was only recently that a sharing provision was added to the PFI contract to counter this.

- PFI can be very complex given the time period and factors involved in a contract.
- The cost of procurement within the PFI process is greater than that of traditional procurement. This can limit competition as smaller companies are unlikely to be able to absorb the costs of bidding.
- If the public sector were to terminate a contract the costs of doing so are significant in scale.

PFI in the national accounts

The treatment of PFI

So how should PFI or future models for private finance be treated in the national accounts and are the current projections for spending sustainable?

The Office of Budget Responsibility (OBR) was created in 2010 by the Government to provide “independent and authoritative analysis of the UK’s public finances²”.

As part of this role the OBR is required to produce an annual analysis of the sustainability of the UK’s public sector finances.

The first report was released in July 2011 entitled “Fiscal sustainability report³”. As part of this report, the OBR looks at the sustainability of the commitments made by government under the PFI procurement mechanism.

Within the OBR report a very important aspect of PFI is explored, given concerns as to how its reporting occurs with regards to PFI reporting on balance sheet, vs off balance sheet, and its subsequent effect on the public sector finances.

The treatment of PFI within the national accounts is mentioned as follows:

- “In the National Accounts, an asset relating to a PFI contract must be on either the public sector balance sheet or the private sector balance sheet, but not on both. The treatment is determined by the ONS, based on where significant risks of the project are perceived to lie.”

As such two situations arise with regards to how PFI projects are treated. The first relates to the asset remaining on the private firm’s books.

- “When the asset remains on the private firm’s books, the transaction is treated in the public finances as if it was a long-term rental contract (an ‘operating lease’). Payments are included in the public finances when they materialise, increasing current spending, lowering the current budget balance and pushing up net borrowing and net debt.”

The second looks at the converse situation where the asset resides on the public sectors balance sheet.

- “Where the asset resides on the public sector balance sheet, the transaction is equivalent to the purchase of the asset, matched by a deferred payment (a ‘finance lease’). Capital costs are recognised upfront, through an increase in investment spending and therefore net borrowing. Although the full capital sum is not exchanged, public sector net debt, which is typically considered a cash-only measure, is raised by the present value of outstanding future capital payments. Over time, capital repayments reduce this liability and hence its impact on net debt. Interest and service charges are expensed as current spending as they are paid. In addition, as the asset is on the balance sheet, a depreciation charge is also made. This increases current spending but has no impact on either net borrowing or net debt.”

Given the above, the OBR document asks what would be the effect if all PFI projects were brought onto the balance sheet?

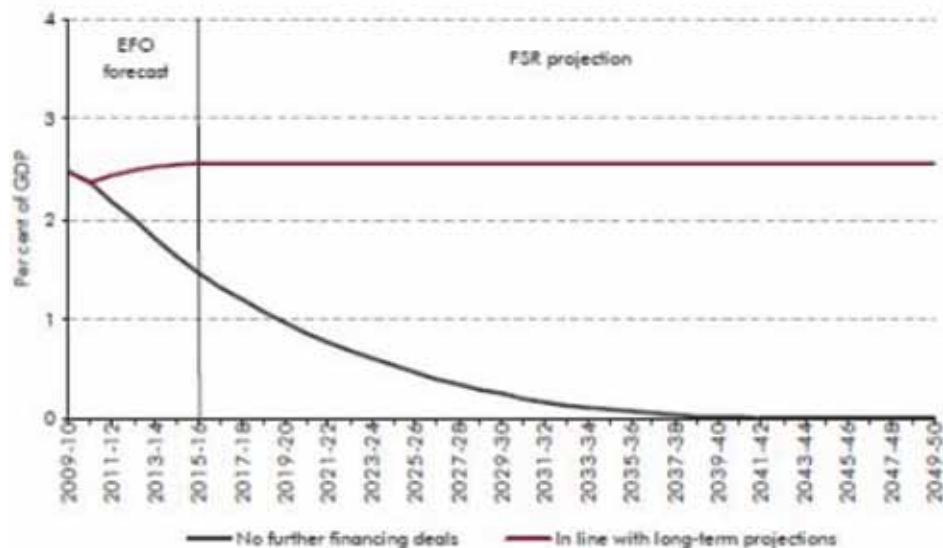
When looking more specifically at the liabilities from PFIs the report states that if no further PFI deals were signed, payment would peak over the current Spending review, after which they would remain consistent for ten years before falling over the longer term.

Setting aside any detailed analysis, this situation does not seem to suggest that the current levels of PFI liabilities are in excess of what the UK could afford, given PFI as a procurement method. So similar levels may be expected when new models for private financing are put in place.

- “These payments constitute less than 3 per cent of resource DEL [Departmental Expenditure Limits] over the Spending Review period. Our central long term projections assume that these expenditures will remain constant as a share of GDP from 2015-16, and that they will continue to be met within spending envelopes.”

The OBR document illustrates the impact on the UK’s net debt projections (chart below) if all capital liabilities relating to PFI contracts were included. It states that as of March 2010, these additional elements totalled a little under £35bn, or around 2.5 per cent of GDP.

There are two profiles. The first assumes that no further PFI contracts are signed, so the direct impact on net debt falls towards zero. The second assumes expenditure as a constant percentage of GDP, which would increase net debt by this amount (2.5%) each year. The rationale behind this second assumption is that it is consistent with a policy which continues to sign PFI contracts where it is possible to attain value for money.



Source: OBR

So is this level of private finance sustainable given the projections?

The OBR’s analysis above shows that UK net debt would increase if all PFI liabilities were brought onto its balance sheet. These liabilities equate to 2.5% of GDP and assuming no new projects were approved the effect of these projects on debt would decline over time.

There is no doubt that it is important that government monitors its off balance sheet commitments, ensuring that they don't result in a future funding crisis.

This is especially important given the current debt crisis that is being observed in a number of countries such as Greece and Portugal and the potential attractiveness of PFI as a means of masking longer term public sector commitments.

The OBR document is a move in the right direction in helping to ensure fiscal stability. However, there can easily be confusion as to the actual scale of the public sector's PFI commitments that must be addressed when considering new models moving forward.

PFI's lack of public trust demonstrates that there needs to be a clear and transparent link between capital liabilities, operational liabilities and the expected rates of return for private companies when financing public projects.

Why review PFI now?

Recent reports have called into question the PFI model as a method of procurement. In December 2011, HM Treasury launched a call for evidence on the 'Reform of the Private Finance Initiative.'⁴ The consultation outlined that:

- “Central to the development of new delivery models are the objectives of achieving long term value for money for the taxpayer, making more effective use of private sector innovation and skills, reducing costs, improving flexibility and increasing transparency.

More specifically, within the review of the PFI procurement model the Government is looking to retain the benefits that a successfully procured PFI project can deliver. These include aspects such as:

- Projects being delivered on time and within budget and the management of construction risk.
- The transfer of risk from the public to the private sector.
- Encouraging innovation and whole life costing.

With this in mind the government would like a model that:

- “Is less expensive, and that uses private sector innovation to deliver services more cost effectively.”
- “Can access a wider range of financing sources, including encouraging a stronger role to be played by pension fund investment.”
- “Strikes a better balance between risk and reward to the private sector.”
- “Has greater flexibility to accommodate changing public service needs over time.”
- “Maintains the incentive on the private sector to deliver capital projects to time and to budget and to take performance risk on the delivery of services.”
- “Delivers an accelerated and cheaper procurement process.”
- “Gives greater financial transparency at all levels of the project so that the public sector is confident that it is getting what it paid for, and that the taxpayer is sure it is getting a fair deal now and over the longer term.”

This consultation contained 44 questions to which government was seeking feedback from industry on the subject of PFI procurement efficiency. A copy of the consultation questions can be found in appendix D.

The consultation begins by asking a key question as to whether respondents think that the private sector has a role to play in the future delivery of public sector assets?

- The private sector will have a role to play in the future of infrastructure delivery. PFI has proven that there can be significant benefits in allowing the private sector to manage construction risk, to aid the timely and effective delivery of construction projects.

- The scale and long term sustainability of using private finance to deliver infrastructure projects is key to maintaining market confidence. Currently PFI has resulted in an excess of £50bn worth of projects being signed. However this is still small in comparison to total government capital spending (which according to the 2011 budget is estimated to be £53.7bn in 2011-12 period). In addition this sum is also small in terms of the UK's infrastructure investment challenge. Policy Exchange's Delivering a 21st Century Infrastructure for Britain report stated that Britain has an infrastructure deficit requiring at least £434 billion of new investment by 2020. Given the rate of PFI investment since 1992 to the current period this leaves a significant short fall if government spending is to continue to be restrained.

Given the above it is important that industry and government work together to critically assess their needs. These then need to be translated into new models to encourage sustainable and affordable investment.

The effect of the recession and the financial crisis

The financial crisis and recession have had a significant effect on the financial sector. Lending has been constrained, confidence between banks, consumers and business has been shaken and attitudes to risk have shifted dramatically.

This has meant that there have been significant changes in the factors that effect the cost of capital, the cost of government borrowing, the difference between the two, the private sector's ability to raise funds and attitudes to risk.

To explore the cost of funding and financing within the economy, and the effect this has had on the PFI model, this report will utilise a number of indicators produced in the Bank of England's Trends in Lending publication⁵.

The scale of the financial crisis is significant and therefore, so too is the effect it has had on liquidity across all aspects of the economy.

Whilst the government has to take a long term view on the use of private finance models, it is important to note that with such methods of financing, the government is effectively a price taker in the market. That is to say that the cost of borrowing will reflect market conditions at that point in time.

This generally means that the financing cost will be driven by aspects such as the base rate and or LIBOR, as well as risk margins. The base rate has fallen significantly and remains at historic lows, reducing the cost of capital. Simultaneously, there has been an increase in spreads as risk has increased, raising the cost of borrowing.

The availability of finance

The table on the next page shows that the net monthly flows in lending continue to remain negative or significantly constrained since 2008.

This contraction in lending to businesses reflects both the tighter lending conditions within the market and businesses attitudes to debt.

Lending to UK businesses^(a)

	Averages							2011		
	2007	2008	2009	2010	2011 Q1	2011 Q2	2011 Q3	Sep.	Oct.	Nov.
Net monthly flow (£ billions)	7.4	3.8	-3.9	-2.1	-1.7	-1.2	-0.4	-1.2	-0.2	1.8
Three-month annualised growth rate (per cent)	20.9	10.7	-7.7	-5.1	-3.8	-2.1	-2.8	-1.0	-0.2	0.3
Twelve-month growth rate (per cent)	16.8	17.9	-1.8	-7.1	-4.3	-3.7	-3.2	-2.8	-2.3	-2.1

Source: Bank of England

So how are conditions in the primary corporate debt markets?

The next chart is from the Bank of England's Financial Stability Report⁶ and whilst it shows there has recently been a slight improvement within the primary corporate debt market, it also suggests:

- “New issuance in a range of primary debt markets weakened in the second half of 2011, particularly for higher-risk companies.”
- “Global issuance of leveraged loans fell by 45%, to US\$194 billion in 2011 Q3 (compared with 2011 Q2).”
- “Global issuance of high-yield corporate debt, another key source of funding for new borrowers, fell by over 70% during the same period. Issuance of investment-grade corporate bonds in 2011 Q3 was in line with recent quarters, though the cost of new debt rose.”

The figures above demonstrate the degree to which the financing markets have been affected.

This shows how constrained primary market conditions have become over the various types of finance.

In 2007 only investment grade syndicated loans in the UK were considered to be tight (although there were three areas where no issuance was also recorded). Moving into 2008, the recession and financial crisis the number of countries and types of debt that were reported as being tight start to increase. Then in 2009 another step change occurs. A genuine loss of confidence begins to occur between investors, banks and companies. The Bank of England report comments that:

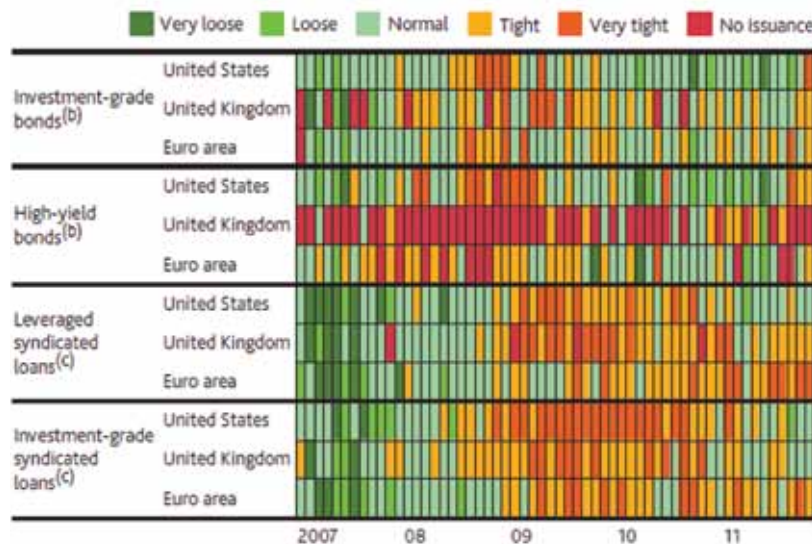
- “High volatility in secondary markets spilt over to primary capital markets, affecting the price and availability of new corporate debt.”

This volatility and lack of confidence within the market spreads in several ways:

- First, companies begin to question their debt exposure and so question their financial commitments. In addition, this parent companies investing further even if their financial position is secure given demand and workload uncertainty.
- Second, investors begin to question the ability of banks, companies and institution to pay off the loans that have already occurred. This subsequently leads to a decrease in their willingness to lend.

These two effects result in further tightening in the market as shown in the diagram.

Primary corporate debt market conditions ^(a)



Sources: Dealogic and Bank calculations.

Source: Bank of England

Whilst the ability of companies to borrow has tightened this should not automatically mean that the finance available for project deals has fallen. For this to be the case other factors must have also changed.

