Public Sector Research Centre

The value of PFI

Hanging in the balance (sheet)?

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Introduction

Since the Government announced[1] the adoption of International Financial Reporting Standards (IFRS) from 2008/2009 onwards there has been much speculation about what this means for the future of the Private Finance Initiative (PFI). If, as suggested by the recent Financial Reporting Advisory Board (FRAB) consultation paper[2], the government chooses to apply the "service concessions" accounting standard under IFRS to PFI schemes, and that application means that the great bulk of them have to be accounted for on-balance sheet[3] by government, will that not remove the accounting driver for implementing projects through PFI? And, notwithstanding the fact that accounting classification was never meant to have been the rationale for the use of PFI, will this not in fact have a significant impact on the behaviour of procuring authorities and therefore the pipeline of PFI schemes?

The relationship between the introduction of IFRS in the public sector and the propensity to use PFI is not, in fact, as simple as many have supposed. However, there will clearly be some impact. Indeed, it is arguable that the widespread debate about the implications of IFRS on PFI may already have had some dampening effect on the PFI pipeline.

This is therefore an opportune moment to ask whether, to put it bluntly, this matters at all. Has PFI in fact brought about the long term benefits in public procurement which were claimed for it? And, to the extent that there have been any beneficial effects, how far are they attributable to the introduction of private finance in PFI, as distinct from other aspects of PFI project delivery? Could these benefits not have been brought about by, say, the use of Design, Build, Manage and Operate (DBMO) models? In other words, what have been the benefits of the Private Finance Initiative? And do these benefits outweigh any additional costs associated with PFI?

It is also a good time to see whether the blanket answer to the balance sheet question potentially implied by IFRS will provide opportunities to improve PFI delivery. Specifically, will there be options to structure projects more efficiently if keeping them off balance sheet disappears as an attainable objective?

1 Budget 2007 – Delivered 21st March 2007 announced the adoption of International Financial Reporting Standard on all public accounts from 2008/9 onwards
2 "Accounting for PPP arrangements, including PFI" – Financial Reporting Advisory Board consultation paper, issued 10 December 2007
3 On balance sheet is an industry term indicating that the assets and liabilities associated with the project are recorded on the balance sheet of the relevant entity

IFRS

The impact of IFRS on accounting for PFI is as yet uncertain. There is a widely held view that the application of International Financial Reporting Interpretations Committee's Interpretation 12 (IFRIC 12) by PFI contractors will have the consequence that PFI schemes involving the creation of single purpose assets will not be accounted for on balance sheet by the PFI contractor, except where they take significant residual value risk. Further, it is argued that, since the government has in the past been uncomfortable at the prospect of PFI schemes not being on anyone's balance sheet, they will issue guidance indicating that IFRIC 12 should also be used by the public sector to account for PFI schemes, with the effect that the great majority of schemes will be on balance sheet for the public sector (i.e. where the assets do not appear on the balance sheet of the PFI contractor).

On the other hand, it has been pointed out that any government guidance on the application of IFRS to PFI should consider not only of IFRIC12, but also European System of National and Regional Accounts (ESA 95) and any standards developed by the International Public Sector Accounting Standards Board. Running alongside the debate about the application of IFRS there has been an underlying view in some quarters that, even under FRS5 and the relevant Application Note[1] most PFI schemes should be classified as on-balance sheet.

That discussion has centred on HM Treasury's Technical Note[2], with some commentators speculating that the FRAB was to recommend its withdrawal. Other participants in the debate argue that, even if the Technical Note were withdrawn, there would still be sound arguments for classifying a good number of PFI schemes as off-balance sheet, relying on FRS5 and the Application Note.

Whatever the exact conclusion of these debates, and the results of the FRAB consultation, it looks safe to assume that the majority of PFI schemes will be on balance sheet going forward. What impact will this have on the public sector's propensity to use PFI as a method of procurement?

It should have little or no impact in most central government departments where for some years the majority (though by no means all) of PFI schemes have been classified as on-balance sheet for the public sector. The position in local government is less clear. Off balance sheet classification has been a pre-condition for the award of PFI Credits which have constituted a strong fiscal incentive to use PFI. Much depends on the structure and amount of any PFI Credit scheme going forward, and on what criteria are used to distribute PFI credits in an on-balance sheet world.

While accounting treatment has been used as a test for PFI Credits, it is clear that there is no necessary link between the two. Off-balance sheet treatment has, in effect, been used as a proxy to indicate appropriate risk transfer, but other indicators could be found. In Australia, for example, very few projects have ever been off-balance sheet, but this has not stopped the Victorian Government from pursuing a robust PPP policy, or from devising ways of identifying those genuine PPP projects which deserve support (see Case Study 1, page 3).

1 FRS5 – Application Note F 'The Private Finance Initiative and similar contracts' (effective from September 1998)
2 Treasury Taskforce PFI Technical Note Number 1(Revised): 'How to account for PFI transactions' The Treasury have recently published a list of PPP and PFI projects, including details of their balance sheet treatment on its website: http://www.hm-treasury.gov.uk./documents/public_private_partnerships/ppp_pfi_stats.cfm

Case study 1: PFI without Accounting Treatment – Partnerships Victoria (PV)

Partnerships Victoria (PV) is the brand name for the Public Private Partnerships (PPPs) entered into by the current Victorian State Government. The more generic term – PPPs – covers a wider range of models and includes infrastructure based service delivery projects established in Victoria from the late 1980s onwards.

The Victorian Treasury is responsible for managing the PV programme. PV policy was initially launched in 2000. Some of its central tenets include the retention of core service delivery responsibility, the requirement for value for money (as measured against the Public Sector Comparator benchmark) public interest tests, and both a whole of lifecycle and whole of Government approach to the provision of public infrastructure and related services. As at December 2007, 18 PV contracts worth around $AUD 5.5 billion in capital investment had been signed by the Victorian State Government (since late 1999).

