

## **SUPPLEMENTARY GREEN BOOK GUIDANCE**

### **ADJUSTING FOR TAXATION IN PFI vs PSC COMPARISONS**

#### **1 INTRODUCTION**

1.1 This guidance looks at the differential tax receipts that arise from the use of the Private Finance Initiative (PFI), compared to traditional public sector procurement. It provides the recommended approach for estimating the differential tax receipts as a proportion of the net present cost of the Public Sector Comparator (PSC), to correct any potential bias.<sup>1</sup>

#### **2 SCOPE**

2.1 Many of the principles in this guidance note will also be appropriate to schemes under the wider Public Private Partnerships (PPP) initiative. The flowchart in section has, however, been prepared for a typical PFI structure and should not be used for either non-PFI PPP schemes, pathfinder projects, innovative or particularly complex projects. In these cases, if required, a project specific factor should be calculated.

2.2 This note does not provide guidance on general taxation issues relating to PFI, which should be sought from the Office of Government Commerce, and from tax advisors where appropriate. If advisors are used to provide such general advice, this note should form part of their instructions.

#### **3 RATIONALE**

3.1 The Green Book recommends that the adjustment of market prices is appropriate where it may make a material difference to the appraisal decision. In practice, it is relatively rare that adjustments for taxation are required, because similar tax regimes usually apply to different options. It can also be difficult in practice to estimate costs net of tax. However, where the tax regimes applying to different options vary substantially, this should not be allowed to distort option choice. This note provides guidance in one area – PFI versus PSC comparisons – where tax differences may be material to the appraisal. If so, they need to be stripped out to ensure like-for-like comparisons in terms of their resource costs, net of tax.

3.2 The Appendix to this guidance note provides further information on the approach that was taken to developing the adjustments.

---

<sup>1</sup> The guidance was prepared from advice provided by KPMG, *Report on identifying and measuring the differential tax receipts from Private Finance Initiative schemes for the purpose of economic evaluation against a Public Sector Comparator – Working Methodology*, KPMG (July 2002), available at [www.hm-treasury.gov.uk/greenbook](http://www.hm-treasury.gov.uk/greenbook).

## 4 OBJECTIVES

4.1 The main objectives of applying this guidance note are to:

- Estimate the difference in tax liabilities between public (PSC) and private (PFI) financing of the same project; and therefore to
- Provide a better estimate of the net present cost of the PSC.

4.2 The guidance should not be used to forecast actual tax payable, nor to compare competing PFI bids, which should be assessed on a gross cost basis.

## 5 MAKING THE ADJUSTMENT

### Introduction

5.1 The appraiser should make a percentage adjustment to the net present cost of the PSC by using the flowchart set out below. The flowchart is designed for general users who are appraising capital projects for the procurement of accommodation, equipment or transport infrastructure services from the private sector. Although each project will have its own unique aspects, the flowchart is designed to cover a wide variety of projects.

### Using the flowchart to determine adjustment factors

5.2 The flowchart has been prepared to enable a user with a thorough understanding of their own project to be able to answer the questions relatively straightforwardly. Effective use of the flowchart requires the user to understand the key corporation tax risks in relation to the particular project. Working through the steps in the flowchart requires some judgments to be made, and the main considerations are set out below. It may be necessary to seek tax advice on occasion.

### Step One

5.4 The starting factor is always 2%, which is equivalent to the bottom of the range of likely results. It represents a tax efficient project with relatively low capital expenditure and low risk.

### Step Two

5.5 The user needs to consider the extent to which the PFI project requires the provision of soft services, e.g. custodial services, cleaning, portering, low level maintenance. There are four boxes depending on the relationship between the cost (nominal and undiscounted) expected between the soft services and the capital value of the project. If the expected level of soft services in the project does not fit within the stated ranges in the flowchart, then there is guidance in Section 5.1.

### Step Three

5.6 This step involves a series of questions which relate to the tax treatment of project expenditure.

5.7 The user needs first to consider the extent to which the lifecycle maintenance in the PFI scenario relates to new building and improvements rather than to repairs.

5.8 The decision will lead the user down either the left hand column or the right hand column. There is no crossing between the columns in the flowchart.