- The first of these factors is the rate of return to the investor; if this rate of return is sufficient then capital should be available.

However, as we have seen above, if borrowing is more expensive on the open markets then the return required within a project needs to be higher to attract investors.

- The second is the perceived and acceptable risk level within the project.

Attitudes to risk have shifted significantly for investors, and whilst risks attached to PFI would appear to have remained unchanged this is not the case.

- The financial risk mentioned above has increased.
- The potential for companies and parties involved in the project failing has increased.
- Demand conditions are poorer and so end user returns are likely to be smaller given constrained expenditure.
- Public and political uncertainty over PFI continues to be of concern and the added uncertainty of the outcome of the consultation also adds to this.

Attitudes to risk

This is where the financial crisis has possibly had the greatest effect. Attitudes to risk have certainly taken a knock, with companies moving towards cash rich positions, paying off debt and re-enforcing balance sheets.

As demonstrated above, this feeds through into the PFI model. Are companies able, or willing to accept the risks that are associated with a project given uncertainties within the market?

Whilst the Bank of England Fiscal Stability report looks at macrofinancial factors, these will feed down into attitudes more widely. The report finds that:

- “The global macrofinancial environment became much more challenging in the second half of 2011. Rising concerns about the adverse feedback between sovereign risk, the path of global economic growth and the resilience of some banking systems led to a significant increase in financial stress internationally and a retreat from risky assets.”

A continuing aversion to risk will impact on the long term growth and investment potential of projects in the UK from the private sector. However, it is important to recognise that attitudes to risk are also aligned with the pricing of finance.

The cost of finance

The financial crisis has seen the number of financial products available to businesses fall, and the cost of existing facilities rise. The availability and cost of finance is important within PFI projects. The recent report by the House of Commons, Treasury Committee on the performance of the private finance initiatives revealed that:

- “The cost of capital for a typical PFI project is currently over 8%—double the long term government gilt rate of approximately 4%. The difference in finance costs means that PFI projects are significantly more expensive to fund over the life of a project. This represents a significant cost to taxpayers.”⁷

The widening of this differential is important given the financing of a project is undertaken by the private sector under the PFI model. As this gap widens the number of projects that qualify as representing value for money will fall unless they can demonstrate additional savings that offset the increased cost of financing.

Private finance and the management of risk are the key elements of the PFI model. The deterioration within the financial markets and the shift in attitudes towards risk are likely to make the use of the PFI model less viable compared to the period before the recession and financial crisis, even if evaluating projects against the existing value for money assessment.

Review of HM Treasury data

The government has been tasked with collating and providing statistics on PFI projects in the UK. This data is currently provided by HM Treasury, and is available on their website⁸. According to this site the data is collected once a year in the spring. The information is provided by the Departments and Devolved Administrations that procured or sponsored the projects, and is not audited by HM Treasury.

This report will now explore the data available to see if there are any trends that can be inferred. The data used was collected by HM Treasury between January and March 2011. From the data it is found that over £50bn of PFI contracts have been signed. To put this in context of the infrastructure challenge the UK faces it is estimated that Britain has an infrastructure deficit requiring at least £434 billion of new investment by 2020⁹.

The analysis of this data looks at the unitary payments as reported by HM Treasury. The data does not provide a breakdown that would allow for a detailed analysis of the scale and number of components that make up these unitary payments. This subsequently makes value judgements difficult. However, it does allow us to make comparisons over time, across departments and over capital ranges.

Traditionally, analysis of PFI performance has involved case studies and specific circumstances that account for cost differentials. However, it is felt that a wider view of PFI and its relative performance is needed to draw conclusions as to how alternative models should be formulated going forward, so as to ensure they provide value for money for the taxpayer. Whilst this report does not undertake such analysis, it does compare a wide range of data in a way which has not been done before. This should help to draw conclusions as to ways in which the process of utilising private finance in new partnership models could be better managed in the future.

This aggregated amount is broken down as follows:

- Energy £264 billion
- Transport £120 billion
- Communications £5 billion
- Water £45 billion
- Total UK infrastructure deficit of £434 billion¹⁰

As can be seen from the above estimates, there is significant investment required. It is also important to note that not all of this investment is required through the PFI model. Industries such as the water sector operate Regulatory Asset Bases (RABs) which use public funds to deliver infrastructure improvements. As such, the majority of the improvements in infrastructure will have to be funded by the user and will not be procured under a PFI model.

Looking at the National Infrastructure Plan (NIP), despite a significant emphasis on private finance as a means of funding the projects outlined, there is little mention of social infrastructure. This is one of the areas in which PFI investment has been traditionally used (e.g. schools and hospitals). This therefore makes the scale of the challenge and the importance of accessing private sector finance even greater.

Whilst NIP has been a positive step, if the government is to encourage the scale of investment required then NIP will need to include more detail on the models and methods through which investors will be able to invest. There will also need to be a greater emphasis on policy certainty so as to reduce some of the risk within the market as well as the cost of financing such investment.

This in itself suggests that PFI, and private finance alone are not the solution to the UK's infrastructure challenge.

However, private finance will have to play its role. Even if the PFI model were to continue to delivering investment at the pace it has done to date (since its launch in 1992) the UK is still going to fall short of the estimated capital investment required.

The PFI model involves the private sector investing the upfront capital to receive operational income over the life of the project. Using the data available on signed projects from HM Treasury it is possible to analyse the estimated total capital value against the summation of the total estimated unitary charge (a single annual or monthly charge for the services it receives under the contract) payments for that project.

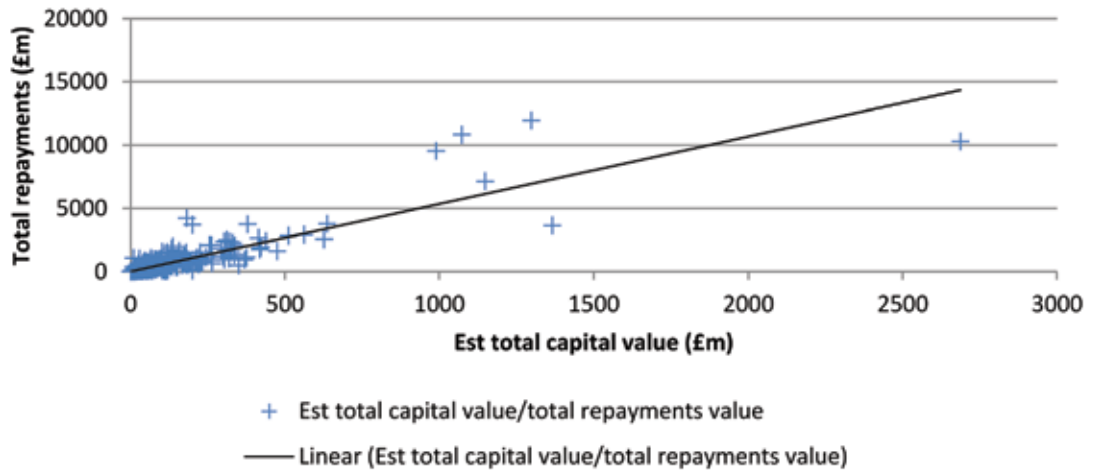
Analysis of these figures should provide some indication as to how well PFI projects compare not only as a linear average, but also as to the degree of the relationship between the cost of capital against the return on long run payments. Whilst this analysis may not look specifically at the individual factors of a PFI project it should allow us to draw inferences as to the effectiveness of PFI, and allow some inferences to be drawn as we look to develop new models for private finance.

Initially this report looked at a simple average of capital investment against unitary payments of the data for each sector (sectors as defined in the original data) and whilst there were some sectors that performed better than others there was no conclusive banding of projects. This suggests that the sectorial influences may not have the greatest effect on the subsequent unitary payments of projects, and that aspects such as procurement may have a more important role.

As such this paper makes no inferences about what constitutes an efficient ratio for each sector, as it would be assumed that common risk factors across sectors might result in investors demanding similar rates of return.

The following chart shows that as the private company invests more in the capital cost of the project the total amount it receives in unitary charge payments increases. This is what would be expected, as the higher investment would need to be covered by higher or a longer period of unitary charge payments.

All PFI projects¹¹



However, there are few projects above the £500m level in terms of capital expenditure. To ascertain the ‘fit’ of this capital verses repayment trend continues, it is important to compare the performance of PFI across a varying number of bands. So for this reason analysis was performed on projects according to a number of capital investment bands.

Analysis of projects by size of capital expenditure

Appendix A contains plots for each of the PFI projects that fall in the following bands:

- Band 1 – PFI projects below £500m threshold
- Band 2 - PFI projects below £250m threshold
- Band 3 - PFI projects below £100m threshold
- Band 4 - PFI projects below £50m threshold

When looking at these charts separately a comparison of the performance can be difficult. For this reason the next page contains an amalgamation of these charts.

The band results show little variation of performance between capital and unitary payments across the different capital bands

As can be seen from the table and the chart on the following page, as expected the positive relationship holds between capital expenditure and unitary charge payments across the varying scale of projects.

Capital band	Scale of linear relationship between capital investment and unitary payments
All Projects	5.33
Below 500m	5.13
Below 250m	5.38
Below 100m	5.28
Below 50m	5.47

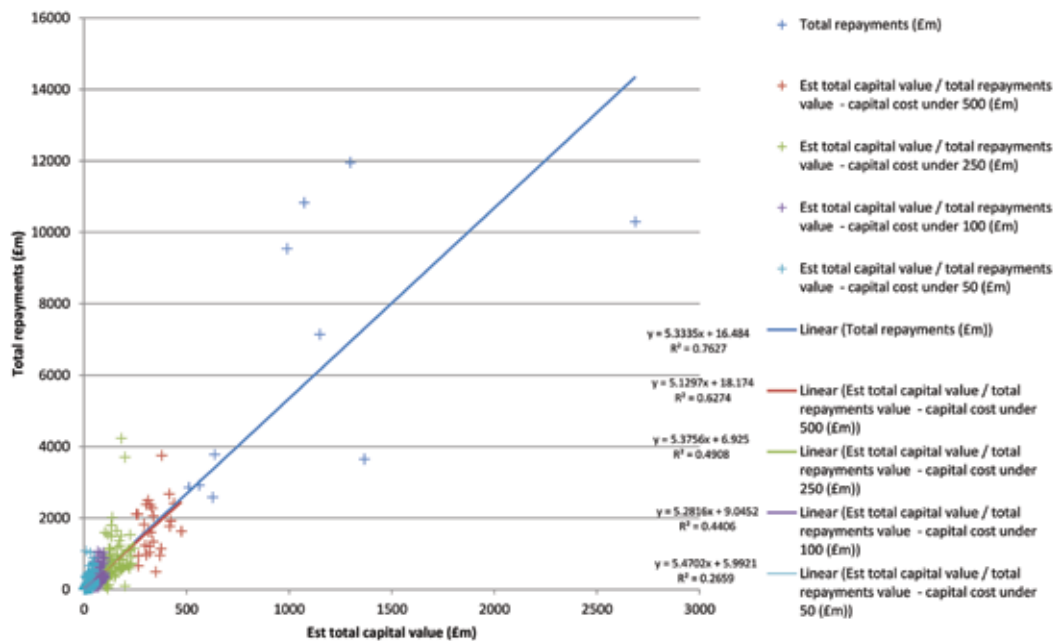
Interestingly, there is little the variation between the scale of the relationships across the capital bands. Looking at the overall relationship (for all projects, across all bands) between the unitary charge and capital expenditure suggests that for approximately every £1 of private money invested as capital, the public sector can expect to pay back approximately £5.33 in unitary charges.

The x figure provides the slope of the relationship and so the strength of the effect the variables have on each other. This varies between 5.1297 and 5.4702. That is to say that:

- For every £1 the private sector invest in capital the government would expect to pay between £5.13 and £5.47 in unitary payments.

Overall this suggests that across the different capital bands the model for PFI has been robust (the results being repeatable) given that it delivers similar results across all expenditure ranges.

PFI projects – combined linear comparisons



Linear results verses a simple average ratio analysis show that the model remains consistent across different capital bands

The linear analysis is interesting, given that it demonstrates how much of the data is explained by the regression line, the slope and degree of the relationship between the series and an axis intercept.

The intercept in particular can be seen as representing a fixed cost to the PFI project, such as the procurement or investigation cost. This fixed capital cost, it could be argued, would occur if procurement occurred through PFI or traditional means.

However, if we were to produce a much simpler analysis by dividing the total unitary payments made by the total capital invested we find that the relationship is slightly greater with £1 of capital investment resulting in £5.73 paid in unitary payments.

This simple analysis assumes that all the capital costs equate to operation costs, and so does not account for any fixed cost. For this reason it would be expected that the result would be slightly higher (the government pays more back in comparison to the private capital outlay) than that of the linear analysis.

Capital band	Ave	No projects
All Projects	5.73	688
Below 500m	5.72	678
Below 250m	5.74	652
Below 100m	5.79	564

Performance by government department¹²

So we have established there is little difference in the relationship between capital and unitary payments according to capital expenditure. But what about by individual government department. The following departments were analysed and the results were as shown on the next page.

Government department	Scale of linear relationship between capital investment and unitary payments
Ministry of Justice	11.53
Department for Transport	8.41
Department for Environment, Food and Rural Affairs	5.69
Department of Health	5.59
Welsh Assembly	4.9
Scottish Government	4.68
Ministry of Defence	4.42
Northern Ireland Executive	3.74
Department for Education	3.32
Home Office	3.02
Department for Culture, Media and Sport	2.83
Department for Communities and Local Government	2.69

This relationship varies more significantly when analysing by government department

As can be seen from the results on the next page, unlike the comparison across capital values there is a significant degree of variation between government departments.

