How to Have Your Cake and Eat It

Government accounting for PFI[1]

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This article is about how the capital assets in private finance initiative (PFI) schemes are treated in government accounts. Although on the face of it a technical accounting matter, this subject raises extremely important issues affecting all of us. Among these issues is the way in which the perceived need to qualify for particular accounting treatments has distorted the nature of projects, and the concealment of a substantial hole in the public finances.

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We begin by describing how public-sector obligations in relation to the capital assets of PFI schemes are accounted for in the national accounts, and also, using different accounting standards, in departmental accounts. Neither approach is satisfactory; and as we will see, the introduction of International Financial Reporting Standards for accounting for PFI in departmental accounts has not led to the improvements that were hoped for.

[1] A shorter version of this article originally appeared in the *Scottish Left Review*, Issue 58, May 2010.

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We then consider the implications of information obtained using Freedom of Information for the way PFI schemes actually behave in practice. Analysis of this data suggests that the methods used in the national accounts, and in departmental accounts, seriously underestimate the true scale of PFI obligations. The data also indicate potential weaknesses with the risk-based test for assessing whether a PFI asset should come on to the public sector's books in the national accounts – with the implication that many more PFI schemes should be brought on-book.

A typical PFI project involves a long term (25- or 30-year) contract between the public sector and a private consortium, for the provision of a serviced asset, like a school or hospital. The public sector makes a regular payment, known as the unitary charge, to the consortium throughout the operational phase of the contract. This payment covers both the use of the capital asset and the provision of the services specified in the contract.

When it comes to the government accounting for PFI schemes, the key question is should the capital asset involved in any particular scheme appear on the books of the public sector. In fact, there are actually two different sets of government accounts in which a given PFI asset might appear, and hence two different on/off-book decisions to be made. First of all, should the asset appear in the accounts of the specific government department involved and, second, should it appear in the national accounts compiled by the Office for National Statistics (ONS)?

Both of these sets of accounts are very important – for different reasons. Decisions about whether a project should go ahead are taken at departmental level, whereas the national accounts matter because they are the key focus for determining the overall sustainability of the public finances.

A bizarre, and little appreciated, point is that in the UK these two different on/off-book decisions are in fact governed by different accounting standards. Departmental accounts are governed by rules for government financial reporting, which, prior to 2009, were designed to be consistent with International Accounting Standards and International Capital Reporting Standards. National accounts, however, are governed by the rules of the UN System of National Accounts and the European System of Accounts, as interpreted by ONS. The two sets of standards are significantly different: national accounting standards generally take a more restrictive view of what constitutes a liability for the public sector (Maitland-Smith 2009).

Up until 2009, the difference between the two sets of standards did not matter in practical terms as regards PFI: both standards led essentially to the same test for a PFI scheme, based on the degree of risk transferred to the private sector. If sufficient of the risk involved in the project were transferred to the private sector, then the capital asset associated with the scheme would appear neither in the relevant departmental account, nor as a government asset in the national accounts – that is, the asset would be off-book as regards both sets of accounts (Kellaway 2008; Maitland-Smith 2009).

From the early days of PFI, the government's attitude was perfectly clear: PFI schemes should be designed so that they were 'off the books' (NAO 2010, para. 3.21). There were a number of apparent advantages to this. Departments were able to get the benefits of new capital expenditure without breaching their capital expenditure control limits, and government was able to set about renewing the infrastructure of the state without adverse effects on measures of fiscal sustainability.

Of course, these particular advantages are more presentational than real. But, nevertheless, those involved in capital procurement in the public sector knew that PFI schemes were very unlikely to be approved unless they were 'off the books' (Heald 2010, para. 6). So public authorities set about designing PFI schemes that would pass the off-book test. This involved, for example, developing schemes where the provision of the capital asset was inseparably bound up with delivery of associated services. These schemes were known as 'non-separable' schemes, and the point of non-separability was that the external auditor who was charged with classifying the scheme as on or off the books, would not be able to regard the delivery of the capital asset as a self-standing project on its own – and so would be much less likely to class the asset as 'on-book'.