5.9 The user will then need to consider whether the project is likely to be on “capital account” for tax purposes. This question is fundamental but can be difficult to answer. The question being asked is will the private sector supplier have a trade of building, designing, financing and operating a facility on behalf of the procurer, or a trade of providing services in relation to a facility it is “hiring” to the procurer? The former position suggests “revenue account” treatment and the latter position suggests “capital account” treatment for tax purposes. The choice of answer given can have very different tax consequences and having identified the most robust position based on the key characteristics of the project, the procuring body should proceed to structure the detailed drafting of the project to be consistent with this position as far as possible taking account of commercial constraints. This would minimise the tax risk arising from uncertainty that has to be priced by the private sector. If the project is considered to be on “revenue account” for tax purposes then proceed to step four.

5.10 If the project is considered to be on “capital account” there are further questions that relate to the manner in which the private sector bidder in the PFI scenario is likely to obtain tax relief for its initial expenditure. There are further questions as to the likely eligibility of expenditure for tax relief through the Industrial Buildings Allowances and Plant and Machinery Allowances regulations. There is specific tax legislation dealing with these particular questions, but the project may not be sufficiently developed to be sure of the correct answer. However, in the evaluation the user will need to make an assessment as to how likely expenditure is to qualify for particular allowances and within particular bandings.

5.11 Depending upon the answer given to a particular question, the user either proceeds down the flowchart or direct to step four.

#### **Step Four**

5.12 The user needs to consider how risky the private sector is likely to view the particular project should the PFI route be adopted.

#### **Accumulated factors**

5.13 Having worked through the four steps, the user can now quantify the total adjustment to be made to the PSC. This will give a factor with an accuracy of +/- 3 percentage points in most cases, which should be used as upper and lower bounds for sensitivity analysis. The range of results gives a basis from which to appraise and evaluate the PFI option against the PSC.

#### **Adjusting the PSC**

5.14 Use of the flowchart assumes that the project will be the same whichever procurement route is adopted (PSC or PFI). Therefore it is important that adjustments are made to the correct base number. This will be the present value the costs of the PSC that would otherwise transfer to the PFI option. Other PSC costs that would

remain with the public sector under a PFI option (and therefore not be subject to corporation tax) may need to be deducted to reach the correct base number.

5.15 The base number should be multiplied by the accumulated adjustment factor, and the result added to the net present cost of the PSC.