Some departments such as the Ministry of Justice procure a lower capital value for a higher value of unitary payments with a relationship of £1 capital to £11.53 paid in unitary payments. The reverse is true of departments such as:

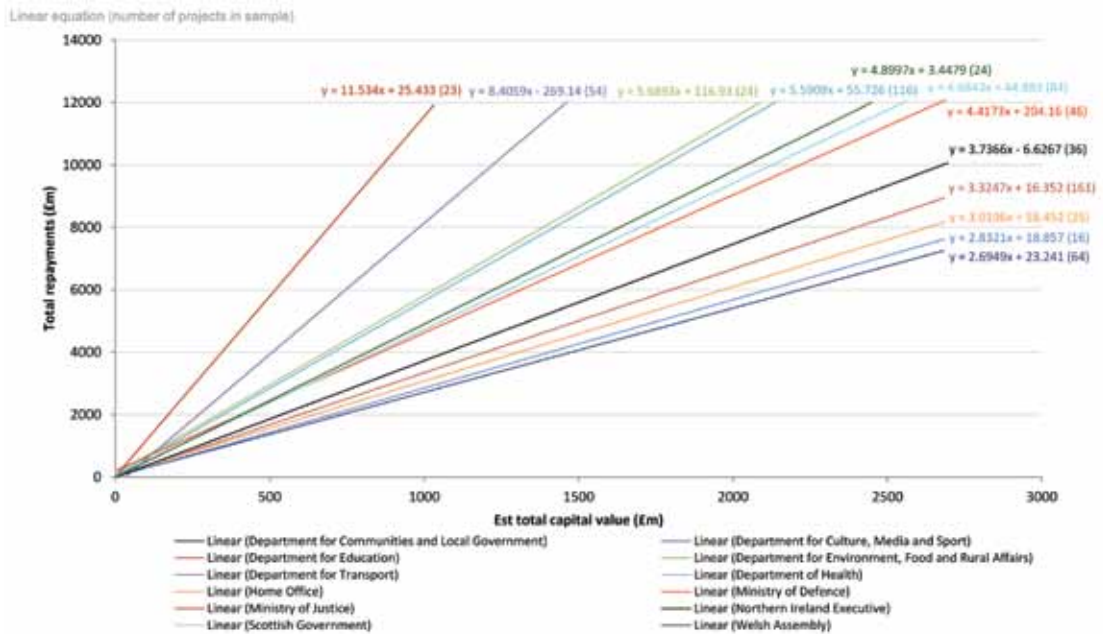
- Department for Communities and Local Government (£1 capital - £2.69 unitary payments)
- Department for Culture, Media and Sport. (£1 capital - £2.83 unitary payments).

Whilst one could attempt to infer efficiency from this result it is difficult to definitively infer results given no detailed analysis of the factors within the unitary payments

When looking at the number of projects undertaken, there does appear to be a relationship between the number of projects procured and the ability to improve the PFI projects value for money, but this is by no means conclusive.

Again the next page shows the graphical output from the linear plots for the governments departments' results.

Performance by Government departments



Linear equation (number of projects in sample)

Linear results versus a simple average ratio analysis suggest that the performance of government departments varies more significantly

Again, a more simplistic min, max and average analysis can be undertaken to compare the difference between the performance of government departments under both types of analysis¹³.

The results below include a number of additional government departments that were not included in the linear analysis due to the limited sample size. However, given the simpler approach to this analysis below they have been included for information purposes.

This data reveals that the relationship between the capital expenditure and unitary payments varies significantly more than was previously suggested. The average ratio varies from £1 capital investment resulting in £3.43 of unitary payments, to £1 capital being invested for £23.10 in payments.

These results anecdotally suggest that if government were to centralise the procurement it could achieve a saving by improving the performance of the deal it could negotiate.

In addition the order of performance of some government departments also changes, but the results are broadly consistent with the linear analysis.

Department	Ave	No projects
Department for Energy and Climate Change	3.4	1*
Department for Communities and Local Government	3.8	64
Department for Education	3.8	161
Northern Ireland Executive	3.9	36
Department for Culture, Media and Sport	4.2	16
Welsh Assembly	5.0	24
Home Office	5.8	25
Scottish Government	6.0	84
Ministry of Defence	6.1	46
Department of Health	6.5	112
HM Treasury	6.7	1*
Department for Transport	6.7	53
GCHQ	6.9	1*
Foreign and Commonwealth Office	6.9	2*
Department for Environment, Food and Rural Affairs	7.5	24
Cabinet Office	7.8	1*
Department for Business, Innovation and Skills	8.1	2*
Department for Work and Pensions	11.6	4*
Ministry of Justice	11.8	23
HM Revenue and Customs	22.9	7*
Crown Prosecution Service	23.1	1*

The evolving performance of PFI since 1996

In addition to departmental analysis it is also important to understand how this relationship has changed over time. Has it improved, deteriorated or stayed stable?

The analysis focuses on the following three 5 year periods:

- Period 1 - 1996-2000
- Period 2 - 2001-2005
- Period 3 - 2006-2010

Theoretically, as departments gain experience of using a procurement model their performance should improve. This comes from efficiency within the process reducing procurement costs, better negotiation with suppliers, understanding financial requirements and better use of the discounted/indexation model.

Has the relationship between capital expenditure by the private sector and the unitary payments paid by government improved since 1996?

The table below shows that if we compare the first five year period (1996-2000) of PFI procurement to the period 2001-2005 there was an improvement in the

relative performance between the capital expenditure of the project verses the unitary payments the public sector had to pay (falling from £1 - £7.45 to £1 - £4.03).

Time period	Scale of linear relationship between capital investment and unitary payments
1996-2000	7.45
2001-2005	4.03
2006-2010	5.43

However, when we look at the comparison between the period 2001-2005 and 2006-2010 we find that this probable efficiency gain has deteriorated, increasing from £1 of private capital resulting in £4.03 of unitary payments, to £1 of private capital costing £5.43 in unitary payments over the life of the PFI project.

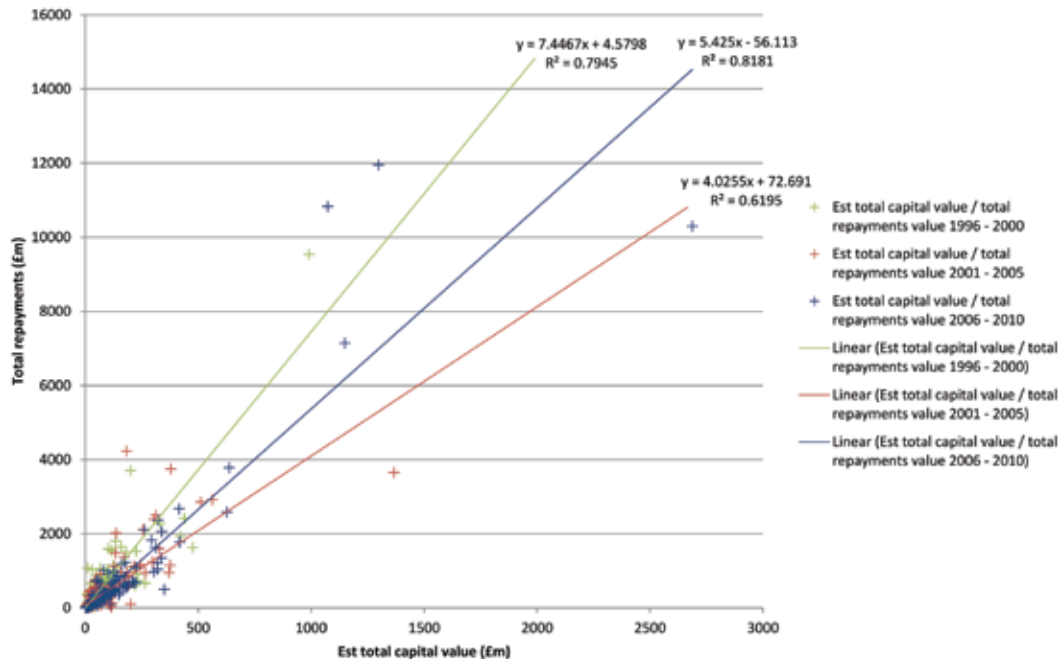
There may be several reasons as to why the relationship between capital expenditure and unitary payments fell initially and has subsequently increased, such as:

- The projects most suited to and that benefit most from the PFI model have been procured making additional procurement more challenging than in the previous period.
- Significant changes have occurred to costs that affect the operational expenditure component of the PFI model. For example, energy prices increased significantly in this period and if these are factored into the unitary payments the government has to make then the operational expenditure relative to the capital expenditure component would have increased.
- Significant changes have taken place with regards to the private cost of borrowing over this period. Whilst it would appear that given the current historically low interest rates that borrowing should currently be at its cheapest, that is highly unlikely to actually be the case given the current risk adverse nature of the financial sector, and increased cost of interbank lending. However, if capital costs are rising less than the operational costs (mentioned above) this would appear to have the same effect.
- It is possible that there has been a genuine loss of skills and procurement knowledge within government, reducing the efficiency of PFI procurement.

For example, a recent review¹⁴ of public procurement and its use as a tool to stimulate innovation found that:

“The Government’s capacity to act as an “intelligent customer” is limited by the level of procurement skills and knowledge in departments and the absence of incentives to procure innovative solutions. Providing training courses is not good enough. Departments need to recruit procurement staff with demonstrable expertise and experience.”

The results of the time period analysis are shown graphically below.

CHART - The evolving performance of PFI since 1996

Linear results verses a simple average ratio analysis; show that PFI performance has continue to improve since 1996

Again a more simplistic min, max and average analysis, can be undertaken to compare the difference between the time periods' performance according to the two types of analysis¹⁵.

Time period	Ave	No projects
1996-2000	7.83	200
2001-2005	5.42	269
2006-2010	4.19	215

Once again the range of the results changes slightly when compared to the linear analysis. However, more interestingly the simple analysis suggests that PFI has continued to improve in terms of price government pays in relation to the capital expenditure spent.

There may be two reasons for this

- The first is that the range between the minimum and maximum performance has improved in the latest period. This tightens the average and suggests that projects were more sensibly procured or higher risk projects were not undertaken.
- Another explanation is that in the linear analysis there appear to be two projects where the unitary payments were particularly high making them potential outliers. If these are removed the linear analysis remains in the same order but the relationship is £1 to £4.30 which is much closer to the 2001-2005 performance of 4.03.

When developing a new model for private finance the improvement of the ratio over time suggests that the public sector has learnt to become more efficient. Or has been able to take advantage of efficiencies that have occurred within the market as participants experience with the model has improved. These are lessons that should be carried forward.

Whilst the analysis so far has looked at the relationship between the figures for private capital against the unitary payments it is important to note that this analysis only provides an approximate comparison of PFI projects across different departments, time periods and price ranges,

This is not necessarily an accurate reflection of the true rate of return to an investor or the public sector. This is because individual PFI projects make differing assumptions within their models. As is noted in the HM treasury data summary document:

- “Unitary charge payments by financial years across the life of the projects are presented as nominal figures i.e. they have assumptions about indexation and have not been discounted”

UK Private Finance Initiative Projects: summary data

Looking at the summary data¹⁶ there is information on the estimated payments under PFI contracts which have been signed. This data is in nominal terms and undiscounted.

Below is a copy of the figures for unitary charges (£m) which are based on departmental and Devolved Administration returns:

Period	Payments	Period	Payments
2011-12	8,568	2030-31	8,251
2012-13	9,115	2031-32	7,770
2013-14	9,561	2032-33	7,313
2014-15	9,722	2033-34	6,657
2015-16	9,803	2034-35	6,066
2016-17	9,770	2035-36	5,239
2017-18	9,874	2036-37	4,619
2018-19	9,456	2037-38	3,942
2019-20	9,620	2038-39	3,631
2020-21	9,683	2039-40	2,912
2021-22	9,531	2040-41	2,223
2022-23	9,407	2041-42	1,639
2023-24	9,394	2042-43	1,212
2024-25	9,556	2043-44	677
2025-26	9,525	2044-45	565
2026-27	9,285	2045-46	260
2027-28	9,200	2046-47	267
2028-29	9,106	2047-48	274
2029-30	8,805	2048-49	2

Source: HM Treasury

A summation of these charges reveals that between now and 2049 government departments have commitments of £242.5bn in unitary charges for current PFI contracts.

Whilst this figure is sizable, it does not necessarily mean it is unsustainable. If the annual payments continue to remain a small percentage of a departments overall budget there should be no reason for financial difficulties.

However, as annual payments increase, it may be possible that situations arise whereby unitary payments place a significant burden on departmental budgets.

For example, there have been a number of reports¹⁷ on hospital trusts such as Peterborough and Stamford which have subsequently needed government assistance to deal with PFI running costs.

Whilst these situations have occurred it is important to recognise that these projects make up a small number of the total PFI projects operated. More importantly, it suggests that the analysis and use of the PFI model was not appropriate. If it was, such, circumstances should not have arisen.

For this reason, it is important that the public sector remains objective with regards to the use of private finance (making sound decisions about how and when to use new models) and the liabilities that are being accrued, and will have to be paid for in future time periods.

This would stop the confusion in some debates over the viability of the entire new model verses the viability of the situation the model is used for.

This paper has explored the history; rationale behind the review; market conditions; and the performance of PFI. As can be seen whilst improvements can be made on PFI given the changes in market conditions since its launch in 1992, PFI as a model has performed relatively well in certain regards.

