

CONTRACT ISSUES AND FINANCING IN PPP/PFI
(DO WE NEED THE 'F' IN 'DBFO' PROJECTS?)

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INTRODUCTION

Contract design and contracting procedures are at the heart of PPP and PFI. Well designed and well managed contracts are the mechanism by which risk is transferred to the private sector and incentives are thereby introduced for good management of service provision. Whether the outcomes represent ‘value for money’ depends on the precise terms of the contract, how the contract is awarded and how it works in practice over the contract life. Who finances the contract is a secondary consideration, at least when public finances are strong.

This paper analyses the risk transfer characteristics of various contract types and compares them with ‘conventional’ public sector procurement (or in-house provision). It then looks in more detail at PFI / DBFO contracts and DBO contracts identifying the key similarities and differences. It then answers the question: ‘Do we need the ‘F’ in DBFO projects?’ Finally, it looks at options for the future of PPP.

The paper draws heavily on contracting experience for assets and services in the private sector. That experience emphasises that there is not a single ‘best’ approach for all circumstances. It is a case of ‘horses for courses’. This is equally true in the public sector. Moreover, there are distinctive characteristics of the public sector contracting environment which argue for some differences in approach from those adopted in the private sector.

Table 1 sets out the six questions posed by IPPR/CPPP. I have set out (my) answers in this paper.

Table 1

1.	How can long term output oriented contracts be designed to allow flexibility to adapt forms of service provision over time? How much worse is the problem with PFI? What contract forms could improve incentives to take account of shifts in technology, social expectations and other policy goals?
2.	Do PFI contracts really transfer risk and to what extent?
3.	In light of the above, review the methodology adopted by others (NAO, Arthur Anderson) to assess value for money. Is the methodology robust?
4.	Review the respective merits of DBO and DBFO contract arrangements. Can most/all the benefits of DBFO be achieved with DBO? What would be the consequences of adopting this route with Government providing the finance?
5.	How can the awarding of contracts balance the need for competition with the need for innovation?
6.	What skills does the public sector need to develop in order to get the most out of PFI (or DBO) contracts?

PPP and PFI

PPP is (mostly) about the contracting of assets and services from the private sector to, or on behalf of, the public sector where there is no end-market for the service and often where those services are free to the public at the point of use e.g. health, education,

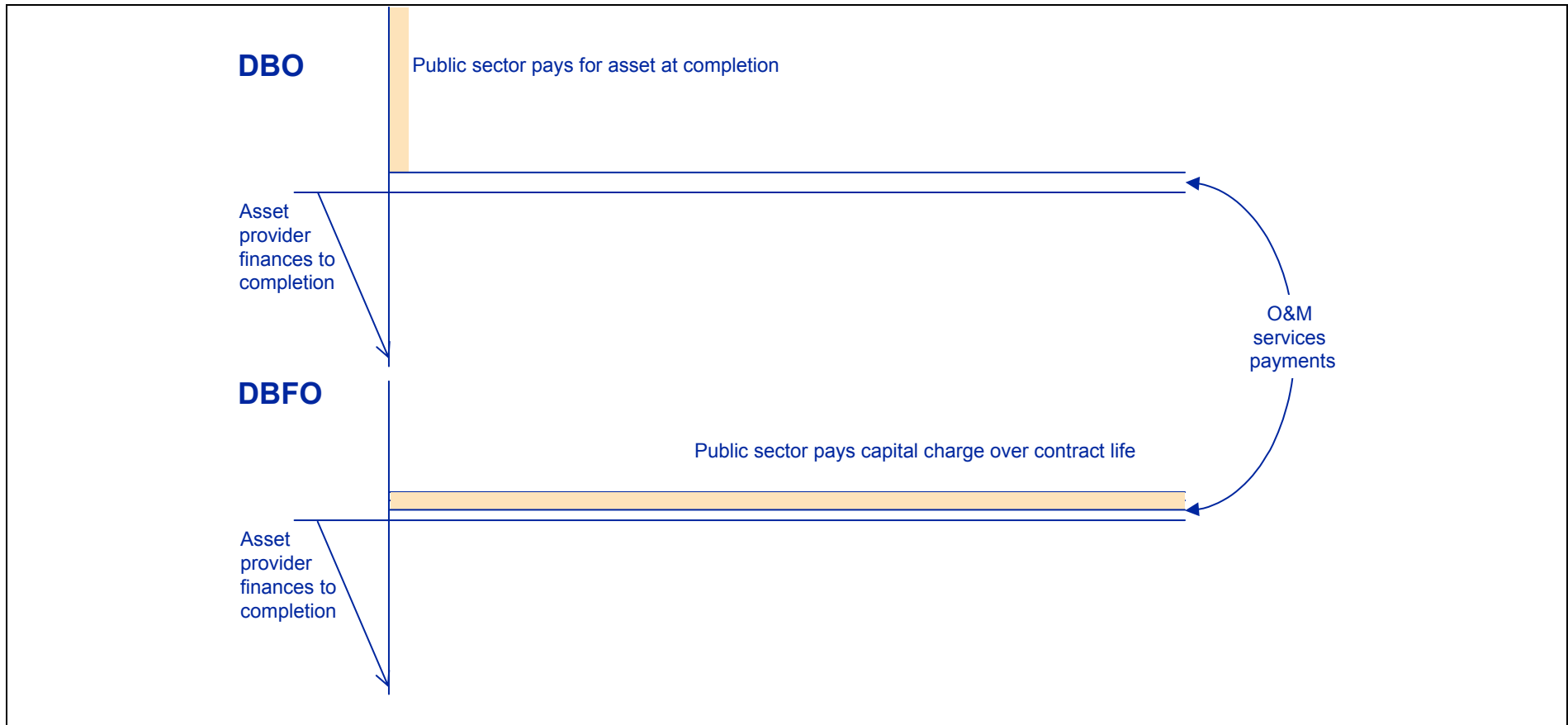
prisons, defence etc. The cost of services is ultimately met by taxation (irrespective of how the contract is initially financed). PPP is the public sector equivalent of outsourcing which is widely (and increasingly) used in the private sector.

Where services **are** paid for at the point of use (e.g. electricity, gas, telecoms, water) then contracting with the public sector is not necessary. The businesses can be privatised following restructuring to create either competitive markets and corporate structures or as formally regulated businesses subject, in the UK, to periodic (usually five year) price cap controls. In those circumstances, the forces of competition and regulation transfer business and regulatory risks to the service providers and thereby introduce strong incentives to provide a quality, low cost service. With PPP, because there are no end-markets, the contracts between the public sector (the buyer of the service) and the service providers need to be structured, awarded and managed so as to mimic, as far as possible, those same incentives for quality service at a competitive cost. Easy to say much less easy to do!