It is at this point that an important boundary is crossed, where accounting treatment starts to affect the real world. The need for PFI schemes to be non-separable has a number of adverse consequences. Non-separable schemes are, by definition, complex, and probably large – so reducing the number of firms that can compete for such projects, and hence reducing the competitiveness of the market. Complex, non-separable contracts are inherently more difficult for the public-sector client to scrutinise effectively. Further, because of complexity, there is often a long period between choosing the preferred bidder and the signing of the contract,

during which time costs can rise substantially. All of these aspects, therefore, are likely to reduce value for money for the public sector. In addition, the large size of non-separable projects reduces the number of local firms who can compete – with adverse effects for the local economy.

In terms of getting schemes off the books, the government's strategy was very successful. Almost all PFI schemes were initially classed by auditors as off-book, and while some of these judgements were later reversed on more detailed consideration, a large majority of schemes remained off-book. For on-book schemes, the liability that initially appears in the national accounts when the project becomes operational is the capital value of the asset; this liability is then progressively reduced over the life of the asset. Of the more than £60 billion of capital assets in signed PFI deals by 2009, only £5 billion of this was reflected in departmental accounts, or in the public sector net debt in the national accounts (Maitland-Smith 2009). This is to slightly understate the eventual effect on public-sector net debt, because there are timing effects at work here as well: schemes do not come into the accounts until construction is completed, even if they are classed as on-book. Nevertheless, it is clear that, under the present accounting treatment in the national accounts, PFI has apparently had a minimal effect in increasing the overall financial liability of the public sector – the important word here, of course, is 'apparently'.

It rapidly became clear that there were nonsensical aspects to this PFI accounting regime. For one thing, while most PFI schemes were off the government's books, many schemes were also classed by the private-sector operators as being off their books, too, since there were tax advantages in doing this. As a result, the capital assets of a large number of schemes were being accounted for in the books of neither the public nor private sectors (Heald 2010, para. 7). Further, it also became clear that the assessments of risk transfer that were being made were, in many cases, highly questionable. For example, it was very suspicious that the amount of risk transferred often turned out to be just sufficient to make the PFI option marginally cheaper than the public-sector comparator (Heald 2010, para. 6).

Following criticism along these lines, there was a general welcome for the announcement made in the March 2007 budget that government would be altering the way in which departmental accounts are compiled. Technically, what the government announced was that it was moving to International Financial Reporting Standards as a basis for

compiling departmental accounts, rather than the approach laid down by International Accounting Standards. For PFI schemes, this meant that the old risk-based test would be replaced by another test, under which the capital asset would come on-book if either the public sector retained a substantial right in the residual asset at the end of the concession period, or if the public sector controlled the terms on which the service associated with the PFI scheme was delivered to the public. Since most PFI schemes will satisfy both of these criteria, it was clear that the adoption of the new approach as from 2009 would bring almost all PFI schemes on-book as regards departmental accounting.

It was, however, premature to assume that this change was going to solve any of the substantive problems surrounding PFI accounting. First of all, as we have explained, departmental accounts are compiled to different standards than those ONS uses in compiling the national accounts. ONS quickly made it clear that the adoption of a new approach for departmental accounting had no implications for its handling of the national accounts – and that the new approach would not result in any greater number of PFI assets being included in the national accounts (Kellaway 2008). Even at the departmental level, the Treasury announced in 2009 that it was breaking the link between departmental accounting and budgeting (HM Treasury 2009). Henceforth departments would have to keep two sets of books: for the purpose of producing their annual accounts, PFI assets would indeed be included, but as regards capital controls and budgets, the old risk-based test for PFI assets should continue; departments therefore have the same incentive to classify schemes as off-book on the risk-based test, in order to avoid capital budget constraints.

So, in fact, the widely heralded change announced in 2007 has solved none of the problems with PFI accounting. What has happened is a classic example of government having its cake and eating it – that is, professing the highest accounting standards, while acting in such a way that the effect of the standards is actually circumvented. It is interesting to note that the House of Lords Select Committee on Economic Affairs (House of Lords 2010), which could not in any sense be described as an anti-PFI body, was nevertheless heavily critical of the way departments will in future have to run two sets of books for PFI.

The publication of aggregate figures for PFI assets and liabilities under the new rules adopted for departmental accounting illustrates other

unsatisfactory aspects of the government's approach. The relevant publication is the Whole of Government Accounts (WGA), published for the first time in audited form in November 2011, and covering the year to March 2010 (HM Treasury 2011). The headline figures quoted in that publication were as follows: 'At 31st March 2010, the net book value of PFI assets was £30.9 billion and the associated liability for capital repayments was £28.1 billion. The present value of future obligations was £131.5 billion, including service charges and some life cycle replacement costs.'