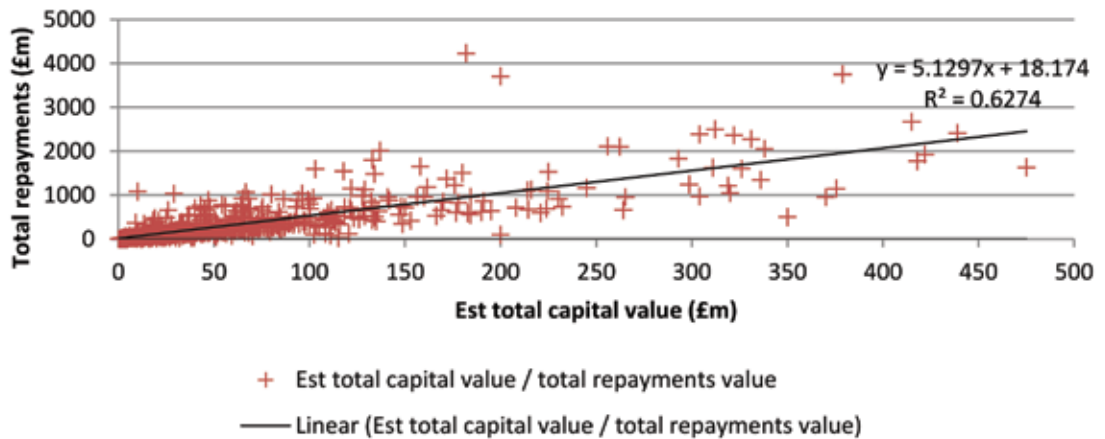
This paper has found that the correct application of models is critical. Going forward it is important that government learn the lessons from PFI to ensure that the incorrect application of a model does not lead to poor performance and value for money in the future.

Appendix A

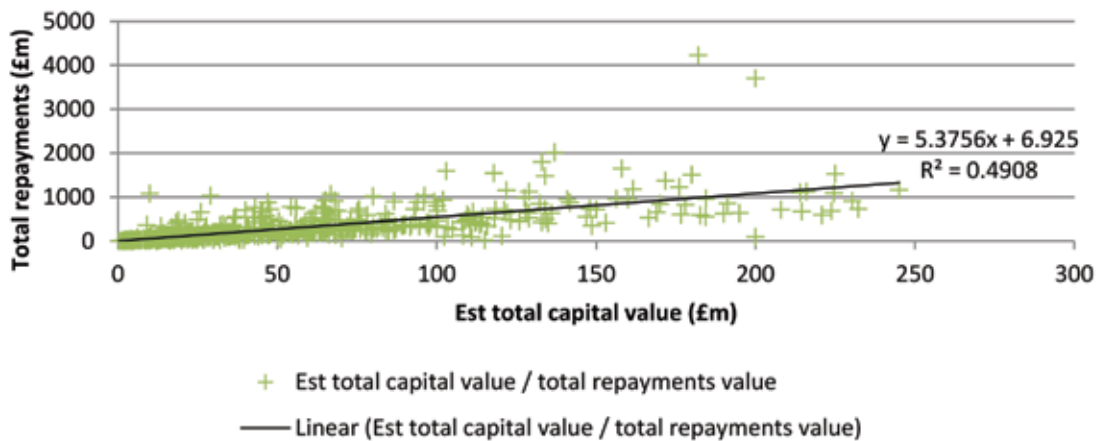
Performance according to the size of capital investment

Source: HM Treasury data

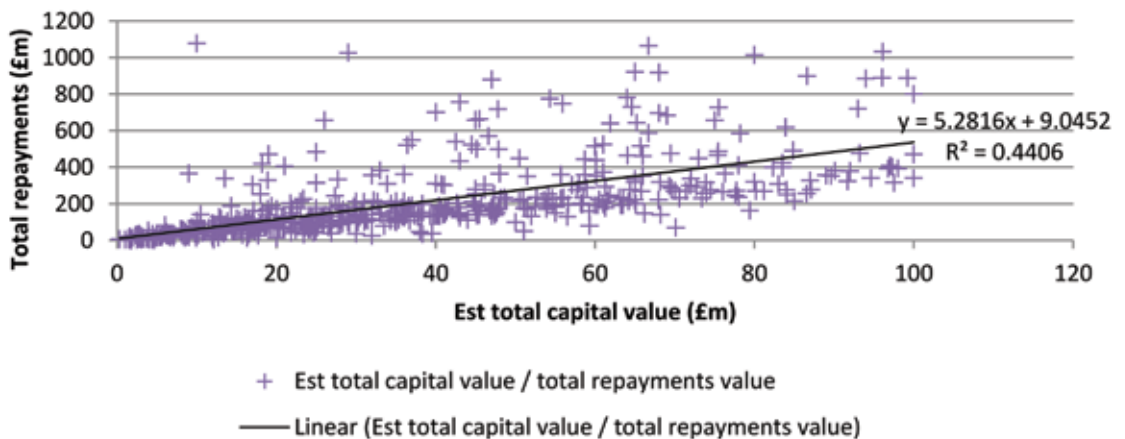
PFI projects under 500m in estimated capital value



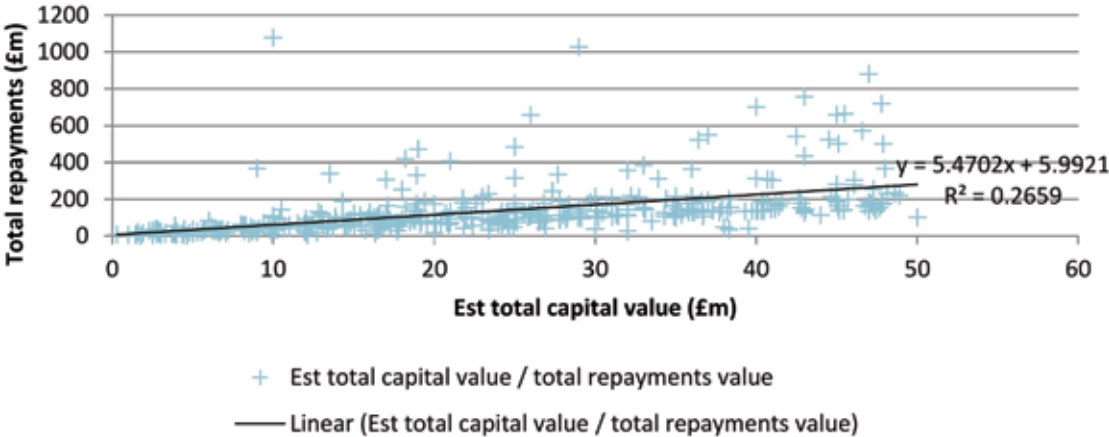
PFI projects under 250m in estimated capital value



PFI projects under 100m in estimated capital value



PFI projects under 50m in estimated capital value

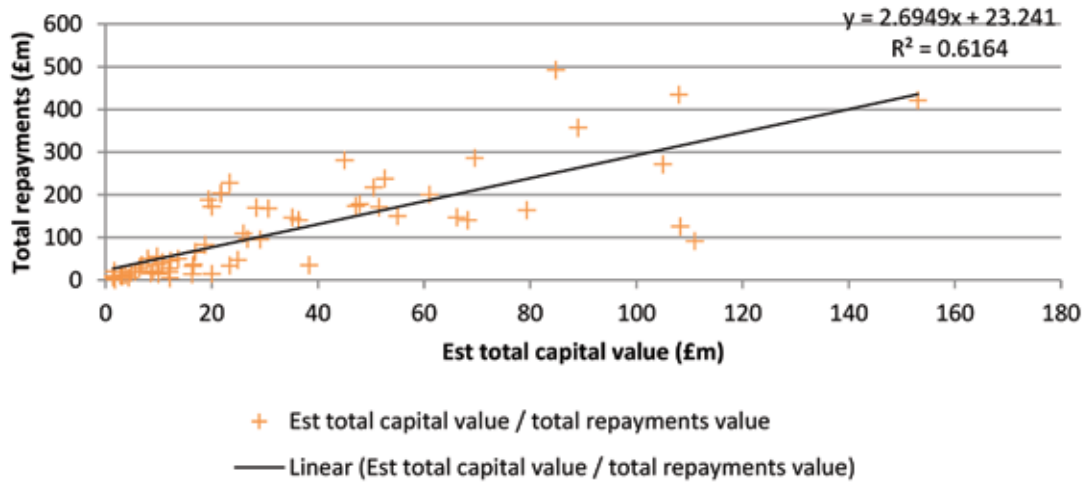


Appendix B

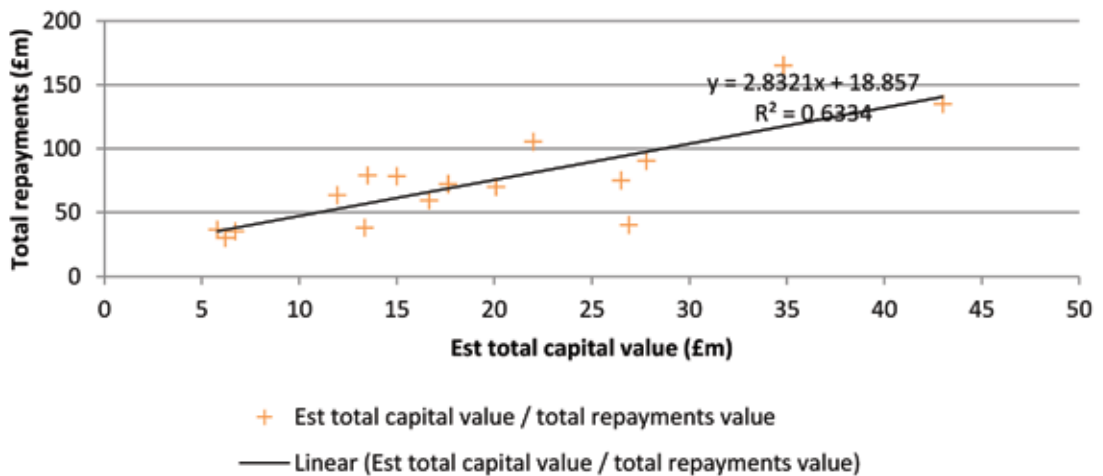
PFI project analysis by government department

Source: HM Treasury data

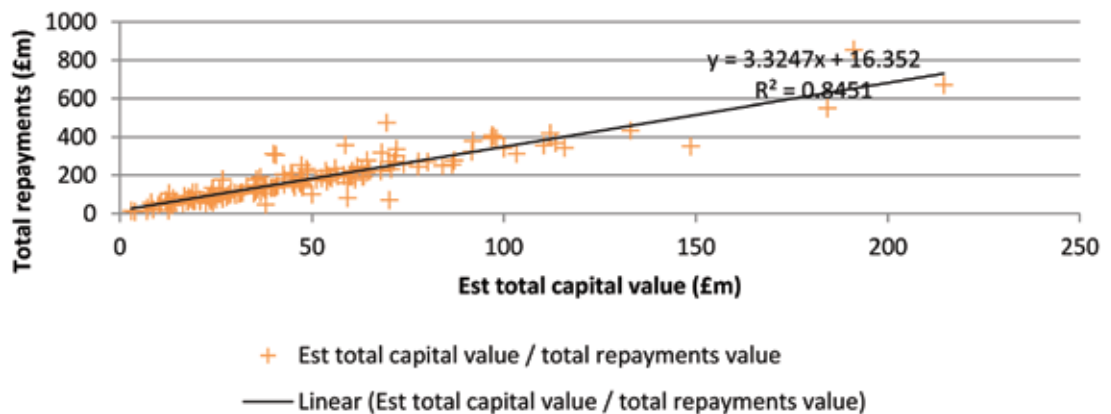
Department for Communities and Local Government