Both Treasury and the State Government insist that the accounting treatment of PVs is not a consideration in procurement choice. The accounting guidance applied in the Victorian public sector (and other States too) is set out by the Australian Heads of Treasuries Accounting and Reporting Advisory Committee (HoTARAC). More recently, Victorian Treasury has been advising agencies to exercise caution in using the HoTARAC accounting guidance on new and emerging projects given the relevant IFRS standards (which were crafted for private sector entities). The HoTARAC approach is based on the UK Accounting Standard FRS 5, Application Note F.

The general rule is that the entity primarily enjoying the benefits from the infrastructure (and carrying the risks e.g. impairment), is allocated the assets (and the relevant debt). Generally, in Australia, the only cases where the owner of the underlying infrastructure assets is judged not to be the State are the projects where the private party takes at least some Demand risk, such as self funding projects (where revenue is collected directly from the public using the services, rather than payments from the public sector). A common Australian example is toll roads.

Consequently, at 30 June 2006, only two of the 18 PV projects signed are or will be off-State balance sheet. These two are the Docklands TV and Film Studios and the EastLink Toll Road (not yet in operation). In addition, a number of older Victorian PPPs remain off-State balance sheet (e.g. CityLink Toll Road and the full service Mildura Hospital), but again the great majority of the pre PV PPPs are also on-State balance sheet.

To ensure that the decision whether to utilise a PPP structure is not a function of the accounting treatment such a project would receive, the decision as to the accounting treatment comes at the very end of the procurement stage, at financial close. To allow for this, the public sector body will have to commit to the expenditure on the project, however procured, and will therefore be prepared for the project to appear on the balance sheet.

This is achieved through a set sequence in the procurement of infrastructure projects:

1) Identify/define the service need.

2) Consider the plausible options (technical, financial, social etc).

3) Business Case: confirm that the project is worth doing, commence assessment of the potential for PV along with early development of the key value for money benchmark – Public Sector Comparator (PSC).

Criteria involving the delivery of the service, risk transfer optimisation and value for money are therefore the primary decision-making factors.

It is clear that in the UK there will no longer be an accounting driver to structure a project as an off-balance sheet PFI scheme in order to avoid counting against capital allocations, since in many cases, this will not be practically and commercially achievable while still delivering value and affordability.

The case for using PFI will – as government policy has consistently intended – turn on its supposed intrinsic merits as a procurement method offering better value for money. The current accounting debates therefore have the effect of putting that case under the microscope. Just how strong is it?

The classic case for PFI

The case for PFI essentially turns on whether it has achieved the beneficial outcomes it was meant to bring about:

- Focus on outputs/outcomes rather than inputs.
- More rigorous risk/cost analysis.
- Optimal allocation of risk.
- Synergies of integration of design/construction/operation/maintenance.
- Whole life costing.
- Comprehensive competition across all elements of projects.
- Long term performance management.
- Whole of contract maintenance, and hand-back, of the asset in contractually agreed condition.

PFI has also arguably had some unlooked for benefits, not envisaged when it was launched in the 1990s, including:

- Mobilising the sheer project execution ability of the private sector. Between May 1997 and July 2007, 123 Department of Health PFI schemes were approved, of which 69 were operational by the end of July 2007. These operational schemes had a combined value of £4.2bn. It is hard to imagine that this could have been achieved without the thorough-going involvement of the private sector implied by PFI. Only 21 comparable publicly funded schemes, approved in the same period, are operational.
- Innovation in banking and capital markets products. PFI projects are now routinely financed on terms which would have been inconceivable in the mid 1990s.
- Pump priming the development of equity infrastructure as an asset class is a potentially important means of giving pension providers, including some public sector pension funds, access to the long term assets they need to match their long term liabilities.

How important is the 'F'?

Whatever view is taken about whether PFI has delivered the benefits identified above, there is a further question about the role of private finance. How important has the use of private finance been in delivering the benefits of PFI? Could not some or all of these have been brought about by the use of less radical procurement models, not involving private finance?

To answer this challenge it is necessary, first, to get clear about what the use of private finance was intended to achieve; and, secondly, to look at the available empirical evidence (much of it necessarily anecdotal) to see if these aspirations have been realised. In doing this it is useful to distinguish between senior debt and equity. For these purposes, the latter is taken to include any kind of financial instrument junior to senior debt, including subordinated and mezzanine debt, and whether provided by project sponsors or third party investors.

The table below summarises a standard view of the intended roles of private finance within PFI.

Instrument	Role
Senior Debt	• Provider of finance • Discipline in risk analysis / allocation • Due diligence • Ongoing monitoring of project through the life of the contract • Early warning of failing projects • Step in and sort out failing projects • Incur loss when projects fail
Equity	• Provider of finance • Integration of design / build / operate / maintain skills • Long term performance management • Long term client management • Gripping emerging problems • Lose some or all of their investment when projects fail

Has private finance actually made a difference?

There is now over ten years of experience with PFI in practice against which to judge whether the introduction of private finance has actually made the intended difference. Again, this analysis is best broken down by financial instrument; senior debt and equity.

Senior debt

The table below summarises the extent to which senior debt has fulfilled the original envisaged roles.

Role	Outcome
Provider of finance	Yes – but no public policy purpose served
Discipline in risk analysis / allocation	Definitely. Major cultural change in public sector procurement and risk allocation methodology
Due Diligence	Yes. Stark contrast with non-privately financed projects
Early warning of failing projects	Construction period: Yes. Operational period: insufficient data
Step in and sort out failing projects	Banks have not stepped into projects even though allowed under the Direct Agreements, therefore rather disappointing
Incur loss when projects fail	Yes, but very limited

Key points are as follows:

- Senior debt has obviously acted as a source of finance for projects but this has not, of itself, served any public policy purposes. Finance could have been arranged from public sources just as easily. This is in stark contrast to the use of private finance in many fiscally-stressed economies where the private sector's borrowing power is what governments have been mainly interested in.