Few argue today with the notion of private sector provision of a wide range of public services. In-house provision by civil servants has rarely provided a quality, low cost service. In part this is because civil servants (and the government) are neither rewarded for good performance nor penalised for risk averse and/or poor performance. Nor is there much argument that contracts with private sector service providers should transfer risk. Conventional contracts have too often left performance risks e.g. cost over-runs, completion delays, with the public sector. A range of contract forms has been developed (actually adapted from the private sector) which aim to access private sector skills while imposing financial incentives on the provider by linking payments to performance. These include simple service contracts; Design-Build-Operate (DBO) contracts where the private sector provides assets and on-going operation and maintenance services in respect of the assets but the public sector pays for the asset on completion and for the services when provided; and Design-Build-Finance-Operate (DBFO) contracts where the private sector provides the same assets and services as with DBO, but also arranges debt financing from commercial banks for a high share of the cost of the asset and equity for the balance of the funding requirement.ⁱ The asset provider gets paid on completion (by the banks) while the public sector pays a capital charge over the contract life which is used to repay the banks and to remunerate the equity (Figure 1).

ⁱ The Private Finance Initiative (PFI) is essentially the same thing as DBFO. Hereafter DBFO is used rather than PFI because the term is clearer – but the terminology for present purposes is interchangeable.

Figure 1
Cash Flow Profiles – DBFO and DBO



CONTRACT DESIGN FOR PPP

A medium or long-term contract is a complex document which regulates the overall business relationship between the parties (the buyer and seller) over the whole contract term. Table 2 sets out the six major provisions at the heart of any contract:

Table 2
Contract Design – Major Provisions

Specification:	<ul style="list-style-type: none"> ■ What is being provided? ■ Conventional Ⓢ input focussed ■ Functional Ⓢ output focussed 	<ul style="list-style-type: none"> ■ Buyer specifies exactly what inputs it wants ■ Bidder left to develop best solution to meet output spec
Pricing:	<ul style="list-style-type: none"> ■ Cost plus ■ Fixed price ■ Target price ■ Price re-opener/review 	<ul style="list-style-type: none"> ■ Cost risk with buyer ■ Cost risk with bidder ■ Buyer/bidder share over-run risk by formula ■ Allows later transfer of price risk to buyer
Maturity:	<ul style="list-style-type: none"> ■ Long term 	<ul style="list-style-type: none"> ■ Eliminates price competition for contract term ■ Eliminates cost increases for contract term ■ Reduces buyer flexibility if bidder fails to perform
Unanticipated outcomes:	<ul style="list-style-type: none"> ■ Price adjustment ■ Price reviews ■ Force majeure ■ Arbitration/termination 	<ul style="list-style-type: none"> ■ Central to long term contracts Ⓢ how it deals with unanticipated outcomes is key to risk transfer.
Liability:	<ul style="list-style-type: none"> ■ Consequences of failure to perform ■ Liquidated damages 	<ul style="list-style-type: none"> ■ Recourse to bidder for failure to perform - in contract and practice
Payment terms:	<ul style="list-style-type: none"> ■ Staging of payments ■ Provider of finance 	<ul style="list-style-type: none"> ■ DBFO or DBO?

Specification: This provision specifies the goods and/or services to be provided. A conventional contract is input focused i.e. the buyer specifies precisely what inputs are to be provided. For example, x tonnes of cement, y tonnes of steel and z man months of labour. The bidder prices the inputs. In contrast, output focussed contracts set out a **functional** specification. For example, by a given date a commissioned power station with specified capacity, availability and technical capability; or a prison of specified capacity and standard. An output based contract specification leaves the bidders to determine the best way to meet the specification. This increases the scope for bidders to innovate in designing solutions to meet the specification.

Pricing: The price provisions are central to the risk sharing in the contract. At one extreme is the cost-plus contract where cost risk lies with the buyer. At the other extreme is the fixed price contract where the cost risk lies with the seller. Many contracts provide for risk sharing between buyer and seller; e.g. they may specify a Target Cost and a sharing between buyer and seller of any cost over-runs. Performance linked bonus and penalty provisions are also common; the idea being that the seller is incentivised to

deliver on time and budget through extra payments and likewise is penalised financially for failure to perform. (Force majeure provisions are important here – penalties may be avoided if the cause of failure can be shown to be beyond the seller's control).

Long term contracts frequently specify a base price or price schedule (in constant prices) and provide for indexation of the base price in line with movements in broad-based price indices. The idea is that the inflation risk lies with the buyer and the 'real' cost risk (upwards and downwards) lies with the seller. Note that although this arrangement protects the buyer against real cost increases over the contract period that it also protects the seller against real cost decreases. The buyer cannot benefit, if the market price for the service falls, until the contract ends; and conversely the seller keeps the benefit if costs are reduced below the level anticipated when the contract was signed.

Maturity: The duration of the contract is also important. Long term contracts are relatively inflexible (and indeed need to be if they are to transfer risk effectively). The output specification and the pricing are set out for long periods, up to 25 years. When the contract is initially competitively tendered then the terms of the winning bid will reflect the market price for delivering the specification at the time. However, buyer requirements may well change – in response to shifts in technology, social expectations and/or policy. It can be difficult, slow and costly to renegotiate the contract terms.

If actual costs move away from expected costs when the contract was executed then actual supplier profits will turn out to be higher or lower than expected. The purchaser of services can sometimes be a victim of asymmetric information. If costs are lower than expected (therefore supplier profits higher) then the contract is likely to remain unchanged. On the other hand if costs are higher than expected, then the supplier will seek to exploit to the full any re-opener or review provisions allowing for price adjustment. If the contract is signed with a highly geared special purpose company then the lenders to the project company can be expected to support the supplier in seeking an upward price adjustment.

Hence in the private sector we observe that many service contracts are medium term (typically 5-10 years) rather than long term. This duration is a balance; long enough for the seller to commit time, effort and capital to making the business relationship work but short enough that the buyer retains flexibility in light of changed circumstances. Similar considerations are relevant when setting the duration of public-private partnerships.

Why then are long-term contracts sometimes used in the private sector? They are used principally when output markets are incomplete or imperfectly competitive and when the seller (or buyer) must invest in large, long life, fixed capital assets. For example, iron ore producers can only sell their output to a limited number of steel producers. They must manage the market risk before developing the property and they do so by signing a long-term sales contract which commits the buyer to purchase the output on agreed terms. In that case the volume risk is removed; however the price risk is shared with the buyer. Similarly a power station developer or a gas field producer operating in a situation where there is not a competitive market for the output will seek a long-term contract before

building the asset, for the same reason. The important point is that a long-term contract is 'needed' by the supplier to manage market risk associated with large fixed capital investment.

It is sometimes argued that long term contracts are 'needed' to facilitate long-term project finance (thereby reducing the annual capital charge for asset provision). This is not clear thinking. The contract reduces the supplier's market risk and therefore lowers the risk adjusted cost of finance. The buyer benefits (in a competitive situation) through lower cost of service provision. This is true irrespective of the method of financing.