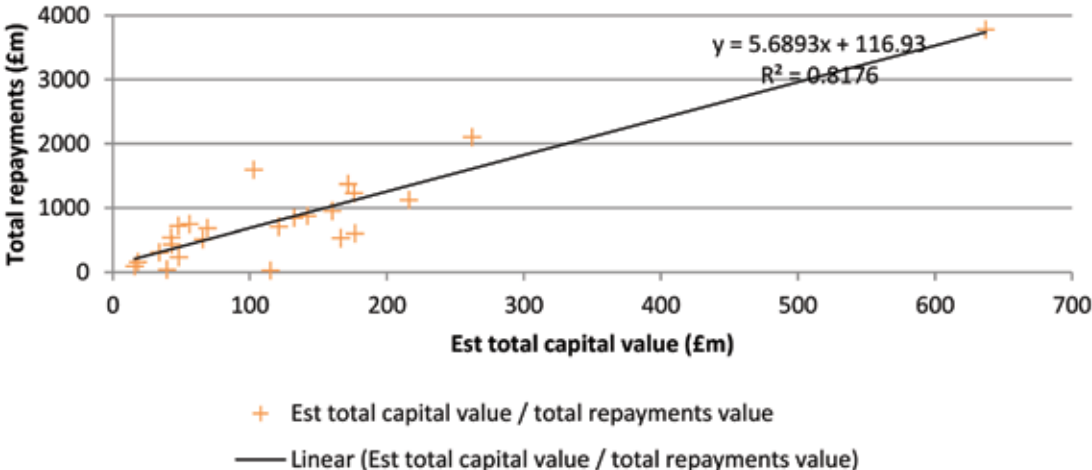
Department for Culture, Media and Sport



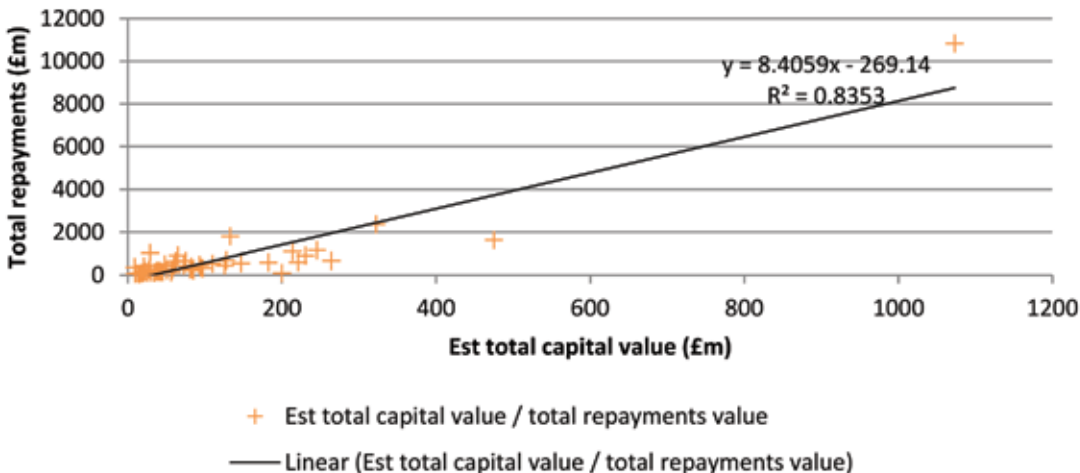
Department for Education



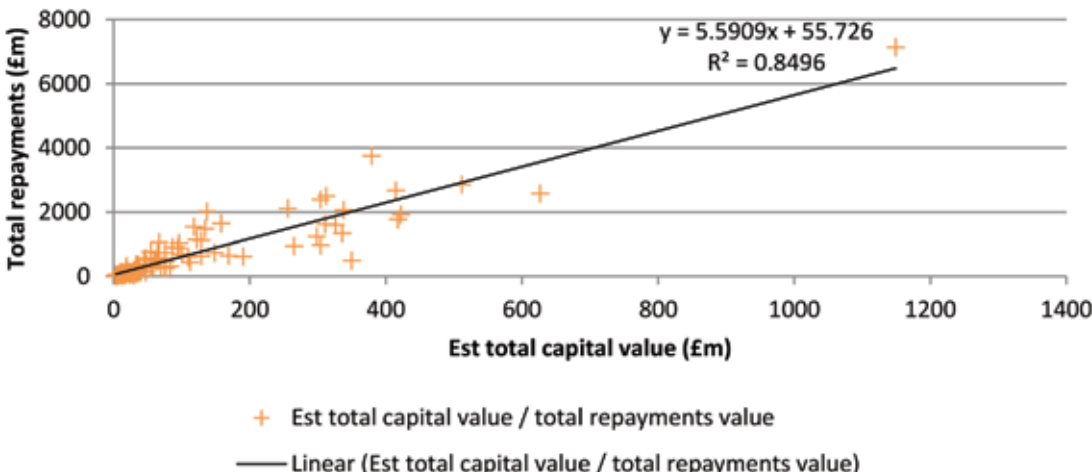
Department for Environment, Food and Rural Affairs