- The introduction of PFI as a mainstream procurement methodology has increased focus on the analysis of project risks and on their optimal allocation, both between government and the private sector project company, as well as between the private sector company and its subcontractors. Senior debt providers have played an important part in this, both directly and indirectly. Directly, senior lenders have contributed to the development of fair and mutually satisfactory positions on a number of thorny risk issues including, for example, insurance, change in law and inflation in soft facilities management costs. Indirectly, the knowledge that draft contracts will be scrutinised by senior lenders has arguably led to increased rigour from the outset. It can also be argued that the greater focus on risk analysis and allocation in PFI has had a beneficial spill-over effect onto other forms of procurement. For example, it would be unthinkable now for a team running a major public sector project not to have a comprehensive risk register, though this was by no means invariable practice ten or fifteen years ago. While many factors have contributed to the improvement of project discipline, it is clear that PFI has had an exemplary effect – in the literal sense – in this area.
- Senior debt has also brought greater focus on due diligence. This has had a clear and beneficial effect, the tangible result of which is the relatively few projects which exceed construction, time and cost projections, compared with conventionally procured projects. This has been confirmed by evidence collected by the National Audit Office. (See Exhibit 1, right).

Exhibit 1: National Audit Office Reports

The National Audit Office (NAO) published a report in 2003 which showed significant improvements in the areas of price certainty, timely delivery and quality of assets. Whereas a report published by the NAO in 2001 suggested that 73% of government department and agencies' construction projects exceeded the price agreed in the contract and 70% delivered late, the survey in the NAO's 2003 report showed that only 22% of PFI construction projects exceeded contract price and only 24% delivered late. Only 8% of PFI projects surveyed were delayed by more than two months (3 projects of out 37 surveyed). The report also concluded that where price increases had occurred, they had mainly resulted from changes required by the public sector client.

- The benefits from due diligence derive not so much from lender's engagement of skilled professionals to review designs, construction programmes and so on; after all, public sector clients typically engage professionals of comparable skills from the same disciplines. Rather, it arises from the asymmetric exposure of senior lenders to risk i.e. they face a potential loss if the project defaults, but their upside is capped at the repayment of debt and the payment of interest. Accordingly, they have strong reasons to be exacting in their due diligence requirements, and unforgiving of any problems revealed by due diligence. Unlike discipline in risk allocation, due diligence is not a feature of PFI procurement which has, so far at least, spilled over significantly into non-PFI procurement.

- It was always envisaged that senior lenders would exert a similar salutary influence through giving early warning of failing projects as they have had in detecting bad projects at the outset through due diligence. The evidence either way as to whether this aspiration has been realised is slight, for the good and comforting reason that relatively few projects have failed. It is hard to believe that the month by month scrutiny of construction programmes and costs by senior lenders' technical advisers has played no part in the good track record of PFI projects in the construction phase. Equally, there has been at least one example of a spectacular overrun which lenders have continued to fund, i.e. Metronet (though that may be explained, at least in part, by the degree to which lenders were protected through debt underpinning). Beyond the construction phase there is little evidence either way on whether senior lenders give early warning of failing projects. A clear test will arise if and when a project runs into trouble during a costly mid-life capital replacement cycle. Overall, while it seems plausible to attribute some of the success of PFI during the construction phase to the looming presence of senior lenders and their advisers, they plainly have not blown the whistle on all failing projects. For instance, they did not do so on the National Physical Laboratory (see Case Study 3, page 12).
- The concept of step-in rights was very controversial with public sector bodies in the early years of PFI. If the project has failed why could the public sector not simply terminate the contract, pay the termination compensation and move on? Step-in rights, and the associated direct agreements, were in the end accepted not simply as an inevitable consequence of securing private debt, but presented as a potential benefit. The public sector would benefit from intervention by senior lenders in failing projects, it was argued, as they would ensure that they were successfully turned round. While, again, the stock of evidence is small (for the same reasons as explained above) such evidence as there is suggests that senior lenders have, not unreasonably, sought to extricate themselves from failing projects while mitigating their losses as far as possible. They have been deterred from stepping in by the prospect of taking on the contractor's pre-existing liabilities. This is therefore one area where senior debt has not played the role originally hoped for.
- Where projects have failed senior lenders have taken a share of the pain. The amount has varied according to the termination on compensation provisions in the contract concerned (which varied greatly in the early days of PFI), and the particular circumstances of the project. There have been clear cases of senior lender exposure, for example in the case of Jarvis (see Case Study 4, page 13). Analysis done by Standard and Poor's suggests that overall these losses have been, and will continue to be, limited (see Exhibit 2, below). But arguably what matters from the point of view of the health of PFI is that the losses have been sufficiently noticeable as not to weaken the disciplines on risk allocation and due diligence.

Exhibit 2: PFI Lenders' Recovery Rates

In December 2003 Standard and Poor's introduced "Recovery Ratings" designed to indicate the likely "loss given default" rather than the "likelihood of default" indicated by their traditional ratings. They range from one+ (high expectation of 100% recovery of principal) to five (negligible expectation of recovery of principal 0 – 25%). A survey of 2,800 debt instruments over 10 years, undertaken in 2004, demonstrated that despite initial concerns, the risk profile of the project finance asset class was comparable to that of senior secured corporate debt and the average recovery rate was 75% on defaulted loans (with a default rate of 12%). UK PFI project loans typically have recovery ratings higher than this average, because of the termination compensation arrangements and, in a few cases, explicit debt underpinning. For example, Transport for London substantially underpinned the debt taken on by Metronet and Tubelines to finance the London Underground PPP. The first securitisation of 24 UK PFI projects by DePfa Bank Plc had an estimated post default recovery rating averaging 85% for debt funders.

Equity

The table below summarises the extent to which equity has made the difference which the architects of PFI hoped for.