What are the implications of private sector experience for PPP? First that where capital investment associated with service provision is not large (e.g. facilities management) the contract term can be kept to 5-10 years with scope for retendering on termination. Long-term contracts are most necessary when there are on-going major capital expenditures required to provide the contracted level of service. The infrastructure contracts for LU are one example; the overland railway operating franchises are another. However, when the capital expenditure is front-end loaded there is no need for long-term contracts, as we shall see.

Unanticipated Outcomes: Medium and long term contracts often have provisions which seek to address what happens if unanticipated circumstances do arise. These provisions attempt to anticipate changes in the state of the world. Sometimes there will be 'contingent pricing' where the payments made to the seller are linked in a formulaic way to changes in the external environment (e.g. to the spot market price of the good or service). Instead, or as well, there may be review provisions which seek to establish commercial principles within which any re-negotiation of contract terms would take place. The force majeure, termination and dispute settlement provisions are also important in determining the real extent of risk transfer over the life of a long-term contract.

Liability: The contract also specifies the consequences of failure to perform by the parties and specifies the recourse available to recover losses arising from failure to perform. In the private sector, liquidated damages provisions (sometimes backed up with bank guarantees) are a common means of providing assurance that the seller will meet its contract obligations or compensate the buyer financially. Representations, warranties and indemnities are also important.

Payment Terms: The payment terms specify the timing of payments by the buyer to the seller. Once the risk-return characteristics of the contract have been specified, and the liability of the parties established, the payment terms simply determine the timing of payments. With DBO the asset is paid for on completion; with DBFO it is paid for over the asset life. The public sector risk is no different if the risk-return characteristics of the contract are the same.

Contract design is an attempt to balance certainty and risk transfer on the one hand against flexibility and responsiveness to changed circumstances on the other. Generally

the greater the flexibility e.g. wide price re-opener or review clauses, the greater the potential for erosion of risk transfer. The appropriate balance depends on the competitiveness of the market to supply the service, the bargaining power (and contracting skills) of the buyer and the extent of service disruption should the contract partnership fail midway through the contract term.

CONTRACT TYPES

Table 3 lists some generic contract types. The ‘conventional’ contract has an input focussed specification and cost-plus pricing. Delays and cost over-runs increase buyer costs; changes in specification result in negotiated cost increases. There is no scope for innovative design, few incentives for efficient management by the service provider and little risk transfer. Historically, contractors have made much of their profit out of ‘change orders’ negotiated after the contract has been signed. Payments for ‘conventional’ contracts are staged over the implementation period with final payment made following completion. Financing therefore comes primarily from the buyer: the contractor has only to arrange working capital to finance work-in-progress.

A Design-Build (DB) contract is for asset provision and leaves the design to bidders. The bid documentation sets out a functional specification leaving bidders to decide the best means of achieving the output spec. If the contract is Fixed Price for delivery of an asset, then it transfers completion risk to the winning bidder and thereby introduces strong incentives to perform to time and budget cost. The bulk of the payment is made by the buyer to the asset provider on satisfactory completion.ⁱⁱ

ⁱⁱ Unbundling of Design from Build is common in the private sector. The client may bid a Design-Engineering contract followed by a Build contract. Another variant is a 2 stage process where stage 1 focuses on the quality of the response and stage 2 focuses on own price.

Table 3
Contract Types

Contract Type	Characteristics
Cost plus - conventional	<ul style="list-style-type: none"> • Inputs specified by public sector • Price against budget inputs - asset completion risk with public sector • Funded by public sector - progress payments against work done
Design build 'fixed' price	<ul style="list-style-type: none"> • Outputs specified, bidders design • Fixed price, asset completion risk with bidders, charge for risk transfer in price • Funded by public sector - payment on successful completion
Indexed service contract	<ul style="list-style-type: none"> • Inputs or outputs specified • Contract based price + indexation - risk sharing between buyer / bidder
DBO	<ul style="list-style-type: none"> • Combines DB fixed price + indexed service contract • Funded by public sector, staged against successful performance
DBFO	<ul style="list-style-type: none"> • Same contracting relationships as DBO, but . . . • Private sector funding (project debt + bidder equity) in special purpose company (SPC)

A Design-Build-Operate (DBO) contract is usually entered into between the buyer (Government) and a contracting vehicle (a special purpose company or joint venture) which consists of an asset provider (DB) and a service provider (O). The joint venture parties contract with the public sector to provide an asset(s) and operations and maintenance services for the contract period. In a DBO contract there is scope for innovation at both the design and implementation stages, incentives for strong management and substantial risk transfer (if the DBO contract is well designed). For the buyer to acquire 'seamless' asset and services provision, the asset provider and services provider need to enter into a shareholder or joint venture agreement with each other which specifies unambiguously their respective rights and obligations over the contract life. With DBO, title to the asset usually remains with the SPV but it may revert to the public sector in some circumstances.

The DBFO contract can create exactly the same incentives and risk sharing as DBO. The only important difference is the timing of payments by the public sector and the total cost of those payments – about which more below. Table 4 summarises the characteristics of the contract types. DBO and DBFO are equally effective at spurring innovation, accessing strong and effective private sector management and transferring risk to the private sector. **Both contract approaches are superior to 'conventional' contracts so long as awarded competitively.**

Table 4

Characteristics of Main Contract Types

Contract type	Risk transfer characteristics		
	Innovation	Strong management	Risk transfer
Cost plus - conventional	★	--	★
Design build "fixed" price	⊕	⊕	⊕
Indexed service contract	-- or ⊕	-- or ⊕	-- or ⊕
DBO	⊕	⊕	⊕
DBFO	⊕	⊕	⊕

Indexed service contract characteristics depend on precise terms

These contract types are best thought of as ‘genotypes’; any particular contract will contain some features taken from different genotypes. The best package will depend on the nature of the project and the particular circumstances. Factors important in selecting the ‘best’ contract form will include:

- whether there is expected to be strong competition for the service provision (and ready substitution of service provider at the end of the contract period)
- the contract management skills and market power of the buyer of the services
- the complexity of the contract and of the interface between buyer and provider

The key point is that the desired relationship between buyer and seller can be provided in a set of contracts which introduce management discipline and risk transfer into the business relationship **irrespective of who is providing the finance.**

The contract interface between asset and service providers may be complex particularly when the consortium contains several parties and when capital investments continue throughout the contract life. The more complex the interface, the greater the risk to the buyer that responsibility and liability will become unclear. When things go wrong, who must act and who must pay? The risk is that the buyer ends up with unsatisfactory performance and inadequate powers to ensure performance or financial compensation.

The contract interface between the public sector and the SPV can also be complex. For example, the London Underground infrastructure contracts must anticipate all possible circumstances arising between the infrastructure operators and the rail service provider (LU) over 25-30 years. This is an immensely complex interface. The probability must be that unanticipated circumstances will cause the parties to renegotiate the contract terms after signature. In the process risk transfer to the private sector may well be eroded.