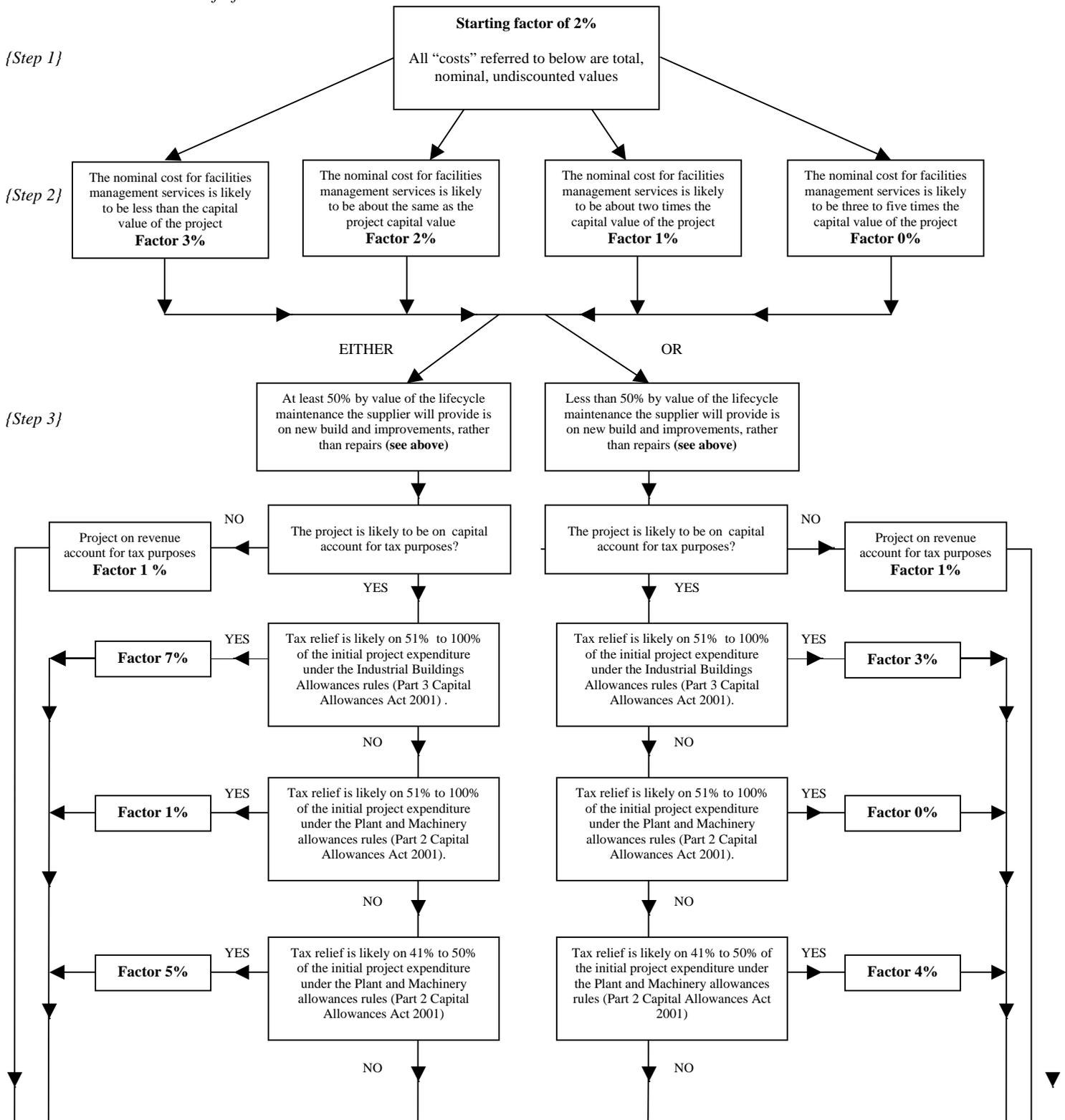
### **Using and presenting the results**

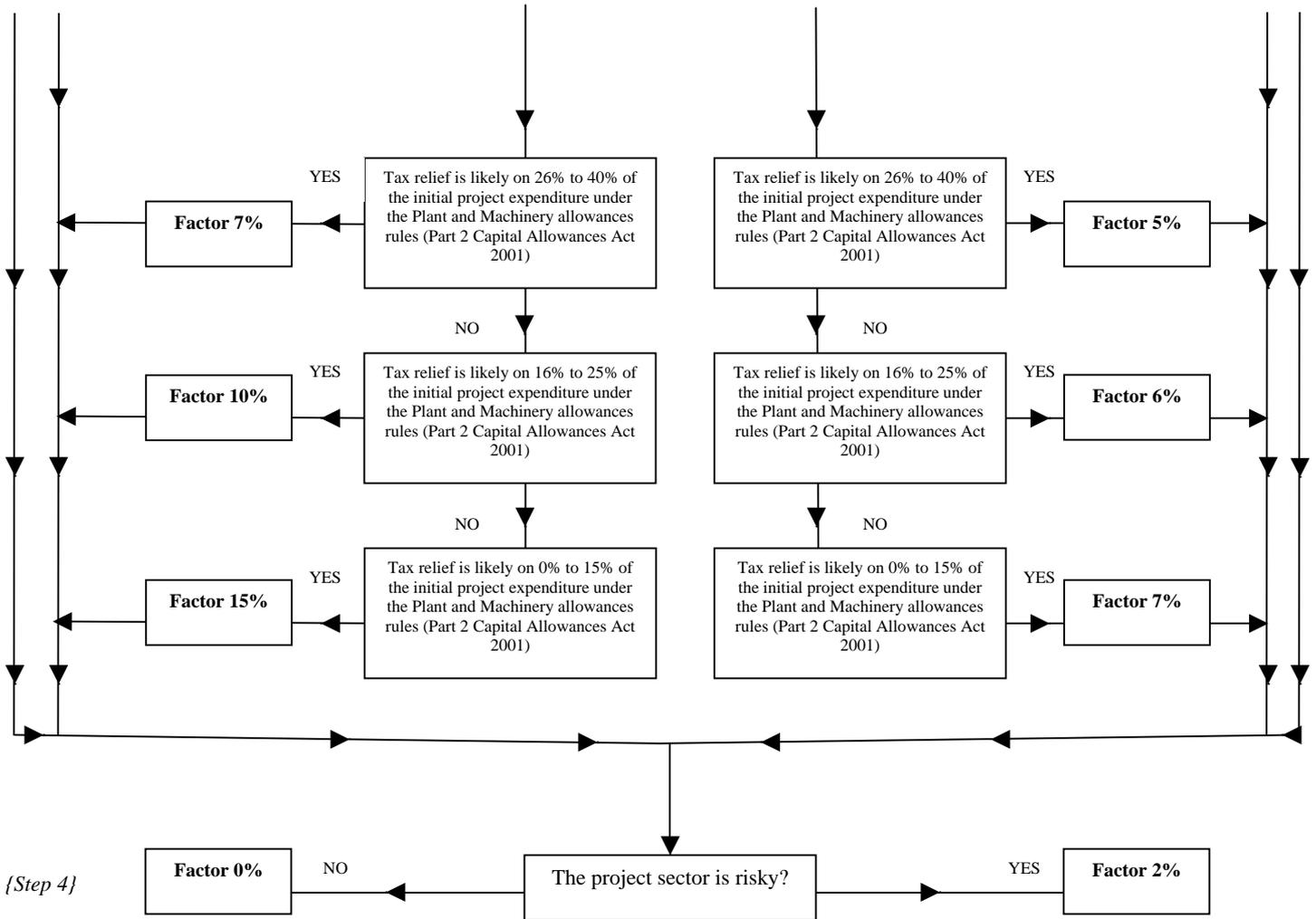
5.16 The recommended sensitivities of +/- 3% should inform the overall risk and uncertainty analysis. If the taxation adjustment is shown as a separate piece of analysis, the range of results, not just the central value, should be shown.