Role	Outcome
Provider of finance	Yes – but no public policy purpose served
Integration of design, build, etc, skills	Yes – but to different degrees in different sectors
Long term performance management	As most projects have not run their course, it is not possible to conclude on the impact of equity role. However, with some notable exceptions, the early evidence is positive
Long term client management	Jury still out, but some good signs
Gripping emerging problems	Some signs
Losses when projects fail	Yes – several examples

The key points are:

- As with senior debt, the finance providing role of equity has not been critical to achieving the public policy purposes of PFI.
- However, its role in gluing together the integration of design, construction, operation and maintenance skills has been important. While a DBMO model may achieve some degree of integration, it does not pin long term financial responsibility or incentives on the contractor to make the integration work in practice (see Exhibit 3, page 17). It is the equity provider who takes long term risk on the integration plan working. The extent of the integration benefit varies from one kind of project to another. Potential benefits will be the greater to the extent that there is a significant operational, maintenance or asset replacement element in a project; and to the extent that the way this element is provided depends on the original design and construction. A further indicator of potential integration benefits is where the original design is influenced by the bidder's confidence in their ability to operate the project in a particular way. Classic examples of projects with high potential integration benefits are therefore those involving process plants of one kind or another (e.g. water treatment plants; waste processing facilities).
- The long term financial exposure of equity to the success of a project should provide strong incentives to manage the long term performance of the project, and to maintain good and trusting relationships with the client. There is now a small but growing body of evidence to suggest that public sector clients are generally satisfied, or better, with the performance of their PFI contracts. The Treasury's report, "PFI: strengthening long-term partnerships" ("SLTP") shows that, according to contract managers, of the 100 PFI projects looked at, 96% were performing at least satisfactorily and 66% were performing to a good or very good standard. It also shows that PFI performance improves with the age of the PFI (70% of PFIs operational before 1999 were rated good or very good, compared with 63% of those that became operational in 2001). The incentive to ensure timely rectification of operational problems seems similarly to be working, with contract managers reporting that such problems are resolved within the time frame allowed in 82% of cases. Of itself, this evidence does not necessarily prove that it is equity which has led to these generally satisfactory results; theoretically, they could be attributable to the payment mechanisms under the operating contract. However, the evidence reported in SLTP does at least suggest that equity is having a beneficial effect on long term performance management. The longer the satisfactory figures hold up, the stronger this inference will become.

- How has equity reacted when problems have emerged in projects? The few major problems that have occurred have often swamped equity, resulting either in termination or requiring a financial contribution from the public sector towards the resolution of the problem (e.g. a financial contribution towards modifying an asset to improve its performance). However, the experience of Jarvis, where equity injected significant additional funds to help the completion of projects which were in mid-construction when Jarvis's problems emerged, is a clear example where equity has put its hand in its pocket (see Case Study 4, page 13).
- Where projects have been terminated through contractor default, equity has certainly taken pain. A well known example is the National Physical Laboratory (see Case Study 3, page 12). In some cases such as these, equity holders have also taken losses in their roles as contractor on a project. A clear example of this is Sir Robert McAlpine's losses during construction on the Dudley Group of Hospitals PFI (See Case Study 5, page 14).

Case Study 2: Ballast

Ballast plc entered administration when it was part-way through delivering a programme of major refurbishment of six schools for East Lothian Council under a PFI contract to refurbish and maintain the schools and build and maintain a new community centre. Ballast had been experiencing liquidity difficulties which resulted in the insolvency of sub-contractors, but had a strong parent company which was expected to support it. When the parent company removed its support, leading to administration, the other equity providers – Noble PFI Fund (subsequently acquired by Infrastructure Investors) and Forth Electrical Services – who together held 60% of the PFI contractor Innovate (East Lothian) took the lead in dealing with the administrator, then successfully sourcing replacement construction and facilities management contractors and stabilising the supply chain. The overall project cost, taking into account the cost for new contractors to step into the project, was very significantly higher than the original project cost and correspondingly increased the funding requirement. This further requirement was met through contractor bonding and guarantees plus additional debt and equity funding.

After extensive financial restructuring and discussions with the Council and Scottish Executive, the project proceeded with the replacement contractors. This gave the Council the refurbishments it had contracted for, at the contracted price, but with an agreed element of delay. There was a further refinancing at a subsequent date around certain risks which the replacement construction contractor had not been prepared to accept. Overall, in a situation of extreme financial distress, the Council secured substantively the schools and services which it had originally contracted for and the PFI equity providers, in conjunction with the lenders, played a central role in returning the project to stability and delivering the services.

Case Study 3: National Physical Laboratory (NPL)

In July 1998, the Department of Trade and Industry (DTI) signed a contract with Laser, a Special Purpose Vehicle (SPV) owned by Serco Group plc and John Laing plc, for a 25 year PFI deal to build and manage new facilities at one of the world's leading measurement laboratories, the National Physical Laboratory (NPL). The planned cost was £96m, funded mainly through loans from Bank of America and Abbey National Treasury Services plc.

Initially the fixed price design and build contract with John Laing Construction Limited (JLC) protected Laser from increases in construction costs. However, when in November 2001 John Laing plc sold JLC, and took on responsibility for the contract with Laser, it lost this protection. A supplemental deed meant that the contract was now to complete an agreed list of work, rather than to construct facilities that met DTI's specification. The DTI was not party to this deed and registered its objections. The deed exposed Laser to the full financial impact of any further construction problems and delays.

Problems materialised during construction and by 2004, Laser had paid JLC £76 million of a £82 million fixed price for construction, although only nine of the 16 modules were completed and an estimated £45 million worth of work was outstanding. Laser acknowledged that it could not complete the project in July 2004 and, after negotiations, the DTI and Laser signed a termination agreement worth £75million (which was at the low end of the range of estimates of Laser's contractual entitlement) in December 2004.

The private sector reported considerable losses. While the equity investment in this PFI was small, it certainly took pain when the project failed, as the equity holders lost all of their £4 million investment. Debt also suffered as senior lenders wrote off debt to the sum of £18 million. However, the largest losses were incurred by the construction contractors, JLC, who reported losses of £67 million, and their subcontractors, who reported losses of £12 million.