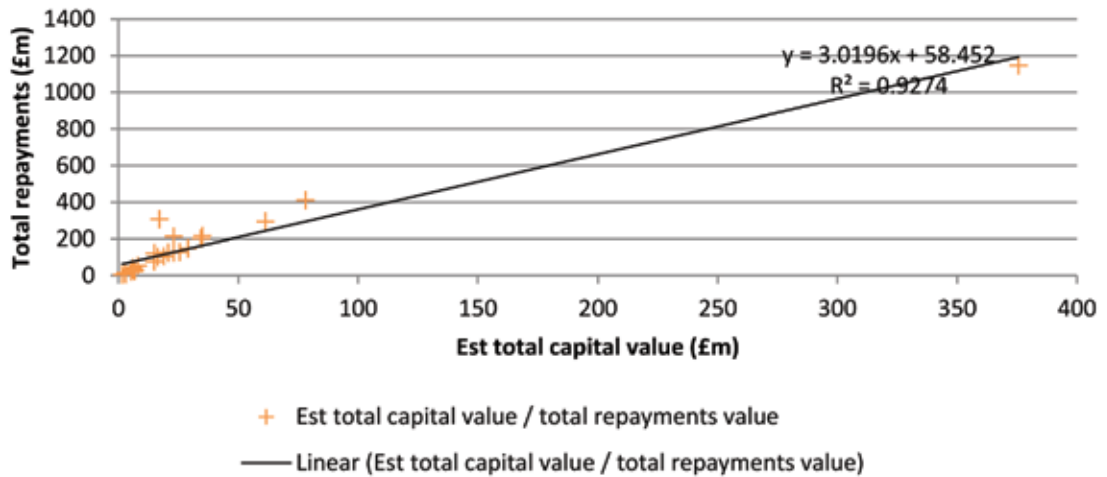
Department for Transport



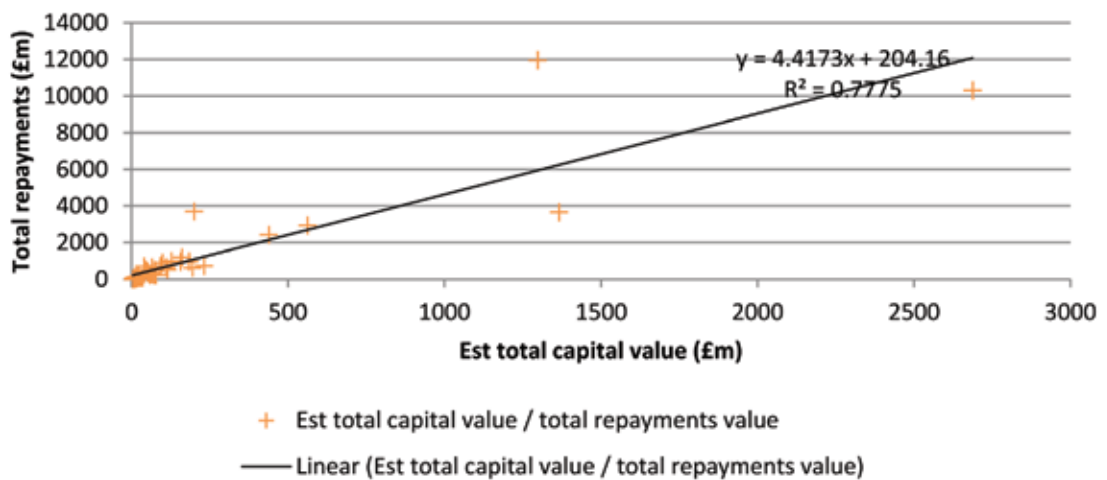
Department of Health



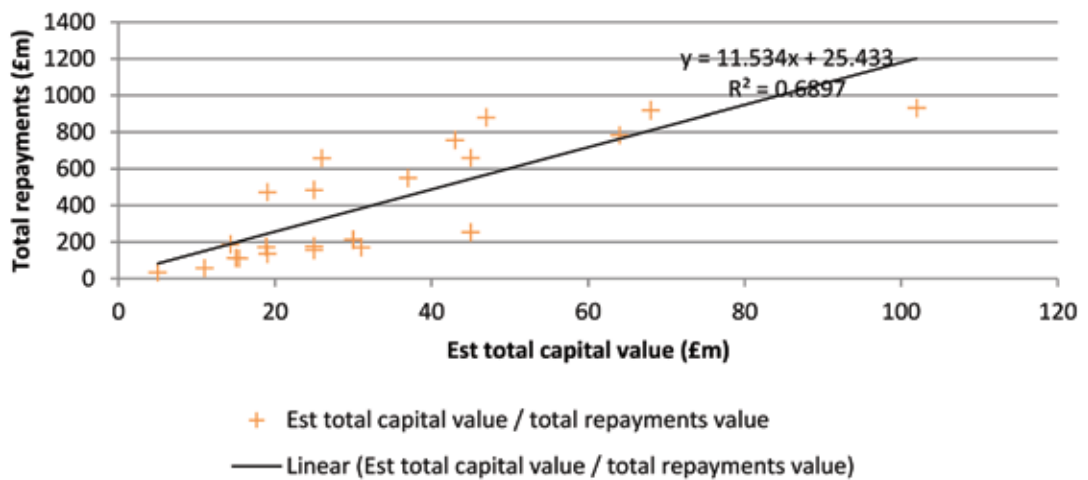
Home Office



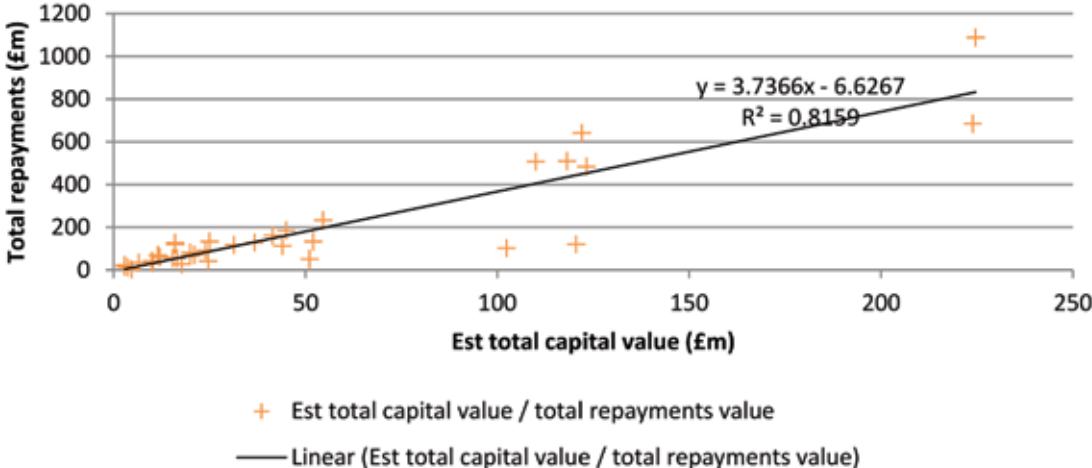
Ministry of Defence



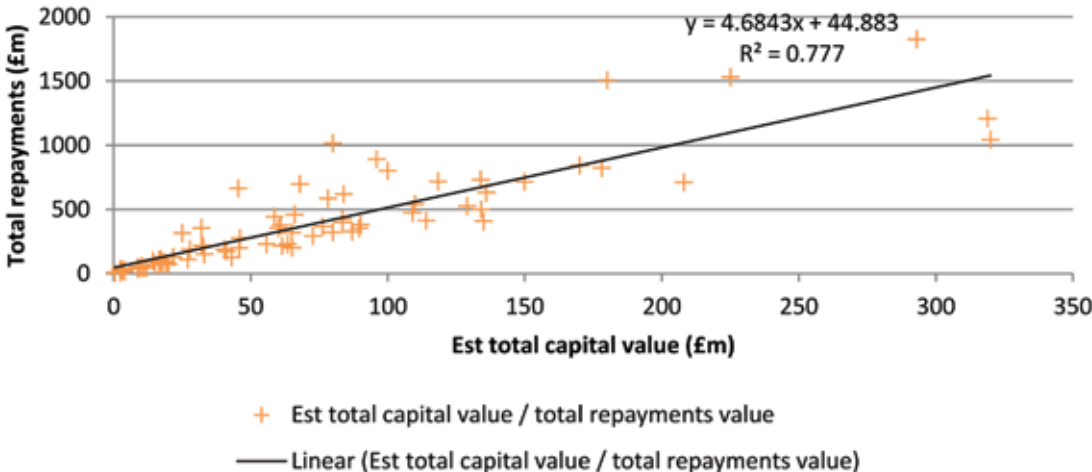
Ministry of Justice



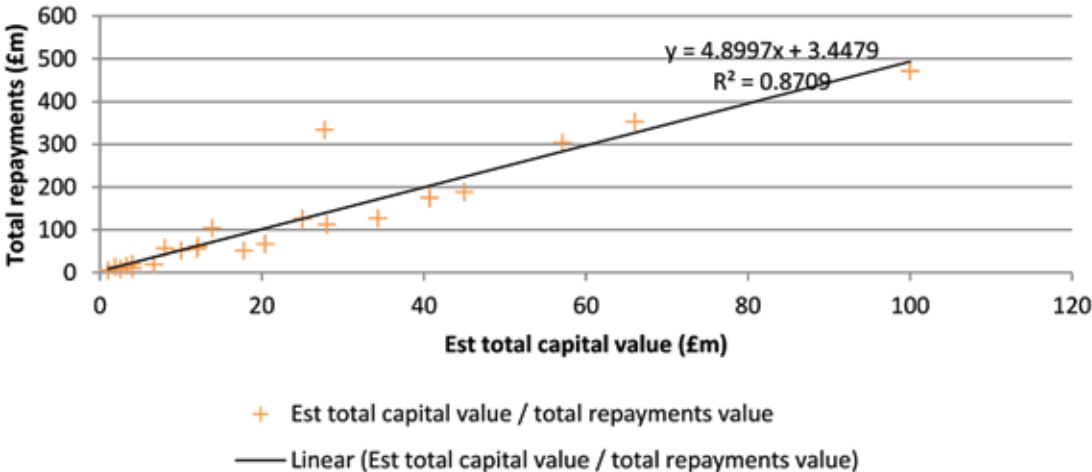
Northern Ireland Executive



Scottish Government



Welsh Assembly

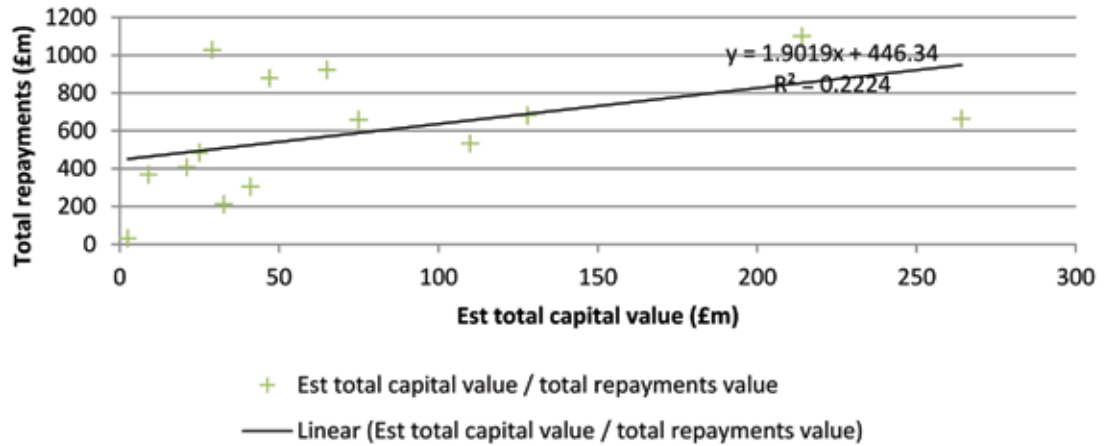


Appendix C

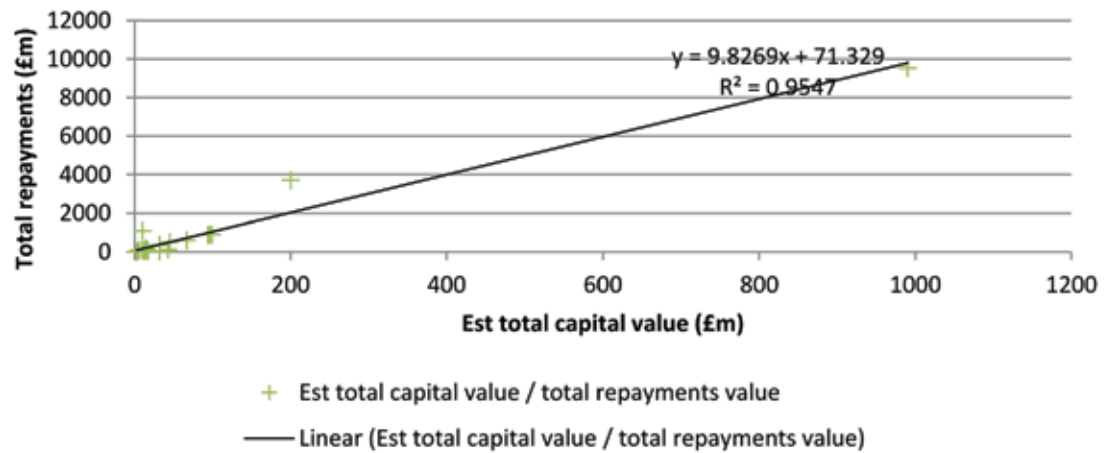
PFI project analysis – annual

Source: HM Treasury data

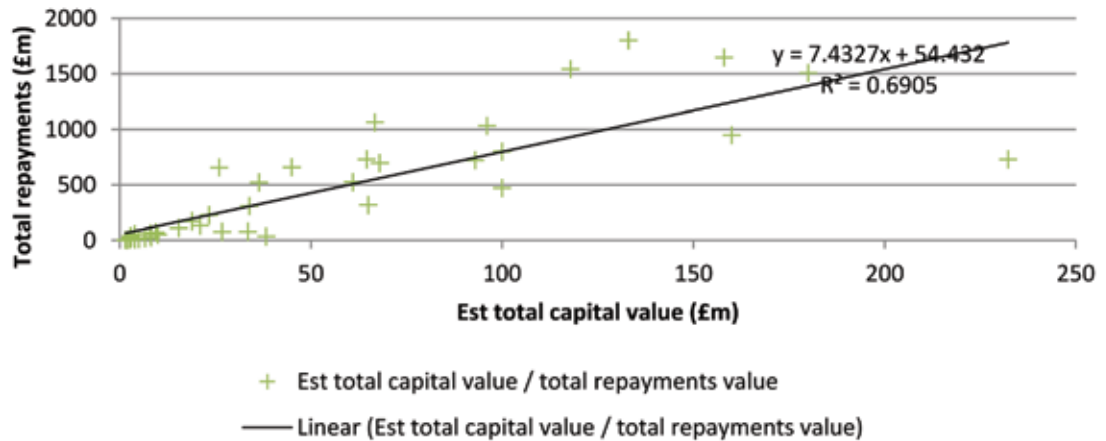
1996



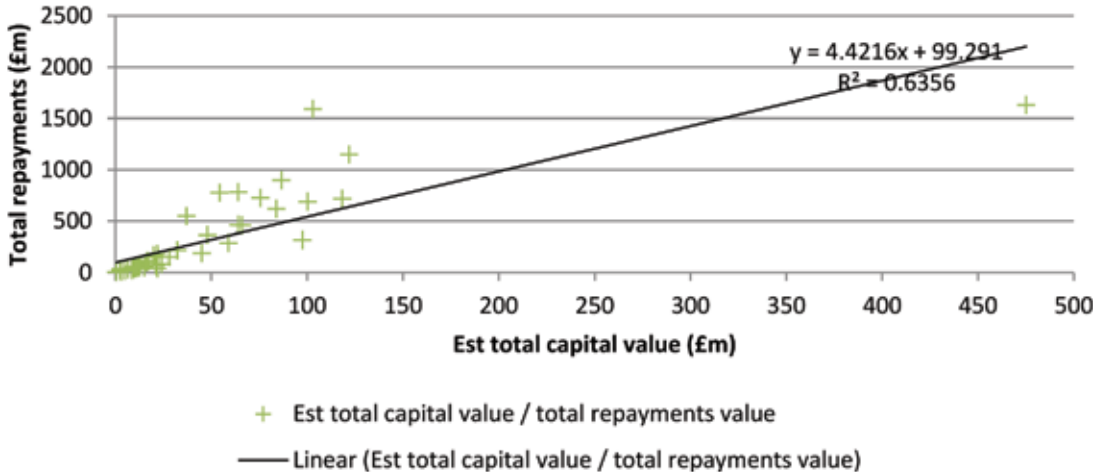
1997



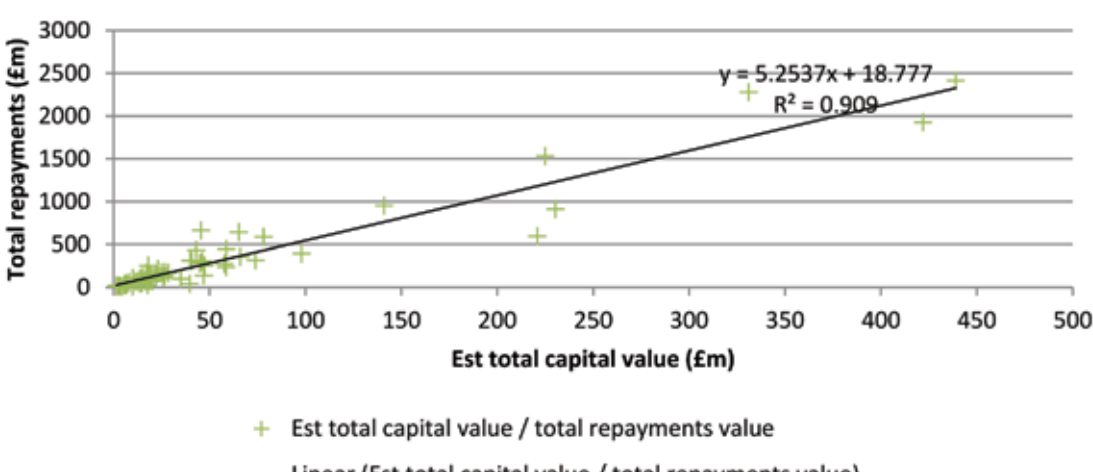
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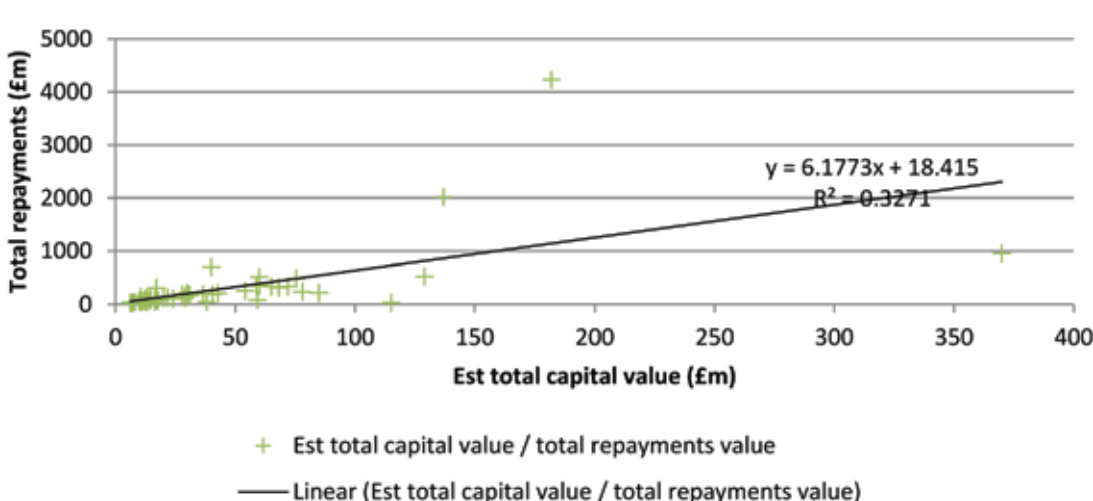
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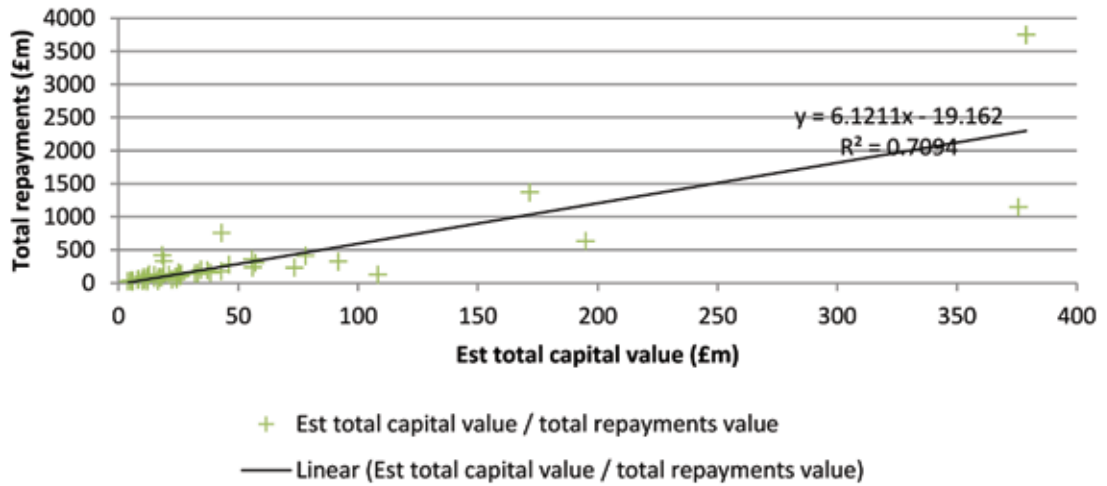
2000