The practical importance of these complexities is clearly observed in the overland railway industry where it is now acknowledged that the terms of the contracts established at privatisation have introduced perverse and unintended incentives on Railtrack and on the train operators. The conclusion is not that PPP should not be used in these circumstances rather that close attention should be given to simplifying the contractual interface and introducing sharper incentives provisions.

CONTRACTING PROCEDURES

Lessons from the private sector about procedures are clear. A competitive tendering process with a reasonable number of bidders almost always achieves a superior price/risk transfer outcome compared to a negotiated contract. Tendering processes are most effective when the buyer sets out very clear documentation. It is possible to develop objective methodologies for comparing proposals based on different responses to a functional specification. Multi-stage bidding, with early stages focused on quality and later stages on price, are often more effective than single stage bidding.

Negotiated contracts never have a better outcome and commonly have a much less favourable outcome than a competitive process. Demonstrating that a negotiated outcome is superior to a hypothetical Public Sector Comparator does not clearly demonstrate value for money. The outcome of a transparent, competitive process, on the other hand, prices the contract (and the embedded risk transfer) at the market price at the time.

It has been suggested that competitive tendering is too costly for small projects. The best response is not to adopt negotiated procedures but rather to develop imaginative approaches to packaging small projects into larger packages; and tendering the package. This approach has recently been adopted in a number of PPP schemes.

Another lesson from the private sector concerns tactical bidding. When long term contracts are being awarded, and particularly when the buyer of the service will find it hard to change service provider, the bidders may be tempted to under-bid the contract with a view to exploiting review/re-opener provisions at a later stage. The extent to which this may be a problem depends on the language of the contract and the respective bargaining power of buyer and seller following contract award. Although in theory the contract may provide for risk transfer, in practice it may not be achieved. For example, when recent IT contracts have gone badly wrong the public sector had limited practical recourse against the service provider.

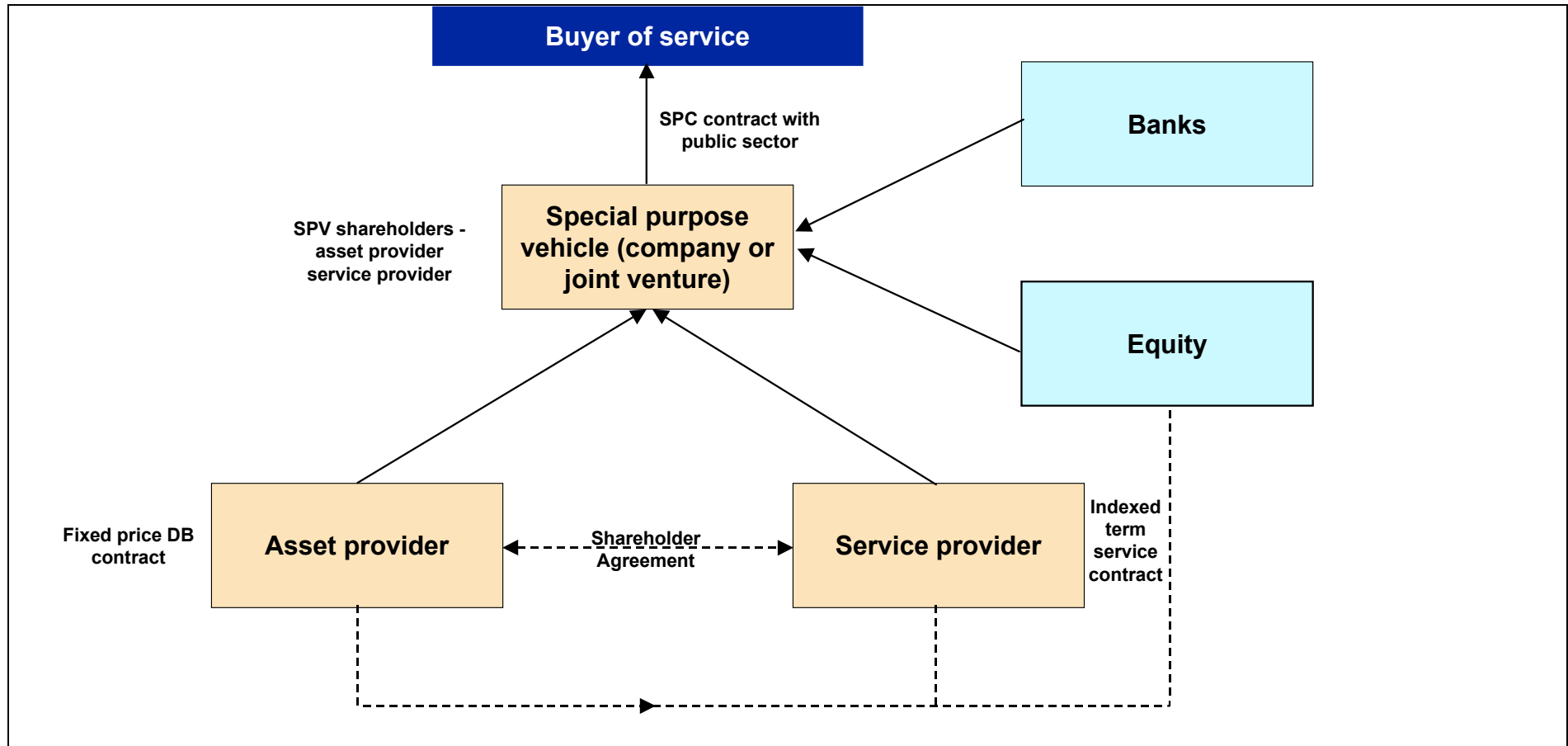
DBFO OR DBO?

DBFO is, in essence, the project finance structure used for many years in the private sector with the distinction that the buyer of services is the public sector. A typical DBFO structure is set out in Figure 2. A special purpose vehicle (SPV) – often a limited liability company – is created to undertake the contracted services, to own the assets and to be the contracting party with the public sector. The SPV enters into the primary

contract with the public sector which typically involves providing both assets (e.g. roads, prisons, hospitals etc) and services (e.g. operation and maintenance of the assets) over the contract term. The SPV then enters into matching back-to-back contracts with an asset provider (a contractor) which builds the asset often on a fixed price contract; and a service provider (a facilities management company) which contracts with the SPV to provide the related services component of the primary contract with the public sector often on an indexed base price basis. There is typically a contract between the asset and service providers specifying their respective rights and obligations (and in particular defining the extent of their liability). The objective is to ensure a seamless match between the terms and conditions in the SPV contract with the public sector, on the one side, and the SPV contracts with the asset and service providers on the other. If achieved, there is minimal residual risk in the SPV.