These figures from the WGA have, however, to be interpreted with care, and are not really intelligible as they stand. We contacted the Treasury for further details on how the WGA were compiled. The headlined £28.1 billion liability figure represents only the value of capital repayment liabilities – and excludes interest payment liabilities. Similarly, the figure of £131.5 billion is the sum of PFI obligations for capital repayments plus services, but excludes obligations for interest payments. Both of the headlined figures therefore exclude interest payments; this way of presenting the figures is, at best, unclear and, at worst, misleading.

The figures for PFI liabilities that appear in the national accounts and in the WGA both relate initially to the capital value of the relevant asset; they do not take into account future obligations to make interest payments. The question then arises: is this an appropriate way to value the liability of the public sector? The public sector, after all, has obligations to make both capital repayments and interest payments in relation to PFI assets. If these streams of payments were valued (that is, if their net present values were calculated at an appropriate discount rate), how would the result relate to the initial capital value of the asset? If the net present value of the payment streams were much greater than the capital value of the asset, this would call into question the validity of the national accounts and WGA approaches.

At this point, we are entering into an area that can be examined only by looking at how PFI schemes behave in practice, and it is also an area where we ourselves have carried out relevant research. Detailed information on how PFI schemes behave is very difficult to obtain because it is classed as commercial in confidence. We were fortunate to obtain, by means of Freedom of Information, the detailed financial projections produced by the operating consortia for eight PFI projects at the time when the final contracts for the schemes were signed. These projections give

detailed cash flow statements for each of the consortia, over the life of the contract, showing the inflows and outflows of funds for all purposes. The projections relate to three hospitals, one further education college, three schools projects and one office project, all but one of which are located in Scotland, and with start dates for construction between 1998 and 2006. (We are grateful to Unison, the public-sector trades union, for obtaining some of these projections.)

One of the things we were able to do with these detailed projections was to split down the stream of unitary charge payments into two components: one covering the cost of the services (that is, operations, administration, maintenance and life-cycle costs), which will be provided as part of the PFI contract; the other being essentially the payments that will fund the initial capital used in the project. We have called this latter stream of payments the non-service element (NSE) of the unitary charge. It is this latter stream of payments, the NSE, which represents the liability that the public sector has undertaken in order to secure the availability of the capital asset. The problem is, how should this stream of payments be converted into a single figure representing the cost to the public sector? An appropriate way to do this is to calculate how much the public sector could have borrowed, for the same cost as the stream of payments, had it gone down the normal public-sector route of borrowing from the National Loan Fund. This is assessed by working out the net present value (NPV) of the stream of NSE payments, calculated at a discount rate equal to the National Loan Fund interest rate (which was effectively 5% during the period in question).

The results of this calculation are shown in Table 1. In this table, the NPV of the non-service element of the unitary charge has been expressed as a ratio to the NPV of the capital raised in building the original asset. (The reason that the NPV of capital raised has been used in the denominator of this ratio, rather than the nominal value of the capital raised, is that capital investment usually takes place over a few years. But the NPV of capital raised will be very close to the nominal value of capital raised.)

In each of the eight schemes, the ratios of NPV to capital indicate that the cost of the liability the public sector was taking on was much greater than the cost of the capital asset. In fact, in six of the eight cases, the liability was more than one and a half times the cost of the capital asset; and, in three cases, the liability was effectively twice the cost of the capital asset.

Table 1: Eight PFI schemes – capital raised, total non-service element payment and ratio of net present value to capital

Scheme	Capital raised (£m)	Total NSE payment (£m, nominal)	Ratio of NPV to capital discounted at 5%
A	189.2	760.2	2.04
B	73.4	330.2	1.97
C	74.9	257.4	1.68
D	6.5	23.6	1.97
E	20.7	73.8	1.82
F	20.3	55.2	1.49
G	16.3	55.1	1.60
H	85.5	228.3	1.28

These results do not mean that PFI is necessarily twice as expensive as public procurement: the public is also getting an element of risk transfer for the stream of capital payments. But, for present purposes, what matters is that the liability being taken on by the public sector on PFI contracts is clearly commonly very much larger than the cost of the capital asset being provided. So the way in which the liability relating to a scheme is calculated for WGA, or for the national accounts, can grossly understate the extent of the actual liability being taken on by the public sector. (For the avoidance of doubt, we should stress the point that the liability we are talking about here relates solely to the provision of the capital asset; we have taken payments for services right out of our calculation. There are, of course, significant contractual liabilities attaching to future PFI service provision too, but that is not the subject of this article.)