**PUBLIC SECTOR COMPARATOR ADJUSTMENT FLOWCHART**

Reference should be made to the explanatory notes on pages 1-4 of this guidance.

*Projects on ‘capital account’ for tax purposes are likely to include projects that are to some extent free standing financially or joint ventures between the Purchaser and the Supplier. They could also include projects where the Supplier is providing services in relation to a facility it has built and is ‘hiring’ to the Purchaser for its own use. Projects on ‘revenue account’ for tax purposes are likely to be projects where the Supplier is designing, building and operating a facility on behalf of the Purchaser.*





{Step 4}

<b>Accumulation Table</b>		
	<b>Guide</b>	<b>Factor</b>
Step 1	Always 2	2
Step 2	0 to 3	
Step 3	0 to 15	
Step 4	0 or 2	
Percentage adjustment to PSC		
<b>Range</b>		
+ 3 per cent		
- 3 per cent		

*This flowchart is based upon corporation tax law and practice at April 2002, which is subject to change. The flowchart will need periodic review to ensure it remains consistent with tax law and practice and with developments in the PFI market.*

**This flowchart should not be used to forecast actual tax payable by a private sector bidder.**

## 6 WORKED EXAMPLE

6.1 A local authority is evaluating whether to procure two new secondary schools, either directly with public funding, or through PFI. The adviser should calculate the factor to adjust the PSC to ensure that the differential tax receipts form part of the appraisal and evaluation. It is known that:

- There are expected to be bids from various private sector consortia experienced in building schools under the PFI. Each would probably set up a SPV;
- The capital expenditure on the new schools is likely to be £30 million. The schools are typical schools with classroom and recreational facilities. They need IT infrastructure. Approximately 35% of the capital expenditure will be incurred on fixtures, fittings and equipment;
- The schools will need ongoing maintenance and repair work but little new build or improvement. Sufficient money needs to be spent on the schools for them to be in full working condition for at least twenty five years after they have been built. The school children will be provided with daily meals at lunchtimes. The estimate is that all these services will cost the authority £30 million over the next twenty five years;
- It is unclear at this stage, whether the schools would be built by the SPV to be made available to the local authority (i.e. on capital account for tax purposes) or whether in substance, they are being built for the local authority (i.e. on revenue account for tax purposes). Under either scenario, the schools would not necessarily be recorded as assets on the local authority's balance sheet (this would be a matter to consider separately); and,
- As schools have been provided under PFI for many years, the sector is not considered to be particularly risky. The risk capital is therefore likely to attract a relatively low interest coupon and banks are likely to lend 90 percent of the funds.