The DTI, having invested £122million (including the termination compensation, cost of procurement process, upfront payments and unitary payments), was left with assets valued at £85million. This indicates that while significant financial losses were incurred by the DTI, these were mitigated by the risk transferred to the private sector.

What equity was not successful in doing, in this case, was ensuring that the design was deliverable. However, unlike many infrastructure projects, the design of the NPL was complicated by its highly technical scientific requirements. It was in achieving these that the budget overruns occurred. The DTI had concerns that the design of the NPL would not meet with specifications as early as the procurement stage. However, it was expected that Laser would overcome these design problems, recognising that it was in their interest to resolve such concerns. The DTI did not seek to impose its own design on Laser or request changes to the design as it wanted to ensure that responsibility for delivering satisfactory performance remained unambiguously with the private sector.

While Lenders gave early warning of problems within Laser and took an increasingly active role in overseeing its actions, they did not step in to sort out the problems. It is arguable that this was because there was no alternative solution to the problems that Laser was encountering that would enable it to remain within budget.

Ultimately, much of the financial risk was successfully transferred to the private sector through the use of PFI, and the financial downside for the DTI was mitigated by this. However, not all risk was transferred and the DTI was left with unfinished assets which it has to find an alternative contractor to complete.

Case study 4: Jarvis

Until the beginning of 2004 Jarvis Plc had been extremely successful in winning PFI contracts, especially schools, thanks to a strategy of aggressive bidding. At the year end 2004 Jarvis was involved in 27 educational PFI projects with a whole life value of £3 billion. Typically Jarvis took the role of contractor and operator in these contracts and invested equity alongside a financial investor. However, this scale of activity stretched the construction company's operational capacity beyond its limits. Jarvis was forced to use subcontractors to fulfil its PFI obligations and construction costs began to increase way beyond what had been projected in its bids. From 2003, concerns were being raised about the quality of work done by Jarvis in its PFI business. In February 2004, Brighton Council branded Jarvis's work on four schools in a £105 million contract as "unacceptable". Several of its projects were not delivered on time and on others work had ground to a complete halt.

During 2004 Jarvis issued a series of profit warnings. This focussed attention on its PFI business, particularly how to fund the completion of those projects which were still in construction. The £120m funding shortfall – arising from the higher than expected construction costs – was filled by a variety of means, including around £60m additional contribution from the construction arm of Jarvis (funded by the proceeds of the sale of its Tubelines stake), additional senior debt and calls on bonds. The projects rescued in this way included Tyne and Wear fire stations, Lancaster University and Wirral schools. In each case the project was completed, albeit after delays, and the financial pain was borne by the major stakeholders – Jarvis as contractor, and funders, particularly equity.

Case study 5: Dudley Group of Hospitals PFI

In 2001, Dudley Group of Hospitals NHS Trust signed a 40 year PFI contract with special purpose company, Summit Healthcare, (a consortium between Sir Robert McAlpine, as design and build contractor, Interserve, as FM contractor, and Bank of Scotland) to redevelop and expand the Russell Hall Acute Hospital in Dudley and to provide ambulatory and day care centres at two other sites. The project had a funding requirement of £150m, to be funded through equity, bonds and a loan from the European Investment Bank. The concession was worth £1bn over its 40 year life.

The project ran into difficulties during the construction phase due to additional work being required on the refurbishment of the existing buildings on the Russells Hall site. By October 2003, McAlpine had reported losses of £27m caused by delays and unforeseen work. By the time the project was completed in 2005, McAlpine had suffered losses of around £100m.

McAlpine sued the Dudley Group of Hospitals NHS Trust for damages and in May 2007 the parties settled, with McAlpine receiving £23.2m damages.

Provisional conclusions

Any conclusions about the benefits brought by private finance must be provisional and tentative, since the corpus of evidence is still growing as the project pipeline matures. However, the following propositions appear to have sufficient evidential weight behind them to be worthy of the attention of policymakers:

- The use of private finance has increased the focus on risk analysis and allocation which has had beneficial effects going beyond PFI.
- It has also increased due diligence disciplines. This is mainly attributable to the role of those entities taking, or opining on, senior credit risk: lenders; monoline insurers; and rating agencies.
- The integration of Design, Construction, Maintenance and Operations would not have been as secure or as effective as it has been without the long term glue provided by equity.
- The beneficial impact of senior debt appears to diminish after financial close. In particular, there is no successful track record of senior lenders stepping in to sort out failing projects in the way envisaged in the PFI contracts, though there have been instances (e.g. Jarvis, see Case Study 4, page 13) where senior debt has played an active role in trying to sort problems out, falling short of step-in. The pain taken by senior debt on termination or restructuring has been limited.
- There is some emerging evidence that the long term financial exposure of equity is one of the reasons why public sector clients have been generally satisfied with the performance of operational PFI projects.
- There has been at least one prominent example (Jarvis) where equity has injected additional funds to complete failing projects in the construction phase. There is no real evidence either way yet on whether it will do the same for struggling operational projects.
- Equity has taken considerable pain on those projects that have failed. As well as shielding the public sector to some extent from the financial impact of those failures, this has had a salutary effect in underscoring the risks taken by equity.

Other potential means of providing private finance benefits?

The question arises as to whether the benefits of private finance in PFI identified in the previous sections could have been brought about by other means. This is a significant issue for public policy because, if there are such means, they could replicate the PFI benefits in non-privately financed projects. Again, it is worth considering this in two parts, according to financial instrument; senior debt; and equity.