Once back-to-back contracts are in place, the funding requirement of the SPV can be determined (as the difference between the timing of payments to the asset and service providers and receipts from the public sector). The SPV funding requirement is met with a high proportion of project debt – up to 90% is achievable – and the balance of the funding is advanced as equity or subordinated debt by the SPV shareholders (who are usually the asset and service providers). The project debt advanced to the SPV depends wholly for repayment on the payments made to the SPV by the public sector (there are no shareholder guarantees of the debt at least post-completion and often non pre-completion).

Figure 2
PFI/DBFO Structure



The money flows are summarised in Figure 1. The banks and equity providers put the SPV in funds to pay the asset provider on completion of the asset and the service provider as the services are provided. The public sector contract with the SPV finances an annual ‘capital charge’ to pay over the contract life for the asset and an annual O&M charge to pay the service provider. The total cost to the public sector of the DBFO contract is the present value of these contracts payments.

The terms of the contract between the SPV and the public sector are set to cover the total costs of the SPV i.e. the capital charges, the services costs and transaction costs e.g. legal, financial advisory fees etc. The capital charge is determined by the level of payments to the asset provider and the weighted average cost of funds i.e. both project debt and equity/subordinated debt.

A Design-Build-Operate (DBO) contract only differs from DBFO in that there is no private sector funding of the SPV. The public sector enters into an identical service contract with the asset and services providers via a SPV. The contracting party will be the SPV (either a company or joint venture) and there will be a contract between the asset provider and service provider specifying identical risk sharing. However, in this case, the public sector pays the asset provider on completion; and pays the service provider annually in accordance with the contract. There are no private sector banks involved; nor need there be private sector equity (Figure 3).

Do we need the ‘F’ in DBFO projects? Or, put another way, is DBO as good as, or better than, DBFO in achieving value for money? Let me start by giving my conclusions and then my reasoning.

- If DBO and DBFO are competitively tendered then equivalent risk transfer and incentives for good management of asset and services provision can be achieved.
- In general DBO will be more cost-effective and quicker, therefore better value for money. However, **both** approaches are superior to conventional contracting.

To see why these conclusions are valid, we need to look at the cost to the buyer (the public sector) of risk transfer to the private sector and the cost of finance for each approach.

Figure 4 looks at an illustrative project where the budget capital cost before contingencies is 100 (say, £ million). Using conventional contracting the range of possible outcomes (based on past experience of comparable projects) is judged to be 105, 115 or 130. The expected (probability weighted) cost is about 117. The O&M costs over 10 years are projected to be in the range of 10 to 12 with an expected cost of 11 per year.

Figure 3
DBO Structure

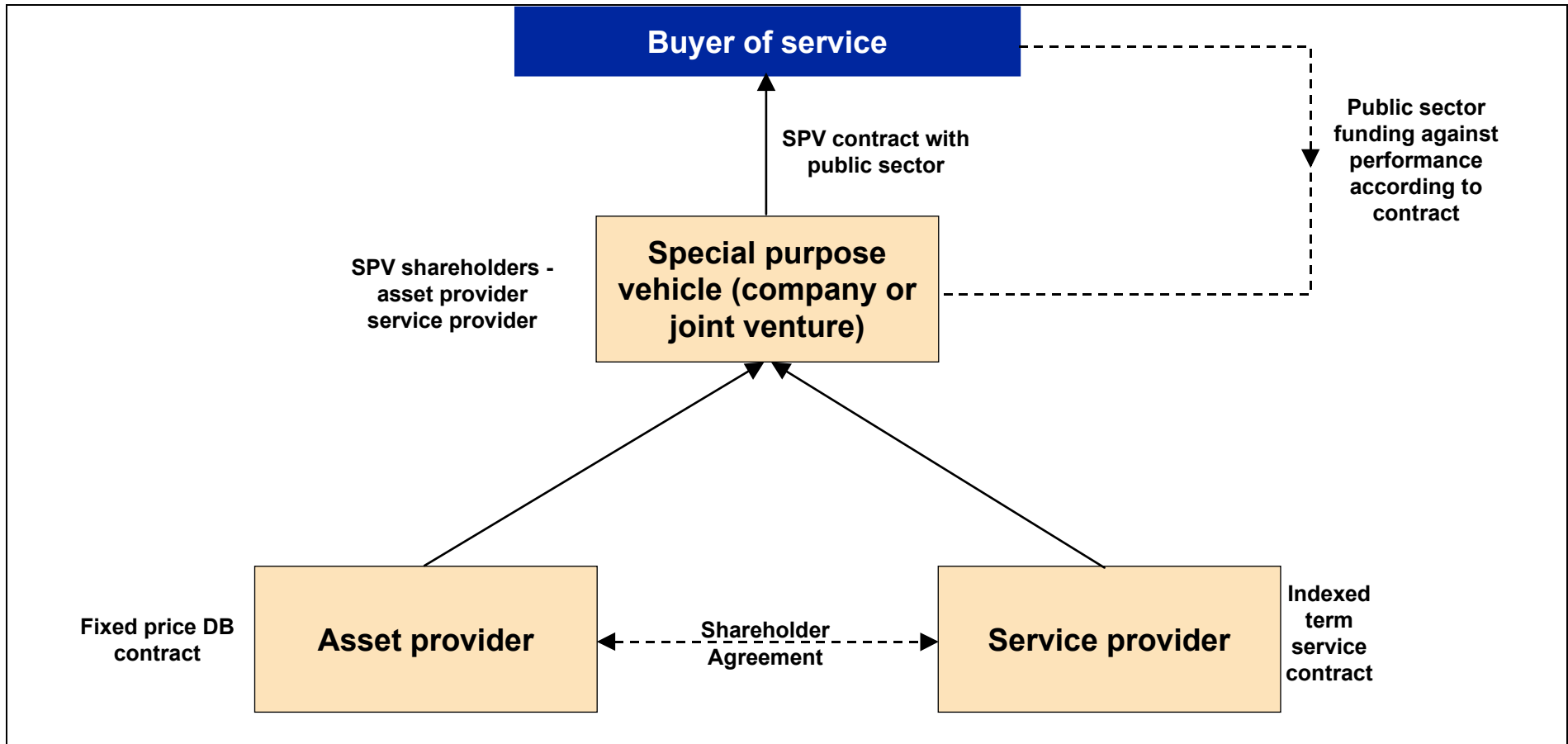
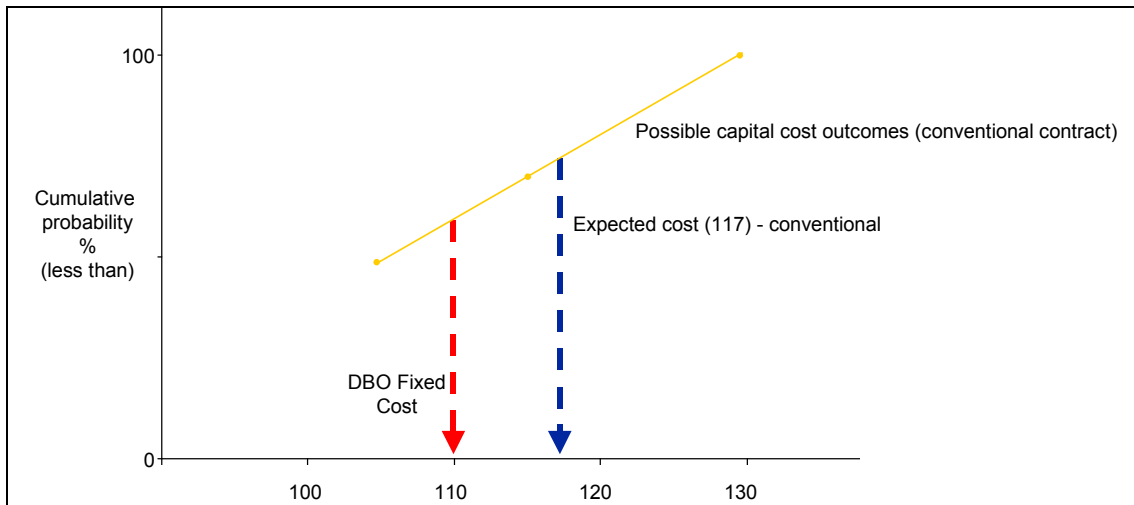