6.2 Working through the flowchart would produce the following PSC adjustment factor:

### **Step One**

6.3 Start with a factor of 2%.

### **Step Two**

6.4 On the basis that the nominal price of services over the project life is likely to be about the same as the cost of building and fitting out the schools, the factor here is 2%.

### **Step Three**

6.5 The main works, after the initial capital expenditure, will be repairs and maintenance rather than new build or improvements. Proceed to the right hand column.

6.6 It is not clear whether the project is likely to be on revenue or capital account for tax purposes for the private sector special purpose company. Consider this fully, and obtain advice if necessary, but for now use both options for the purpose of finding a starting factor.

6.7 If the view is that the project is on revenue account make 1% the factor and proceed to step four.

6.8 If the view is that the project is on capital account proceed down the flowchart. Local authority secondary schools are not regarded as industrial buildings for tax purposes and it is assumed that approximately 35% of the capital expenditure will relate to fixtures, fittings and equipment. Continue down to the box where between 26% and 40% of initial expenditure qualifies for capital allowances under the plant and machinery tax rules. Make the adjustment factor here 5%.

#### **Step Four**

6.9 Schools are in a fairly mature PFI sector so there is unlikely to be a further adjustment unless there is a significantly risky aspect to the project.

#### **Accumulated Factors**

6.10 On revenue tax treatment the accumulated factor is 5%. On capital tax treatment the factor is 9%.

6.11 Then apply the accumulated factor to the NPV of the £30 million capital spend and the £30 million of services. For the purpose of this example, the net present costs are given as £27 million and £13 million NPV respectively. In the case of revenue tax treatment apply the figure of 5% to £40 million to give an adjustment figure of £2 million NPV, and a total PSC NPV of £42 million. The NPV in this example is based on an annual real discount rate of 3.5% and inflation of 2.5% with the costs spread evenly over the construction and operating periods respectively.

#### **Using and presenting the results**

6.12 If shown as a separate piece of analysis, the adjustment (assuming revenue tax treatment) should be recorded as £2million, within a possible range between £0.8 million and £3.2 million.

6.13 The recommended ranges should be used to inform the overall risk and uncertainty analysis.

## APPENDIX

### 1 APPROACH TO DEVELOPING THE FLOWCHART

#### Users of the flow chart

1.1 This section gives more detail on the methodology behind the flowchart. The flowchart was developed for the general user by KPMG. It contains a limited number of questions to enable the user to find the PSC adjustment factor for their particular project. These questions have been derived from a sequence of complex testing from a variety of PFI project scenarios. They enable the general user to find an approximate PSC adjustment factor. It does not attempt to provide certainty, but a reasonable and likely range that should be used.

1.2 For a Pathfinder, innovative or particularly complex project it might be appropriate for the user to calculate a project specific factor. In particular, information technology and defence projects are special cases, and based on these findings, will usually require a specific financial model.

1.3 To aid understanding for the general user and to help establish the adjustment factor on the more complex project, there is a summary below of the approach KPMG took in producing the flowchart. In outline:

- KPMG was instructed to create a theoretical model to enable the testing of financial inputs for a range of typical PFI projects with differing characteristics, including tax data. The KPMG model included financial statements, payment mechanism and unitary charge data, debt financing and a tax computation;
- KPMG sensitised the KPMG model based on scenarios for projects including accommodation, equipment and transport infrastructure schemes. The sensitivity testing took account of a range of selected variables that are discussed more fully below; and,
- The model outputs enabled KPMG to identify the NPV of tax expressed as a percentage of the NPV of unitary charge. The outputs enabled KPMG to examine the main drivers behind the NPV of taxation effects.<sup>2</sup>

1.4 KPMG concluded that the following sensitivities in a PFI project were key to determining the adjustment factor that should be applied to the PSC for evaluation and appraisal purposes:

- The extent to which the expenditure incurred by the contractor qualified for corporation tax relief;
- The extent to which a PFI project required facilities management services as a proportion of capital value of the project;

---

<sup>2</sup> The full terms of engagement are shown in KPMG's report.