Senior debt

It has been argued in this paper that the benefits of senior debt are concentrated at the front end of projects; risk analysis and allocation; and due diligence. There have been several moves towards replicating these benefits outside PFI:

- Processes designed to increase the senior level scrutiny of major projects before they are given the green light, such as the Major Projects Review Group announced in SLTP. This has recently got underway, reviewing, among other projects, the Personal Accounts programme and the carbon capture and storage project.
- The application of due diligence disciplines by the public sector to non-PFI projects. For instance, the MOD has put in place procedures to carry out commercial assurance and due diligence on its major procurements. This internally led exercise emphasises the independence of those carrying out the due diligence from those who negotiated the contracts. The commercial assurance and due diligence exercise aims to ensure that the contract about to be signed is consistent with the terms originally proposed, and approved, for the contract.

These are recent developments, and it is too early to assess their effectiveness. However, as noted earlier, one of the most powerful features of senior lenders' due diligence is that it is carried out on behalf of entities with an asymmetric exposure to risk, and hence no incentive to pursue projects come what may. Public sector projects can suffer from what might be termed momentum risk – the difficulty of stopping, or significantly modifying, a project once it is underway. It remains to be seen how far these new processes can mitigate that risk.

The greater the degree of distance and independence from government which any review process has, the greater (arguably) would be its ability to spot and stop misconceived projects. It has even been suggested that the public sector should subject itself to a completely external discipline, such as assessment of projects by ratings agencies. Illustratively, it has been argued, that government could decline to back a project without some form of external accreditation from a ratings agency. This is an interesting concept but harder to apply than it may at first appear. Ratings agencies' fundamental skills rest in assessing the risk of default by a borrower. The use of a ratings agency could therefore be applicable in situations where government was lending to a project or otherwise taking senior credit risk (as in the case of debt underpinning – see below) as a means of external assurance. However, it is hard to see how the concept could be applied, except metaphorically, to conventionally funded projects, although the rating agencies or similar organisations could be used to review the underlying business (not financial) risks. In particular, structuring a project so as to achieve an investment grade credit rating often involves shifting risk from senior debt to equity or to the ultimate customer (i.e. government). In conventionally funded projects it is the same party – the public sector – which plays all three of these roles.

The overall conclusion is therefore that, while there are steps which the public sector can (and is) taking to replicate the disciplines imposed on projects by senior lenders, it is doubtful whether any process will be as effective as one which (a) requires an independent party to reach a view on a project and (b) exposes that party financially if they are wrong.

Equity

The earlier analysis identified two main benefits from equity in PFI which other procurement models might seek to replicate; integration of design, build, maintenance and operation; and long term performance incentives. (There is a third benefit too – taking pain on project failure – but it is hard to see how, even theoretically, this could be replicated without external investment.)

As noted earlier, the integration benefits could in principle be achieved to some degree through a DBMO model, though the absence of equity to glue various elements of the project together and to give an incentive to achieve successful integration is a weakness. It is perhaps for this reason that there has been little enthusiasm for this model in the UK (see Exhibit 3 below).

Exhibit 3: Design Build Maintain Operate (DBMO) v Private Finance Initiative (PFI) – (Comparison of a Typical Project)

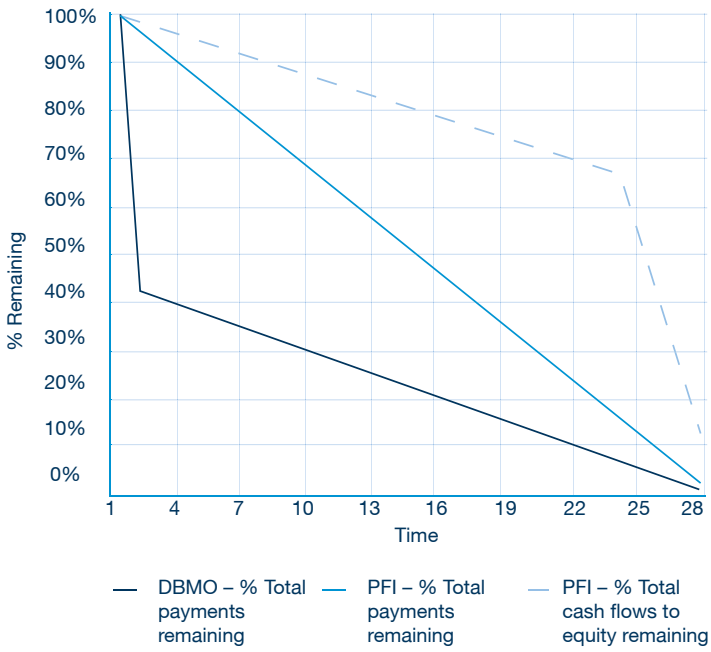
A design, build, maintain and operate (DBMO) contract is one in which a consortium of contractors provide all the services required for the life of a project and the public sector body provides the finance at the stage at which it is required. Typically this will mean investing the majority of the funding during the construction phase when capital intensive assets are built and then providing smaller sums through the life of the contract to cover the running costs incurred by the consortium. This is in contrast to a PFI project, where the consortium finances the construction of assets and is paid a unitary payment over the life of the project by the public sector body.

Arguably, the integration benefits of PFI could be gained using a DBMO model without the complexities and (some would argue) cost of private finance incurred under PFI.

However, DBMO has disadvantages in terms of risk transfer as it does not have the same financial incentives in the form of returns to equity, to ensure the consortium's long term commitment to the project. If problems were to arise during the operation phase of the contract, the DBMO consortium would have less incentive to spend the money required to fix the problem and would be more likely to walk away from the contract than under PFI on account of the payment profile and the profile of cashflows to equity in particular.

The graph overleaf, comparing typical DBMO and PFI projects, shows that after 5 years of operation, using the DBMO model means that only around 35% of the nominal payments in the entire contract are still owed to the consortium – 65% of the nominal contract value has already been paid. By 20 years, there is only about 12% of the nominal contract value remaining to be paid. By year 20, however, there are still around 75% of the cashflows to equity remaining under the PFI model. If exceptional costs were to occur in, for example, year 10 of the contract, the consortium has far less incentive to pay those costs to maintain the project under DBMO, where it has only 30% of the nominal contract value still owed to it, than under PFI, where it still has nearly 70% of the nominal value of the contract owed to it and 85% of the cashflows to equity still due to it. Thus, under PFI, the consortium appears to have a greater incentive to maintain the facilities and to build a better quality of asset in the original construction than under DBMO.