Figure 4
Conventional Contract and DB Capital Costs



The expected cost using conventional contracting is the present value of the expected annual payments by the public sector discounting at the appropriate discount rate. However, the public sector is assuming the risk that actual annual costs are higher or lower than the mean. In this illustration the total expected cost is £198 million but the range is roughly £170 million to £220 million (Table 5). Moreover, past experience is not always a good guide to the future especially in new areas such as IT. The possibility of even worse outcomes must be acknowledged.

Table 5
Cost of Conventional, DBO and DBFO Contracts - Illustrative Case

	PV (£ million)	
Conventional contract		
• Expected Capital Cost	117	
• Expected O&M Cost	81	
• Expected Total Cost	198	
• Range of possible outcomes	170 - 220	(+11% to -14%)
DBO		
• Fixed Capital Cost	110	
• Expected O&M Cost	81	
• Total DBO Cost	191	
• Range of possible outcomes	187 - 195	(+2% to -2%)
DBFO		
• Fixed Capital Cost	115	
• Expected O&M Cost	81	
• Total DBFO cost	196	
• Range of possible outcomes	192 - 200	(+2% to -2%)

Now consider adoption of the DBO contract with a fixed price for asset provision and an indexed service component. If the contract is competitively bid then the market price for risk transfer to the private sector will be revealed. The greater the quantum of risk that the contract transfers to the private sector, the greater the cost to the public sector (because private investors are risk averse). Different private sector bidders will assess and price the risk differently; and the winning bidder will be the one that offers the best deal to the public sector. Note that the range of possible outcomes viewed from the private sector perspective will differ from the public sector assessment because the private sector bidders are better placed to assess, manage and price those risks. Both the expected cost and the risk (i.e. range around the mean) will differ. In this illustration it is assumed that the winning bidder fixes the price for asset provision at 110. Also that the terms for O&M provision reduce by half the range of outcomes compared with conventional contracting. In this case the public sector converts an uncertain public sector cost of 198 ($\pm 11 - 14\%$) into a lower and more certain cost of 191 ($\pm 2\%$).

The total cost to the public sector of the DBO contract is the present value of payments to the asset and service providers over the contract life using the same discount rate as for evaluating the conventional contracting approach. For DBO, the cost of finance is simply the government cost of funds. This is the 'risk free rate' embedded in the long bond yield.

How does DBFO differ? If the asset/services contract is the same (as DBO) and competitive conditions are the same, then the price of risk transfer will also be the same. However, the cost of commercial bank debt will be higher than the cost of government funds. There are two reasons. First, the commercial banks lend to the SPV on a project secured basis. This will always be viewed by the banks as more risky than lending to the government (which is how DBO is effectively financed). Even if the SPV has negligible residual risk, risk averse banks will charge an extra premium over the risk-free rate. This extra premium will vary with the project and with (bank) market conditions typically in the range 75-150 basis points (0.75 – 1.5% per annum). In addition project financings involve significant extra costs and fees; and often cause delay in financial closing.ⁱⁱⁱ The present value of these extra costs represents the additional costs of DBFO compared to DBO. In Table 5 it is assumed that the extra financing cost is 1% per annum over a 10 year contract period. This adds about 5% to the PV of the capital costs compared with DBO.

The higher expected return on the equity in the SPV, if provided by the asset and service providers, may not be an extra cost. In competitive conditions this extra financing cost will be compensated by lower contract payments by the SPV to the asset and service providers.

The next question is, if DBFO has higher finance costs, are there compensating advantages over DBO? In my view the answer is clearly no in circumstances where the

ⁱⁱⁱ Some of those costs are fixed irrespective of project size and thus are proportionally greater for small projects.

SPV shareholders are also the asset and service providers. The SPV adds nothing other than an expensive (and slow) method of financing. Some may argue that the involvement of the commercial banks as project lenders is helpful. In my view it is helpful to the service providers – they use the banks’ risk aversion to press the public sector to assume residual risks – but not to the public sector client. This view is apparently shared by many in the public sector. A recent survey of perceived benefits of PFI ranked ‘involvement of commercial banks’ as last out of 16 suggested benefits!

Where the SPV sponsors are not the asset/service providers then there may be circumstances where their development role may add value. For example, where a project is very complex and requires contracting in of specialised inputs and integration of those inputs, a simple bidding process may not be the most efficient way of proceeding. In such cases there may be advantage in securing private sector participation in a project development/management role, requiring the private sector partner to take a risk position in the SPV (equity or subordinated debt) and rewarding the partner by way of a share of profits in the SPV. This is not, however, an argument specifically for DBFO; it can equally well be viewed as a variant in DBO.

The conclusion that DBFO is expensive compared to DBO is supported by evidence from the private sector. Large, highly-rated companies undertaking major projects will often undertake them within SPVs in order to ring fence the cash flows from the rest of the business. They may and do enter into asset and/or service contracts which transfer risk to the contractors. They practically never use third party project finance; preferring to fund the SPV using corporate funds (i.e. the private sector equivalent of DBO) because it is the cheapest source. (They may use project finance for projects in developing countries but there they are accepting a higher cost of funds in return for hedging political risks). In contrast, small and medium size companies involved in large projects often do utilise project finance because of balance sheet constraints. In short they use more expensive funds because they have to.

In summary, in circumstances where the public finances are not strongly constrained, DBO is more cost-effective, quicker and easier than DBFO in most cases. Why then is DBFO used and DBO not? I think it is mostly for historic reasons. The reality is that PFI was invented by the previous Government in the early 1990’s when public finances were strongly constrained. It was seen as additional finance for public investment (wrongly). Times have changed and the logical conclusion is that PPP should change as well – from heavy dependence on DBFO towards greater use of DBO. This is precisely the conclusion reached by the Irish Government. Flush with funds but with an urgent need to invest heavily and rapidly in physical and social infrastructure, they have launched a major DBO procurement programme.