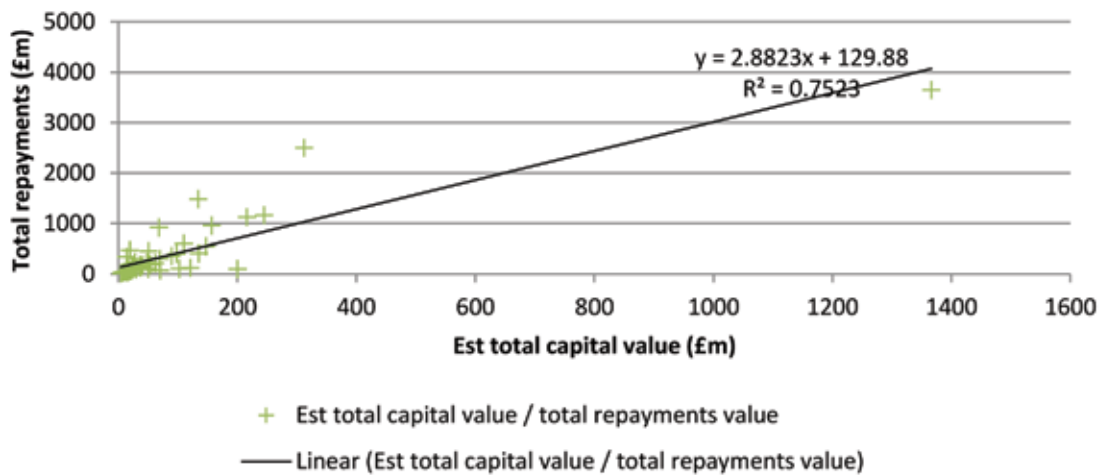
2001



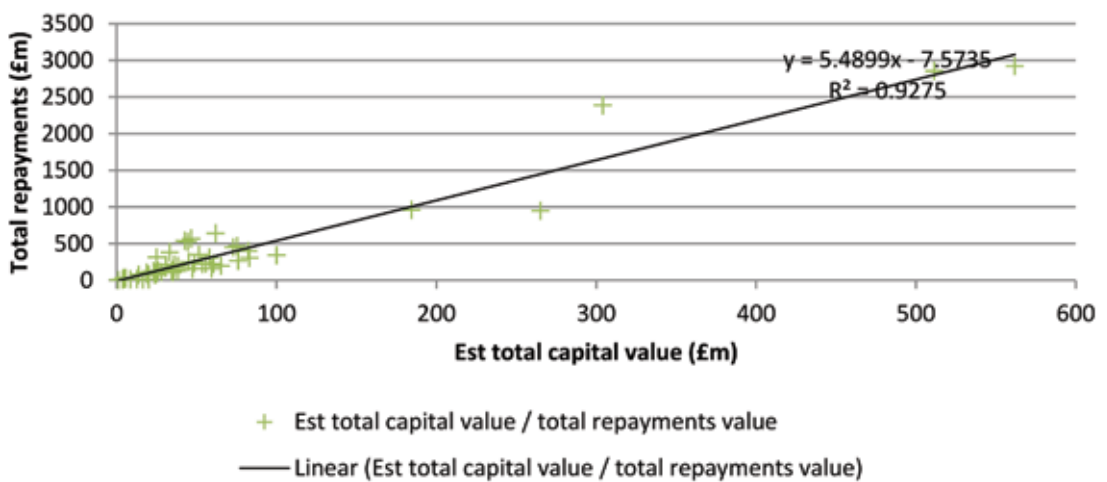
2002



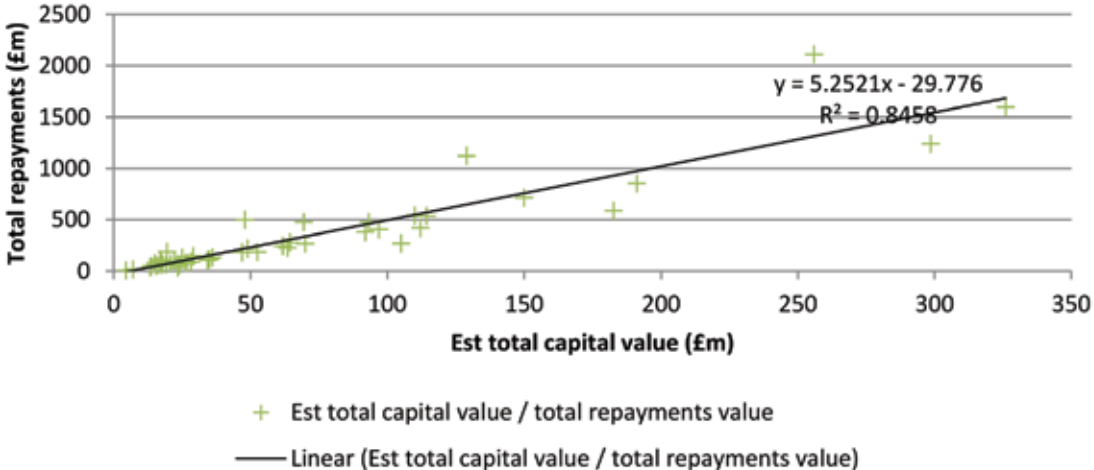
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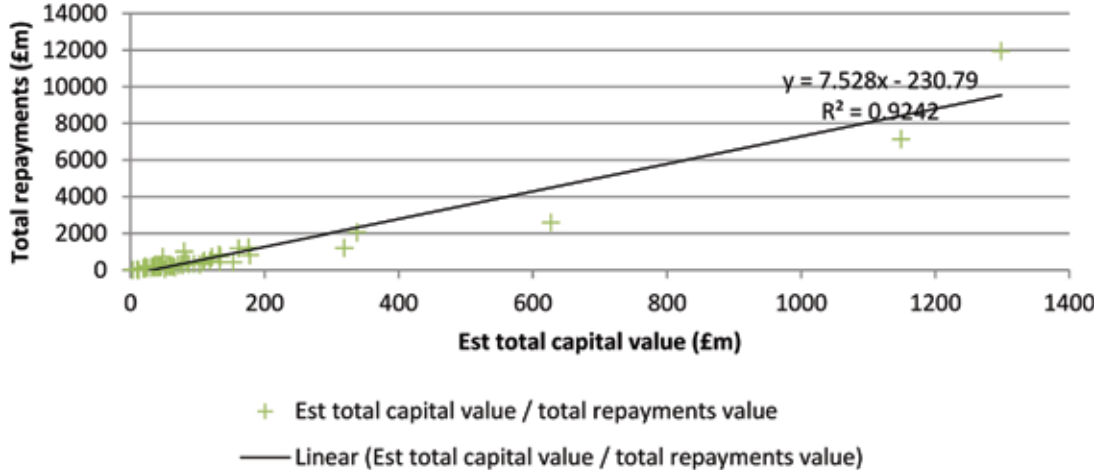
2004



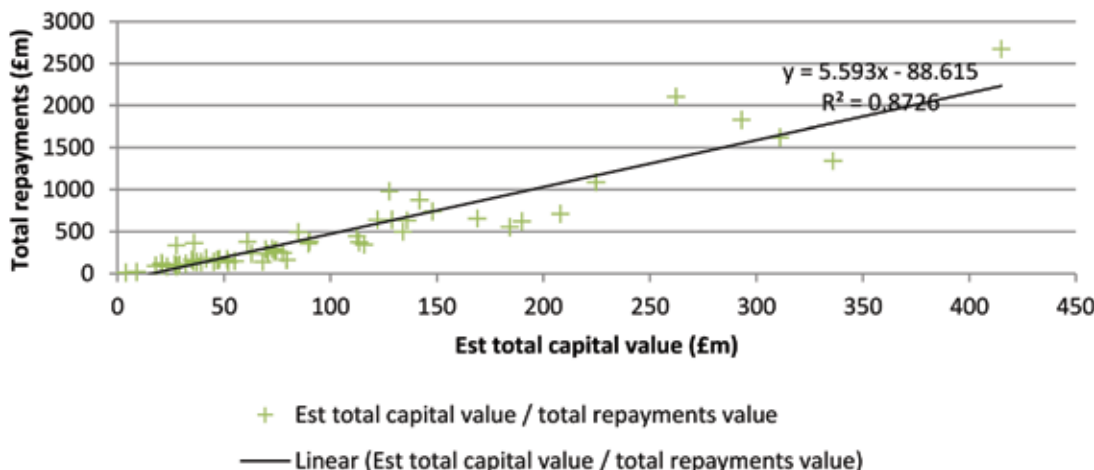
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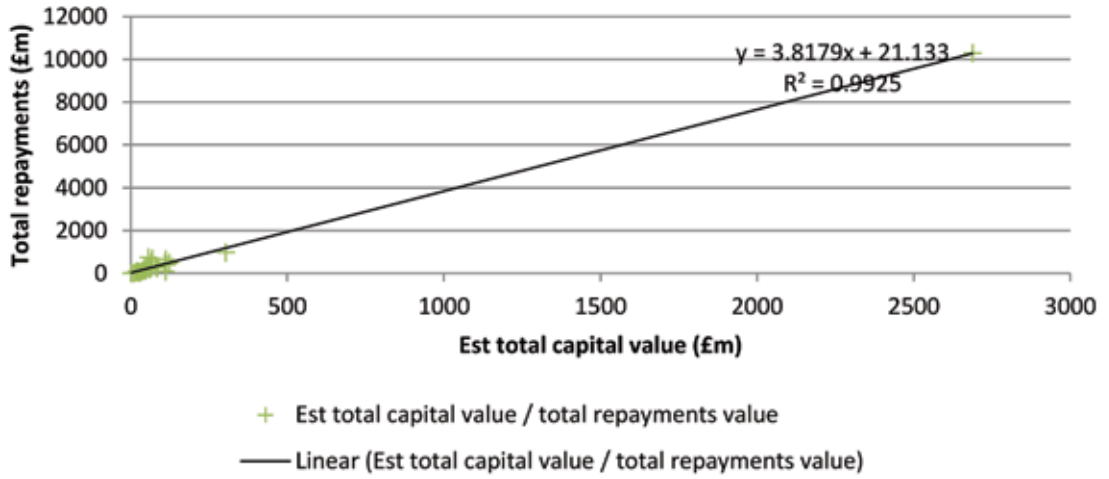
2006



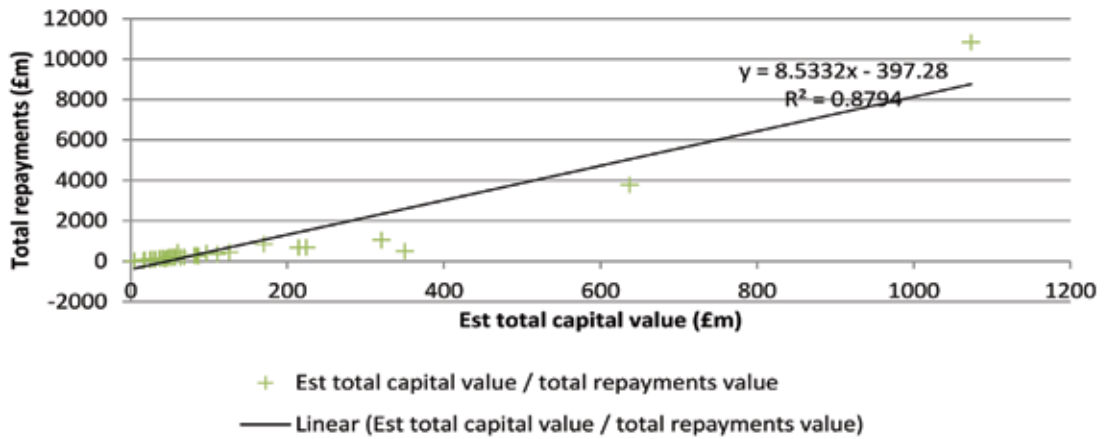
2007



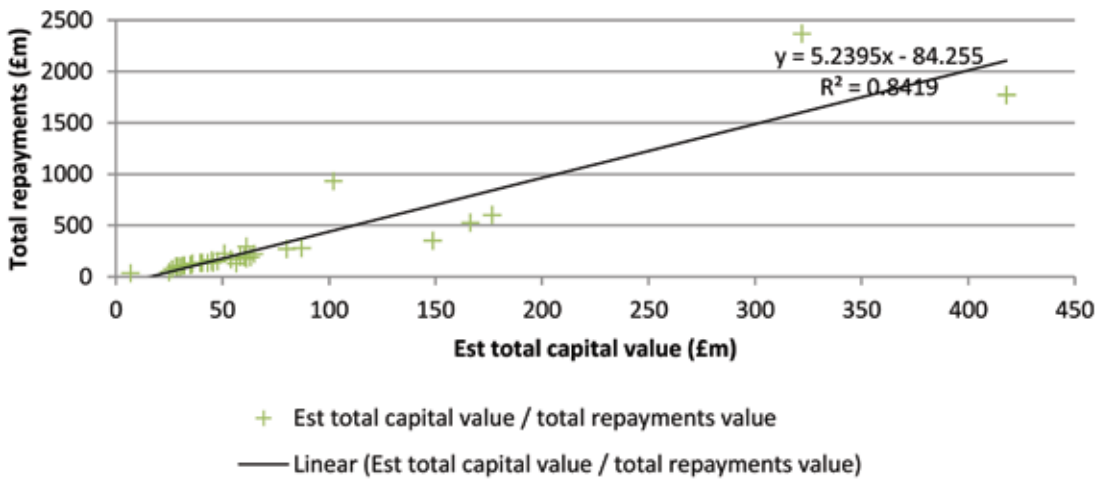
2008



2009



2010



Appendix D

Reform of the Private Finance Initiative

The consultation questions:¹⁸

Question 1

Do respondents think that the private sector has a role to play in the future delivery of public sector assets? Are there specific sectors where the private sector should not have a role?

Question 2

Are there other delivery and procurement models used in the delivery of public assets in the UK and internationally that respondents consider work well? What are the key features of these model(s)?

Question 3

How should the use of private finance be evaluated when considering the best procurement route to deliver a public asset?

Question 4

Are there features of the PFI model that should be retained?

Question 5

What changes to the current approach to the allocation of risk and the procurement and delivery of public facilities and services would increase institutional fund investment appetite, either directly or through intermediary investment vehicles?

Question 6

Would alternative approaches to the current typical capital structure of projects be favoured by institutional investors? What constraints currently exist to adopting these approaches, and how could these be addressed?

Question 7

Are there other actions that could be taken, by the public or private sectors, to increase institutional investment in public assets and services, and what are these? What would be the expected implications for cost, risk transfer and value for money?

Question 8

What if any role should public sector capital play in the financing of the construction or operational phase of public assets and services? How and when might public sector capital be best used to improve investor/lender appetite and pricing without adversely affecting risk transfer and performance incentives? What constraints should apply to the quantum of public sector capital grants?

Question 9

What if any role should public sector risk underpinning or guarantees play in partially de-risking the construction or operational phase of public assets and services? In which areas could underpinning or guarantees have a beneficial impact on investor and/or lender appetite and pricing? What are the constraints to this approach, with particular regard to risk transfer and performance incentives?

Question 10

If public sector capital grants are made to part-finance the construction phase of projects, what constraints should apply and what impact would a level of capital contributions in excess of the current 30% be expected to have on equity and debt investors' investment appraisal and pricing, and on risk transfer and performance incentives?

Question 11

If public sector loans are made to part-finance the construction or operational phase of projects, what impact would this have on equity and debt investors' investment appraisal and pricing, assuming pari-passu ranking with senior debt? What approach should be taken to lender voting rights and what other constraints or procedures would be relevant?

Question 12

What alternative approaches to the debt finance of projects should be considered that would address regulatory pressures on the market, while maintaining current benefits of lender due diligence and risk monitoring - thinking about both bank finance and capital markets solutions?

Question 13

What is the view of respondents to an approach which financed the construction period of projects separately from the operational phase?

Question 14

What impact would a shorter term debt finance approach be expected to have on financing costs? What if any implications would there be for the lenders' due diligence approach and for the transfer of asset design, construction and maintenance risk? What factors would enable the transition from bank debt funded projects to capital markets refinancing?

Question 15

What factors are relevant to consideration of the appropriate allocation of refinancing risk between the public sector authority and the contractor? Is it possible for project performance and credit factors to be separated from market factors when allocating refinancing risk?

Question 16

What are the views of respondents on the effectiveness of preferred bidder debt funding competitions? Could a wider application of debt funding competitions enable more effective access to the debt markets and what role should the public sector play in this, at a local or central level?

Question 17

What alternative approaches could be considered to inflation risk and interest rate risk management, taking into consideration trade offs between budgetary certainty and operational flexibility?

Question 18

Would a regulated asset model be more economically efficient than the PFI concession model?

Question 19

What are respondents' views on an approach that capped equity returns or that provided for public sector sharing in returns achieved above a specified level? What impact would this be expected to have on investor appetite and pricing and on project performance? At what level should any cap or sharing threshold be set?