Percentage of total nominal cash flow remaining in a typical DBMO and PFI model and percentage of total cash flows to equity remaining in a PFI model



The beneficial impact of equity on long term performance management could, it might be argued, be replicated through carefully designed long term operating contracts. Indeed, it is not easy to disentangle, even within PFI projects, the effects on performance of equity and of a well structured payment mechanism. Whether or not equity makes a distinctive difference could be definitively tested either way only by comparing samples of PFI contracts with long term operating contracts in similar sectors. Unfortunately, there are few such comparators. While the public sector have fewer medium/long term operating contracts they have mainly been for IS/IT related services, an area in which there have been very few PFI comparators.

In the absence of much, if any, directly relevant empirical evidence, can any inferences be drawn from the application of first principles? One, perhaps. The normally back ended profile of equity cashflows means that equity remains exposed until the very late stages of a project. This degree of financial exposure is generally greater than that which could be achieved by heavily performance–related payment mechanisms in an operating contract, especially given that any payment deductions under such contracts must not, as a matter of law, be so harsh as to constitute a penalty. This is illustrated by the further comparison of the profile the cashflows to equity under a typical PFI project with the service payments under a DBMO contract (see graph in exhibit 3).

Financial exposure is not, of course, the only incentive for long term performance management. The consequences of poor performance on reputation, and on obtaining further business, are powerful too. But in large and very long term contracts the financial incentives within the contract itself must be very powerful. This suggests that, when a body of empirical evidence comparing projects with and without equity is available for analysis, it will be surprising if it does not show the equity has a special role to play in ensuring high quality long term performance.

“But private finance costs more”

The next question to ask is whether the benefits of private finance are worth the premium apparently paid compared to government’s borrowing cost. A whole industry – Public Sector Comparators, Value for Money guidance, and so on – has developed to answer this question project by project. But it rests on an important assumption: that government can sustainably fund projects from borrowing more cheaply than the private sector. Is this true?

It is certainly the case that government debt is cheaper than the debt provided to finance PFI projects, and cheaper still than the overall cost of finance for PFI projects, i.e. the weighted average cost of capital (WACC). But this is to compare apples with fruit salads. It ignores the position of taxpayers who play the role of equity in this financing structure.

Making a simple comparison between the government’s cost of debt and the private sector WACC implies that the government can sustainably fund projects at a cost of finance equal to its risk free borrowing rate. But this would be true only if existing borrowing levels were below prudent limits. The constraints on public borrowing suggest, however, that borrowing levels are not currently too low. These constraints exist because government borrowing must ultimately be funded by the taxpayer. Prudent management of the public finances requires decisions on the sustainable level of debt that can be supported by taxpayers.

Take a corporate example. A company considering an investment should fund it entirely by debt only if its gearing is sub-optimal; in those circumstances that would be the cheapest thing to do. But if it were already optimally geared, 100% debt finance would be the wrong financing solution. Over-gearing would cause its credit quality to deteriorate and its cost of equity to rise. This would affect the business as a whole, not just the incremental investment.

Similarly, if government has already reached prudent borrowing limits, it would be wrong to favour government debt financing over PFI as a financing solution simply because the headline cost of the former was lower. This would be to ignore the taxpayers, who represent the equity in its financing structure.

Another way of looking at this is by considering the opportunity cost of government funding. The economic cost of providing funding for a risky investment should be equal to the returns foregone by not using it for an alternative equally risky investment. In other words, the cost of investing in one project is not necessarily the cash cost of that investment, but the opportunity which has been lost to invest that cash in other projects. The fact that governments can borrow more cheaply than the private sector does not mean that they should expect any lower return on their money.

Consider examples where Governments do invest large amounts of sovereign wealth. Examples of this include the Future Fund in Australia, GIC in Singapore and Dubai Holdings. These economies have large amounts of funding available for investment but do not use it as a vehicle for subsidising government projects. Why? Presumably this is simply because they can make better returns for bearing similar risks by investing in a balanced portfolio of stocks and bonds. Were these economies to invest instead in their own businesses or projects, the direct cost of funds might be low but they would be foregoing opportunities to invest funds in opportunities available on the market more generally. If, for example, the Australian Government chose to invest its Future Fund (which is aimed at funding long term government pension liabilities) in infrastructure projects or PPPs at a concessional rate which reflected its cost of funding advantage, it would be foregoing the opportunity to buy investments in the broader market where it could earn the same returns as any other investor (and therefore capitalise on its cost of funding advantage rather than concede it to an infrastructure project). This serves an important public policy outcome i.e. good stewardship of public resources. The Future Fund, in this case, would be in a position to pay more of the Government’s pension liabilities in due course than it would have been able to do if it had simply conceded its cost of funding advantage to various projects. The opportunity cost of capital to the private and public sectors is the same in this sense.

Liberating PFI from accounting

The premise of the discussion in this paper thus far is that the introduction of IFRS may represent an indirect (and unintended) threat to PFI, in the sense that it looks set to remove the accounting driver for implementing capital projects through PFI.

But the introduction of IFRS can also be looked at in a rather different light. If PFI continues to be a mainstream procurement method – and this paper has identified a number of reasons to believe that it should be – could IFRS actually open a way to improvements in the structuring of PFI projects? Specifically, if balance sheet classification is never practically in doubt, could this remove pressures for sub-optimal structuring of projects and barriers to devising new and better ways of allocating risk?

It is unquestionable that some prevalent features of project structuring have been attributable to securing off-balance sheet classification. For instance, a number of projects have had a degree of demand risk injected into them, when this does not seem to make sense in relation to the underlying drivers of demand in the project. Commonsense has steadily reasserted itself in this area with a number of sectors migrating from demand-based to availability-based payment mechanisms over time, roads being the prime example. Artificial structuring of projects is not, however, something characteristic only of the early years of PFI. Many people currently active in the market are aware of examples where aspects of project structuring are back-solved from the intended accounting treatment, notwithstanding official admonitions to the contrary. The removal of this pressure will, frankly, come as a relief.