THE CASE FOR PFI/DBFO AND DBO

The only valid argument for DBFO (and DBO) is that it delivers value for money ‘through private sector innovation and management skills delivering performance improvement and efficiency savings’. (Treasury Task Force 1999).

The value for money case relies on demonstrating that the total cost of asset and services provision over the DBFO contract life is no higher than the expected cost of conventional procurement (and that the quality of service is equivalent or better). Studies by the NAO, and by Arthur Andersen for the TTF, confirm that most of the DBFO transactions reviewed do represent value for money when compared with conventional public sector procurement (if the out-turn is in line with the contract). The same should be equally or more true with DBO.

In the past, other (incorrect) arguments in favour of DBFO have been advanced. It has been argued, for example, that PFI generated additional finance for public investment. Robinson et al (The Private Finance Initiative: Saviour, Villain or Irrelevance?, 2000) have shown that this argument is not valid in the UK today. DBFO is an additional claim on public sector resources, just as extra conventional procurement is. Only the profile of financial payments by the public sector changes. The current Government no longer advances the ‘additional finance’ argument – ‘The PFI is not about borrowing money from the private sector’ (Treasury Task Force 1999).

In the past, HMT has been concerned to ensure that PFI expenditures were treated as ‘off-balance’ sheet for public finance accounting purposes. This consideration should be irrelevant to the merits of PFI. Either a project is ‘value for money’ or it is not (Robinson et al, 2000). However, Treasury concerns in the past about balance sheet treatment have increased the perception that PFI was viewed as providing additional finance. (This debate about ‘off-balance sheet’ public finance was active at the same time that the accounting profession was debating the treatment of off-balance sheet corporate debt. The conclusions are similar. It is risk transfer that is important, not the accounting treatment.)

Although DBFO is an improvement over conventional contracting it is by no means a panacea. The Kings Foundation has publicly criticised the complex interfaces and rigid structures of PFI in the health sector. Their criticisms are echoed privately by many involved in health-sector PFI. Headlines such as ‘Ministers Held to Ransom’ in connection with major IT contracts where the contractor has failed to perform reflect widespread concerns about whether risk is effectively transferred to the private sector. The reality is that in most cases the outcomes have been at least as good as in-house provision (or conventional contracting) and mostly a good deal better.

THE SIX QUESTIONS

We are now in a position to address the questions posed in Table 1.

How can long term outcome oriented contracts be designed to adapt forms of service provision over time? What forms of contractual provision could help ensure that the private sector has the incentive to take account of shifts in technology, social expectations or other policy goals?

Long term contracts are inherently inflexible. Moreover there is an inevitable trade-off between flexibility and risk transfer. The more the contract contemplates variations over time to adapt to changing circumstances (whether arising from developments in technology, social expectations or policy) the greater the scope for the contractor to reopen the pricing provisions and to convert a fixed price into a higher one.

The best way for the buyer of services to deal with this situation is to keep the duration of the contract short in situations where there are likely to be alternative suppliers. This allows the buyer to redefine the services required in light of changing circumstances and potentially to re-bid the contract. This will ensure more sustained competitive pressure on the existing supplier to adapt the service provision at competitive costs. Where there is not an alternative supplier at a competitive price then this course may not be a practical or cost-effective option.

DBO contracts are more flexible than DBFO because there are no commercial bank restrictions or consents required in order to vary the contract terms. Also, if desired, ownership of the asset can revert to the public sector on completion thereby increasing flexibility in light of changes in the state of the world.

The issue of flexibility is as important as price. Technology is changing very rapidly, new ideas on managing and motivating resources emerge frequently and government policies change as well. If there is pervasive adoption of inflexible, long-term contracts then this will complicate massively, and slow substantially, the responsiveness of the public sector to a changing world. The greater flexibility of DBO and shorter-term contracts is worth a lot.

Do PFI contracts really transfer risk and to what extent?

Both DBO and DBFO contracts transfer the bulk of the cost overrun and delay risks associated with asset provision. Whether they really transfer significant risk later in the contract life is more arguable. If the contract terms are well designed and contract management is effective then they should; and in the private sector they often do. However, both the NAO and Arthur Andersen found that the major risk transfer benefits arise in respect of cost overrun risk associated with asset provision. Cost effective risk transfer is much more likely when there is a competitive contract award process. It is also more likely when the capital costs are front-end loaded and the contractual interface with the public sector is simple.

In light of the above, review the approach adopted by others (NAO, Arthur Andersen) to estimate the value for money case for PFI. Is the methodology robust?

The NAO and AA compared the cost of PFI with the expected cost of conventional contracting on the assumption that the historic pattern of cost overruns continued. The present value of the full life costs including O&M costs were compared using a 6% real discount rate. Average cost savings of 10-20% were estimated for PFI but there were large variations around the mean.

The method is appropriate and despite the real estimation difficulties the conclusion seems robust. However, in most circumstances all the savings could equally well be achieved using DBO which, since cheaper and quicker, would lead to even larger savings than DBFO.

The comparisons are affected only marginally by the use of the 6% real discount rate. A case can be made for using a lower discount rate for evaluating public investment today. A reduction in the discount rate will have an important effect on the level of public investment but little effect on the relative merits of DBFO, DBO and conventional contracting.

Review the respective merits of DBO and DBFO contract arrangements. Can most/all the benefits of lower cost provision and incentives on the private sector be achieved with DBO and what would be the consequences of going this route with Government providing the cheaper funding?

As noted above there is a strong case for the view that all the benefits of DBFO can be achieved with DBO at lower cost when public sector funding is not constrained.

The main non-cost implication of adopting DBO would be to put the whole cost of the projects onto the public sector accounts. However, as noted earlier, whether spending is on- or off-balance sheet should not matter to the investment decision. Indeed in current circumstances the Government may wish to be seen to be spending more on public sector investment (albeit through private sector provision).

How can the awarding of contracts balance the need for competition with the need for innovation?

This has been dealt with above. Generally competition will achieve the cheapest and best result. Innovation can be retained ab initio by bidding a functional specification and through multi-stage bidding. Keeping contracts shorter will maximise scope to adapt over time.

What skills does the public sector need to develop in order to get the most from PFI (and DBO) contracts?

This is an important topic which has been much discussed by others. The skill set required to effectively negotiate and manage long term contracts with the private sector are in short supply in the public sector and past experience has not been universally

good. The creation of PUK will provide a centre of excellence but there is an urgent need to upgrade capability in operational departments.