- The extent to which lifecycle maintenance (or hard facilities maintenance) related to new build and improvement, rather than repairs; and
- The level of project return that the private sector contractor required, and the amount of shareholder funding. This depends on many factors but crucially on risk. The more mature PFI sectors can obtain a higher external debt:shareholding funding ratio. Typically PFI projects in past two years have a ratio of 85:15 or 90:103

### **Outputs from theoretical modelling**

1.5 In a project funded with private finance under the PFI option, as compared to direct procurement, there are differences in tax liabilities as follows:

- Corporation tax on the profit the private sector contractor requires - taking account of payments by the private sector contractor for which it cannot obtain corporation tax relief;
- Corporation tax on the interest return that the shareholders have on equity they contribute to the PFI project as shareholder debt<sup>4</sup>; and
- Corporation tax on the risk free interest rate of senior debt plus the margin. The assumption here is that tax will eventually be paid elsewhere in the economy on interest receipts from lending to PFI projects.

1.6 The PSC adjustment factors in the flowchart are reached by expressing the NPV of differential corporation tax as a percentage of the NPV of the payments made to the private sector contractor.

## **2 TAX CALCULATIONS AND WORKINGS**

2.1 Sensitising corporation tax inputs has been an essential part of the theoretical modelling and the corporation tax effects are included in the PSC adjustment factors. A corporation tax rate of 30% was used throughout.

2.2 The effects of the following taxes are not included in the PSC adjustment factors for the reasons given:

- Stamp duty could be a significant additional tax in projects that involve a substantial disposal of property by the public sector. The appraisal process should identify this and it should be adjusted for on a case by case basis;

---

<sup>3</sup> As well as the debt:equity ratio, funders can also reflect risk in the equity and debt returns and debt cover and retention ratios.

<sup>4</sup> The SPV's equity element of PFI projects are often now financed with subordinated, or junior, debt. This essentially substitutes for more traditional forms of shareholders' funds but typically allows more consistent recognition of returns. The model assumes that the interest payments are taxed on receipt by the providers of the subordinated debt, and counts this tax in the total.

- The treatment of VAT should broadly be the same for both PFI and PSC options. The appraisal should either include VAT on both options or exclude it for both. In certain cases there may be a redistribution of funds within the public sector because different departments are subject to different rules for recovering VAT;
- The PSC and PFI options are subject to the same rules on employment taxes; if there is evidence for significantly different levels of employment taxes between the two options, the difference should be estimated and included;
- Business rates are paid by the occupier which in both the PSC and PFI is the public sector; and
- A recent change in tax law has introduced a levy on aggregates used in construction which has added significant costs to some projects. Both the PSC and the PFI options are subject to the same rules.

### **Corporation tax sensitivities**

2.3 The KPMG model contains a corporation tax computation built around various assumptions. The main objective of the computation is to calculate the corporation tax liability over the project term based on a variety of project types and sensitivities.

2.4 A tax computation was required because the recognition of profit for tax purposes differs from the recognition of cash and of accounting profit. The KPMG model was designed to highlight the following key differences:

- Permanent differences between taxable and accounting profit;
- Timing differences between taxable and accounting profit; and
- Differences between accounting profit and cash flows.

2.5 The adjustment factor is believed to be a reasonable estimate for evaluation and appraisal purposes based on the current state of the PFI market. It should not be used to forecast actual tax.

### **Detailed tax calculations and workings**

2.6 The detailed calculations allowed KPMG to consider the following:

- The basis on which the PFI contractor's income would be taxed; and
- The basis on which the PFI contractor's expenditure would be allowed for corporation tax purposes.

2.7 In a typical PFI project, the PFI contractor's income under current tax law will be taxed by reference to the tax Schedules A, D Case I and D Case III as set out in Part 1 Income and Corporation Taxes Act 1988. The income may fall entirely within one of these Schedules or in a combination of some or all of them. The treatment of the income is important as it could affect the timing of

tax payments and hence the NPV of tax expressed as a percentage of total income from the public sector.

2.8 The tax treatment of the PFI contractor's expenditure is dependent on various factors. The key question of whether the expenditure is revenue or capital has been raised above. The conclusion reached will determine both the quantum of taxation borne by the contractor and the time at which that tax is payable.