Question 20

Should the public sector limit the transferability of PFI equity? What nature and quantum of limit would not adversely impact on investment appetite and pricing, and on project performance?

Question 21

Should the public sector share in gains on sale of PFI equity, and what impact would this have on investment appetite and pricing?

Question 22

What views do stakeholders have on public sector co-investment or joint venturing alongside private sector equity? What quantum or terms of public sector equity stake would not adversely impact investment appetite and pricing, and on project performance?

Question 23

In what areas do respondents consider that a change to the conventional PFI risk allocation as between the public sector authority, sponsors, funders and suppliers could reduce costs and/or improve the flexibility while still offering value for money?

Question 24

Are there other ways in which the conventional contractual framework could be simplified in a way that would enable the private sector to price more cost effectively?

Question 25

What further improvements could Government consider to the standard approach to PFI procurement in order to streamline the process and reduce costs, while meeting wider objectives for effective competition, accessing bidder innovation and maintaining a robust contractual framework?

Question 26

Are there particular ways in which the private and/or public sector approach to contract management can be improved in order to manage contracts more cost effectively?

Question 27

What is the right balance of output based versus standardised specification, when considering the twin objectives of accessing greater contractor innovation and reducing costs?

Question 28

Could a different approach to the engagement of contractors in the procurement process access greater private sector innovation?

Question 29

Should soft services continue to be included within the contractual model alongside the delivery and finance of the public facility?

Question 30

Are there alternative approaches to the contractual framework for soft service delivery for a long life facility that could result in a better balance of risk transfer, flexibility and competitive pricing?

Question 31

What impact would the separate contracting of soft services be expected to have on equity and debt investors' view of the project's risks and rewards?

Question 32

Under the current PFI model, how effectively has the party who holds hard facilities management and lifecycle risk been able to price those risks?

Question 33

Reflecting on the long term nature of the contracts and changing approaches in maintenance contracts, for example improvements in technology that drive greater efficiency, how could the public sector have better confidence in the ongoing value for money achieved from hard facilities management and lifecycle risk transfer?

Question 34

Are the insurable risks of PFI projects most appropriately dealt with (a) by the private sector with a fixed cost passed through to the unitary charge, (b) by a premium risk sharing mechanism or (c) by the public sector? Please specify reasons for your choice.

Question 35

Are changes in insurance costs that are attributable to project-specific factors (eg claims-history, poor security, quality of build material, installation of sprinklers, security arrangements , etc) most appropriately borne by (a) the private sector, (b) the public sector, or (c) borne on a shared basis? Please specify how.

Question 36

Are there (a) certain types of project (eg housing, office accommodation, specialist accommodation, highways, street lighting, equipment etc) and (b) certain types of risk (eg negligence of the contractor/supply chain, business interruption cover for banks, officer's liability, statutory cover, third party liability, vandalism, construction phase cover, property damage all risks), which are more/less suited to coverage by the public sector. If so, which are they and why? What are the concerns, constraints or procedures that would be relevant or required for any such public sector self-insurance?

Question 37

If the public sector provided cover for insurable risks for any future PFI projects, what incentives or penalties would be needed to promote a private sector interest in managing risks effectively to reduce/avoid claims?

Question 38

Would you favour the establishment of a framework of insurers for PFI contractors to use (with the use of mini-competitions)? If so (a) should the use of the framework be mandatory and (b) would it lead to better value for money for the public sector compared with contractor-led portfolios?

Question 39

Do you consider that the ratio of premium income to claims paid for PFI projects indicates that (a) commercial insurance does or does not represent good value for money and (b) the commercial insurance market is or is not operating efficiently in this area? Please specify reasons for your view.

Question 40

Should there be more and/or earlier break points in contracts and what would be the expected pricing impact for the public sector? Are there specific points that break points should be linked to?

Question 41

What are respondents' views on the current approach to determining voluntary termination compensation, are there alternative approaches that should be considered, in particular should there be differentiation in compensation amounts reflecting the point at which the termination arises?

Question 42

What degree of financial transparency should be adopted for future privately financed and delivered assets and services?

Question 43

What are respondents' views on the potential extension of project information requirements to periodic financial reporting and disclosure from project sub-contractors and shareholders, including sub-contractor out-turn costs, project equity transfers and achieved project and equity returns?

Question 44

Would a different approach to project governance improve transparency? What if any role should be played by the public sector in the governance of privately delivered and operated projects?

Appendix E

Submission to HMT PFI consultation

The full document submitted to HMT can be found on the ACE website¹⁹

Question 1

Do respondents think that the private sector has a role to play in the future delivery of public sector assets? Are there specific sectors where the private sector should not have a role?

- The private sector will have a role to play in the future of infrastructure delivery. PFI has proven that there can be significant benefits in allowing the private sector to manage construction risk, to aid the timely and effective delivery of construction projects.
- The scale and long term sustainability of PFI as a model will be key to its efficient utilisation. Currently PFI in total has resulted in an excess of just over £50bn worth of projects being signed since 1995. However, this is still small in comparison to total government capital spending (which according to the 2011 budget is estimated to be £53.7bn in 2011-12 period). In addition this sum is also small in terms of the UK's infrastructure investment challenge. According to Policy Exchange's delivering a 21st Century Infrastructure for Britain report stated that Britain has an infrastructure deficit requiring at least £434 billion of new investment by 2020. Given the rate of PFI investment since 1992 to the current (in excess of £50bn) period this leaves a significant short fall if government spending is to continue to be restrained.
- Another key issue that must be addressed in the private sector's involvement within the financing of project, is the shift in attitudes towards risk given the financial crisis. The public/private sector need to outline clearly what risk each party are prepared to accept and the return associated with such risk.
- There needs to be further investigation into the risks and cost of finance in relation to the capex and opex phases of the PFI process as these are important in determining the profile of the private investor and the returns they are prepared to accept.

Question 2

Are there other delivery and procurement models used in the delivery of public assets in the UK and internationally that respondents consider work well? What are the key features of these model(s)?

- Internationally, countries are expanding their use of PFI given that it is an off balance sheet method of investment. Given the financial crisis, it is fair to assume that government expenditure is going to be constrained for possibly a decade or more and so the key will be developing a model which attracts large institutional investors such as pension funds.
- It is important that government utilises a range of model to extract the best value possible from projects. ACE has explored a variety of models in its infrastructure papers which include: Tax Increment Financing (TIF), regional stock exchanges, infrastructure/green bonds, supplementary business rates, PPPs, Initial Public Offerings (IPOs), government borrowing/leverage.

- Canada provides a few examples of how the UK could further improve its PFI model. Whilst the development of significant PFI deals in Canada is still a relatively new phenomenon, the government plays a far more active role in ensuring that risks are mitigated and placing its full support behind the PFI model. This support has meant that a number of PFI projects hold A ratings, whereas in Europe projects are considered to be weaker in terms of their performance and risk and so achieve lower ratings. While the level of risk reduces significantly after the construction phase in Canadian PFI projects, credit agencies take this into account in their risk profile. European projects, on the other hand continue to be rated at their BBB status even following construction as they begin the relative lower risk operational stage. As such the role of the public sector should be given greater recognition in the assessment of PFI risk.

Question 3

How should the use of private finance be evaluated when considering the best procurement route to deliver a public asset?

- Private finance needs to be evaluated based on a 'cost in comparison to government expenditure', and the returns that are available elsewhere in the private sector. This may mean that there may have to be flexibility in the stages at which private finance are sought.
- Private finance should be considered where projects have demand conditions that can be forecast accurately. This certainty is important as it provides the private sector with the information it requires to make an accurate assessment of the capital costs, risks and returns. Certainty of demand conditions also reduce the risk the public sector is taking with the possibility of significant projects problems (that may require action from the state) in relation to adequate returns to finance the debt undertaken being less likely.
- The public sector should consider private finance where the outcome of a project is clear. This does not mean that the project has to be specified to exacting detail -limiting private sector innovation - but instead should be clear in terms of how it is expected to perform, and the goals it has to achieve.
- The procurement stage of the PFI process is significantly more expensive and intensive in terms of time for both government and industry than traditional government forms of spending. Part of this cost will be because the parties involved need to clearly define their roles and responsibilities, raise private finance, negotiate a suitable return and form the special purpose vehicle. This lengthy process causes uncertainty for investors. In addition this process constitutes a significant amount of time and effort from industry.
- Set out a clear procurement schedule for local departments. This target should vary for differing project sizes and aim to provide certainty to the market, whilst minimising the costs for different sizes of private sector participants to ensure that the PFI model utilises efficiently the skills that are available.

Question 4

Are there features of the PFI model that should be retained?

- The management of construction risk should be retained as PFI is one of the few models that has successfully transferred this risk away from the public sector.
- The ability of the government to allocate the risks to the party that is most suitable and able to manage them should be a concept that is utilised when possible to increase efficiency, and reduce costs.
- Models including PFI should encourage projects to be delivered on time and on budget. For example this could also be achieved with fixed price contracts.
- PFI provide another means of project finance and delivery, in addition to the government's traditional means of finance.
- Public sector models should encourage the sharing of knowledge and best practices, especially with regards to risk assessment processes and due diligence
- PFI is currently one of the better models in terms of encouraging innovation and whole life costing. Ideally this feature of PFI should be retained as it reduces the costs of operation and so improves the returns that can be made. This should in turn create a conducive environment for innovation, sustainability, and productivity.
- PFI requires the public sector to specify in detail service requirements. This makes the private sector critically analyse its provision and performance requirements, and the time period of PFI helps to promote long term thinking and engagement.

ACE economic and policy papers

This paper forms part of a growing portfolio of research by ACE into the effects of infrastructure on the wider economy. The papers below outline the case for funding, a variety of funding methods including traditional and new forms of infrastructure spending stimuli, and more detailed sector specific issues such as retrofitting and microgeneration.

The 2012 budget

ACE's analysis - A comprehensive analysis of the 2012 budget, the economic and fiscal outlook from the Office for Budget Responsibility and the Infrastructure Delivery Update

Budget submission 2012

Budget submission to HM Treasury for 2012

ACE reports on detail of Autumn Statement

A full analysis of the Chancellor of the Exchequer's Autumn Statement, the updated National Infrastructure Plan and the Office of Budgetary Responsibility report on the economy.

Barriers to Investment

Explores a wide variety of aspects that act as barriers, or significantly change the risk profile of an investment project. These processes are important within the investment cycle and should be understood by all parties involved

Infrastructure: A case for funding

This infrastructure report reviews and analyse a range of material that is openly available to ascertain what effect infrastructure investment has on the economy.

The Infrastructure Investment Trust

ACE proposes a supplementary model to PFI initiatives, to read the executive summary please click [here](#)

Retrofitting the UK's housing stock

This paper is intended as a conversation starter on how retrofitting might be taken forward in the residential sector

Department for Infrastructure

ACE makes the case for a new department to support government and infrastructure

Spending efficiency

This paper makes the case for a balanced scorecard approach to achieving efficiency

Infrastructure funding

a range of options in its latest policy paper: Infrastructure Funding

Avoiding the infrastructure crunch
ACE identifies the problems and suggests policy solutions

Infrastructure bank

ACE sets out the case for an infrastructure bank

Infrastructure gilts

ACE's proposal to create an infrastructure gilt to drive investment in transport, energy and utilities and

Infrastructure assessment

ACEs proposal for an audit of the UKs existing infrastructure

Microgeneration

ACE finds that support for the development of microgeneration technology needs to be increased if the UK government wishes to speed up the adoption of microgeneration technology.

Transport - UKs Infrastructure Priorities

The survey, carried out on behalf of ACE and CECA reveals businesses attitude and opinions with regards to the UKs current and future provision of transport infrastructure.

End notes

¹Grahame Allen, House of Commons, economic policy and statistics section, The Private Finance Initiative (PFI) 2001 ([click here](#))

²OBR website, About us, Jan 2012 ([click here](#))

³OBR, Fiscal sustainability report, July 2011 ([click here](#))

⁴HM Treasury, Reform of the Private Finance Initiative, 2011, ([click here](#))

⁵Bank of England, Trends in Lending, January 2012 ([click here](#))

⁶Bank of England, Financial Stability Report, December 2011, issue No. 30, ([click here](#))

⁷House of Commons – Treasury Committee, Private Finance initiative, Seventeenth Report of Session 2010-12, 18 July 2011 ([click here](#))

⁸HM Treasury – PFI data, 2011 ([click here](#))

⁹Helm, D, Wardlaw, J & Caldecott B, 2009, Delivering a 21st Century infrastructure for Britain, Policy Exchange

¹⁰According to Policy Exchange this figure is based on estimates of “simultaneously replacing aging infrastructure and investing in new infrastructure to improve our competitiveness, while meeting the challenge of decarbonisation” (2006:p6). This is seen as a conservative financial estimate and is on top of the spending needs of public sector infrastructure in schools, hospitals and IT systems.

¹¹Linear equation result - $y = 5.3335x + 16.484$, $R^2 = 0.7627$

¹²Appendix B contains plots for each individual department

¹³A small number of projects have been removed given incomplete data fields

*Data is only available for one or a limited number of projects and so the average represents the performance of that project. Due to a limited sample size this data is likely to be less reliable than those projects with larger data samples

¹⁴Science and Technology Committee, Public procurement as a tool to stimulate innovation, May 2011 ([click here](#))

¹⁵A small number of projects have been removed given incomplete data fields

¹⁶UK Private Finance Initiative Projects: summary data, 2011, ([click here](#))

¹⁷BBC, Peterborough City Hospital's £46m government 'bailout', Feb 2012 ([click here](#)) and The Guardian, Peterborough and Stamford hospitals trust faces £60m loss, March 2012 ([click here](#))

¹⁸HM Treasury, Reform of the Private Finance Initiative, 2011, ([click here](#))

¹⁹PFI consultation submission, February 2012 ([click here](#))

Further information

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