At least as important as training is the issue of motivation and incentives. The public sector is widely viewed as risk-averse in behaviour and public servants are not incentivised to achieve good contracting outcomes. Consideration needs to be given to the creation of new job specs and recruitment of people from the private sector with the requisite experience. Also to the difficult questions of remuneration and incentivisation in the public sector. If private sector provision of public services is to be of increasing importance, as seems likely, then the public sector will need not only to change the way it does things but also to change the way public servants are motivated and rewarded for effective performance.

As noted above, the contracting skills required in the public sector would be very similar if DBO rather than DBFO were adopted on a large scale.

OPTIONS FOR THE FUTURE OF PPP

PPP has the potential to redefine the boundaries of public sector service provision without moving away from the principle that many services should continue to be free (or highly subsidised) at the point of use. A very wide range of services previously provided by civil servants can be procured cost-effectively from the private sector. Well designed contracts can result in high quality, low cost service provision.

The current government recognises the need to move away from a narrow focus on PFI to a broader interpretation of PPP. (Public Private Partnerships : The Government's Approach, 2000). However, until recently most effort has gone into operationalising PFI and into developing 'guidelines' for PFI implementation. There is a need for a significant shift in emphasis from PFI to a broader interpretation of PPP if the stated government objectives are to be met. Some of the changes will be relatively easy; others will be very difficult primarily for political reasons.

The relatively easier changes include:

- a significant shift from DBFO to DBO with resulting gains in flexibility, speed and cost. This initially might focus on 'front-end loaded' asset/services provision e.g. hospitals, prisons, new schools etc.
- greater use of medium term (5-10 years) risk transferring outsourcing contracts for a wider range of services currently provided by the public sector (or procured on a 'conventional' basis). A major refurbishment programme for groups of old and sub-standard State assets (e.g. schools) could be achieved rapidly and cost-effectively using competitive PPP contracting.
- property management services could be procured on an incentivised basis. All public sector property assets could be managed through a PPP vehicle which

accessed private sector property management skills on a risk sharing basis. (This is similar to fund management in the private sector where asset management is contracted out by fund trustees).

The more (politically) difficult changes mostly involve changing the contractual interface between public and private sectors:

1. Transport. The LU infrastructure contracting saga is a good example of how not to proceed. Separation of infrastructure services from rail services is immensely complex and badly suited to management within a long-term contract. In the overland railway privatisation the initial Railtrack/operator contracts and the operator franchise agreements produced highly unsatisfactory incentive arrangements which are currently being renegotiated (less than 10 years after they were introduced). At least in the overland railway there was plausible reason to try to separate infrastructure from operations – it was intended to facilitate competition between operators using the common infrastructure. In the case of LU, competition is not possible (for operational reasons) – a point agreed by all protagonists. Why then try to split infrastructure from operations? The answer, of course politics. The straightforward and cost-effective way to proceed is to competitively tender a contract to operate the entire LU system (infrastructure and operations) either as one contract or separate lines. The pricing of the service to customers would be fixed (either by contract or regulation), a minimum investment programme would be set out to upgrade the (highly dilapidated) assets and the winning bidder would be subject to strong penalties for failure to perform (including, in extremis, termination). With such a contract in place, funding for LU could be secured either through a bond issue by LU (the cost-effective way – in reality a form of DBO) or via third party debt (a form of DBFO). Neither the government's proposals nor the Mayor's adopt this model.
2. Health. The government has announced a large increase in funding for the NHS. DBO can be utilised to effect a rapid and large scale upgrading of physical facilities. However, the contractual interface between the medical/health professionals and the support service providers to the NHS is an example of a complex, and in many ways, unsatisfactory contractual interface. A redefinition of the contract boundary could facilitate a major improvement in the responsiveness of the NHS to rapidly changing customer demands. This will clearly be necessary - more money, if incentives and motivation remain unchanged, will not result in the desired improvements.
3. Education. There is clear potential for whole schools and groups of schools to be managed and operated in the private sector on contract to government. This would not involve them becoming fee paying. Opted out schools already are self-managing and receive per capita funding from government. They must operate within the rules and standards imposed by government. The teachers are recruited by the schools and they are permitted, within the per capita revenue constraint, to determine terms and conditions of staff and the number and type of staff needed

to meet their educational goals. They are subject to monitoring by government. The next step, besides broadening this approach, would be to link per capital fees to performance. Not, of course, exam results but a measure of performance which takes account of local conditions and constraints. If teachers are rewarded for good performance, and schools likewise, then motivation and incentives will be changed and behaviour with it.

For these sorts of ideas to be adopted, there will need to be a better public understanding that this is not privatisation, nor is it sacrificing quality to profit. On the contrary it is seeking an urgently needed increase in the quality of public services using private sector agents. Moreover doing it on a cost-effective basis. More 'bang for the buck' means more as well as better provision.

NATIONAL NEWS

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BUSINESS MPs CLAIM DEALS WITH INFORMATION TECHNOLOGY CONTRACTORS GIVE COMPANIES TOO MUCH POWER

Ministers 'at the mercy of private sector'

By Rosemary Bennett,
Political Correspondent

Contracts between government departments and IT contractors leave the ministers at the mercy of the private sector because they give companies too much power, a committee of MPs is to say today.

The public accounts committee singled out the contract with Andersen Consulting to develop the new national insurance comput-

erised recording system (NIRS2), which ministers hope will help clamp down on benefit fraud.

The structure of the contract, which allowed Andersen Contracting to retain intellectual property rights to NIRS2, has left ministers unable to get a grip on the timetable for delivering the system, the committee said in its latest report on social security fraud.

The project is running three years behind schedule.

MPs concluded that commercial risk in the private finance initiative project has not sufficiently shifted from the public to the private sector, and has left the government wholly dependent on the contractor.

The initial idea behind PFI projects was that all the risks and costs of late delivery or poor performance would be transferred to the private sector.

Dawn Primarolo, paymaster general, told the commit-

tee she had decided not to pursue any further compensation from Andersen Consulting after securing £4.1m, a decision in part linked to the need to maintain good relations.

"In our view, the Inland Revenue, and more widely the Office of Government Commerce, should look again at the balance of benefits and risks underpinning decisions on ownership of international property rights in major government

systems," the committee said.

A key factor in Andersen Consulting winning the contract to develop the system was the commercial value of £100m it placed on the intellectual property rights, which allowed it to submit a lower bid than its competitors. With the system now so far behind schedule, ministers were also behind in plans to clamp down on social security fraud. The MPs called the £4bn annual

bill for cheating and error "unacceptably high".

While they welcomed "good progress" in resolving the backlog, they said they were concerned the Inland Revenue forecast the system would not reach a "steady state" until April next year.

The committee also criticised the government for the high level of housing benefit fraud, particularly that arising from within local authorities that administered it.

Benefit fraud investigators

will be given powers to delve into bank accounts, pension plans and even the gas bills of suspected cheats under new proposals.

Alistair Darling, social security secretary, said he wanted banks, insurance companies, gas, electricity and water suppliers to hand over information to the Department of Social Security under new plans aimed at reducing the fraud bill.

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