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The PFI projection data also show something else very relevant – namely, just how profitable PFI schemes can be for the original equity investors. As we will argue, this has important implications for the risk-based test for bringing PFI assets on-book in the national accounts. In a typical PFI project, the original equity investors (the members of the PFI consortium) provide about 10% of the capital required, the remaining 90% being in the form of senior debt. The capital put in by the equity investors comes in the form of subordinate debt, and pure equity; we refer to

the aggregate of subordinate debt plus pure equity as broad sense equity. Table 2 deals with the return on broad sense equity. What the table shows is the internal rate of return (IRR) earned on this broad sense equity. It also shows the average debt on which this return is projected to be earned, averaged over the lifetime of the project, expressed as a percentage of the capital raised through broad equity.

Since the concept of the average debt on which an IRR is earned may be a relatively unfamiliar measure, it is worth saying something about it. In a standard loan, where capital is paid off in equal instalments over the period of the loan, the average outstanding debt on which the IRR is earned will be just over 50% of the original loan. For a mortgage-type loan, average debt will typically be around 60 to 70% of capital, depending on the interest rate and the period of the loan. For a bond, where interest is paid as it accrues, but all of the capital is paid off in a single repayment on termination, average debt is clearly 100% of capital. For schemes where unpaid interest rolls up, however, average debt may be larger, perhaps much larger, than initial capital. (The measure we have called outstanding debt is equivalent to the concept of unrecovered investment, which is usually attributed to Soper (1959).)

In all of the eight schemes in Table 2, the annual return on the combined input of subordinate debt and pure equity was 15% or more; moreover, these IRRs were earned on an average outstanding debt, which in each case was more than 100% of the capital invested – and in five of the eight cases, was more than twice the capital actually invested. The relevance of these high average debt figures is that, if an equity investor were selling

Table 2: Eight PFI schemes – IRR on broad sense equity, and average debt on which this IRR earned as % of capital

Scheme	IRR on broad sense equity (%)	Average debt as % capital
A	17.7	205.5
B	23.2	234.0
C	20.8	152.9
D	18.1	252.9
E	18.6	283.7
F	16.9	117.9
G	16.3	204.4
H	15.0	138.2

off their interest in a PFI project in the secondary market to an investor (say, a pension fund) who was looking for a return lower than the original equity IRR, then the value the pension fund will be willing to pay will be higher, the higher the average debt figure is. So a proper assessment of the potential profitability of a PFI scheme to the original equity investor has to take account not just of the original equity IRR, but also of the average outstanding debt on which this IRR is being earned. On both these measures, the evidence in Table *2* suggests very large potential profits for equity investors.

The relevance of this for present purposes is that the equity capital providers are the primary risk takers and, if their returns are very large, the extent to which they can be said to be truly bearing risk is very limited. Where equity returns are very large, the phrase 'having a flutter with public money' comes to mind, rather than meaningful risk transfer. The implication is that the extent of projected profit should be taken into account in the national accounts risk transfer test, in which case many more PFI schemes would presumably come on-book in national accounts terms.

In summary, the analysis of the empirical data indicates that the cost of the obligation taken on by the public sector in relation to the capital asset of a PFI scheme is commonly much larger than the cost ascribed to that obligation in the WGA, or (if the scheme is on-book in the national accounts) in the national accounts. Moreover, the empirical evidence calls into question the soundness of the risk-based test for assessing whether a scheme should be on-book in the national accounts.

Overall, what we have here is a sorry tale. Government, while professing adherence to the highest international accounting standards, has so managed things that the public finance liability for PFI assets has been grossly understated. Far from the trivial £5 billion PFI liability that currently appears in the national accounts, a reasonable view of the actual liability would probably be greater than £60 billion – perhaps much greater. The warning signal, which should have indicated the extent of this deepening liability as it was incurred, had been overridden. Nor, as we have seen, has the recent production of the Whole of Government Accounts properly remedied the situation.

There is now an extremely strong case for a radical review of the whole question of government accounting for PFI schemes.

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