More generally, there are some chapters in the PFI text book which it has been hard to question in the past, for fear that this would begin the slippery slope down the road towards on-balance sheet classification. But if that classification is all but certain from the outset, that fear is removed, and the debate can be opened up.

One clear example of this is debt underpinning (i.e. the provision of guarantees by the government that a significant proportion (say 90%) of the senior debt will be honoured either by guaranteeing a proportion of the monthly Unitary Charge or through the termination compensation arrangements. This approach has been adopted in a handful of cases, either to make large and difficult projects financeable (e.g. London Underground PPP), or to test whether it offers a value for money benefit (e.g.Skynet5 and the Docklands Light Railway Woolwich Extension). The M25 ring road around London is currently in procurement with bidders invited to offer variant funding proposals which incorporate a partial debt underpin. The results from the closed deals are positive, in that margins have been lower on the underpinned parts of the debt, without increasing the margin on the uncovered portion by a matching amount. There are different views in the market on how the underpinned and non-underpinned tranches should be priced, however, time will tell how effective the underpin structures are.

If the experiments currently under way bear out positive early experience then debt underpinning could become a standard way of retaining the benefits of private finance while reducing the costs involved. And there would be no barrier to wider adoption of this approach for fear of its accounting consequences.

It is, however, important that any moves in this direction should not undermine incentives on senior debt providers to scrutinise projects in advance and to commission rigorous due diligence. In practical terms this means ensuring that the uncovered portion of the debt is sufficiently large in absolute terms to give the senior credit parties a strong financial incentive to get it right. It may require a number of iterations to find the optimum level of the debt underpinning. The guiding principle is that the underpinning should arguably do no more than formalise the de facto reality, to which the ratings agencies have drawn attention, that the current recovery ratings for senior lenders on defaulted projects will be at least 80% and sometimes over 90% (see Exhibit 2, page 8).

An alternative, or additional, way of achieving the same outcome as debt underpinning would be for the public sector to make contributions towards capital costs during the construction period, or in the case of local authorities, to provide a portion of financing through Prudential Borrowing. Again, a balance needs to be struck between decreasing the costs of the project by this means, while not diluting the disciplines exerted by externally provided senior debt.

Emerging findings

The high level conclusions emerging from this analysis – several of them being tentative and awaiting further evidence as the PFI project pipeline delivers more practical experience – are:

- One way or another, many more PFI schemes are likely to be on balance sheet going forward. This therefore highlights the question of what the real benefits of PFI have been given that any supposed benefits from gaming public expenditure controls will disappear.
- PFI has made a difference to the implementation of large asset-intensive projects, and the role of private finance within PFI has been a big part of that difference.
- In particular, senior debt has exerted beneficial discipline at the front end of projects (though has disappointed in the part it has played when projects get into trouble further down the line); and equity has delivered integration benefits as well as providing an incentive for sustained good performance during the operational phase of projects. Equity has also cushioned the public sector from a significant part of the pain in the very few cases where projects have defaulted.
- PFI has also had a wider beneficial effect on big ticket public procurement, particularly in the areas of risk analysis and allocation.
- In principle some (but not all) benefits of private finance could be brought about by reforms to project control disciplines and through other non-PFI contractual mechanisms. While it is too early to reach firm conclusions on the new initiatives now in play, it is not easy to see how they could ever fully match the disciplines flowing from externally provided finance.

There are ways of improving PFI, some of which will become easier to develop now that accounting classification is becoming a non-issue. In particular, there are ways of reducing the costs of externally provided senior debt though these will need to be carefully calibrated so as not to weaken its disciplinary influence.

Implications for policy

What does this mean for public policy on PFI?

First, and above all, the argument in this paper suggests that policy should strive to conserve the benefits that PFI has brought in the different market circumstances now presenting themselves. In practical terms, this means finding ways to preserve the policy incentive on public procurers to embrace the disciplines and rigour of private finance, for instance by devising a successor to the PFI Credit system which is not dependent on accounting treatment. There is a real risk that the efficiency gains made in the past 10-15 years will dissipate if procurers swing back towards conventionally financed projects. While such a swing would be accompanied by sighs of relief in some quarters, those sighs would be the symptom that necessary disciplines were being relaxed. Robust procedures must be put in placed to ensure that the right procurement and financing route is adopted in each case.

Secondly, the policy should be directed towards refining and honing the existing private finance models, in particular by trying to secure some of the benefits of senior debt more efficiently. The drive to shorten procurement timetables and make tender processes more transparent and predictable (made all the more necessary by the introduction of Competitive Dialogue) should continue. Not only will this reduce bid costs, but it should serve to put downward pressure on primary equity returns, which are currently affected by investors' perceptions of the risks of the procurement process.

Thirdly, the urge to adopt "new models" should be approached with caution. Two models involving public sector equity – LIFT and Building Schools for the Future – have been rolled out. There should be a pause for digestion and reflection before applying the public sector equity model to other sectors. Whatever the benefits brought by public sector involvement in the project delivery vehicle (and they could be considerable), it should not be forgotten that many of the benefits of PFI have come from plain, old-fashioned private sector equity. Public procurers should not be distracted from this fact by the glitter of new models; nor should those alternative models be allowed to blunt in any way the edge which the involvement of private finance brings to the execution of projects.

Conclusion

Procurement outcomes in the United Kingdom have improved as a result of the involvement of the private sector in delivering public infrastructure and related services. Private finance has been an important part of that story, through the analysis, management and mitigation of risk.

There is a strong argument that the apparent private finance cost premium is illusory. But the appearances say that the private sector cost of capital is higher than the government's cost of debt. So governments have political and presentational, as well as substantive, reasons to exert downward pressure on the private sector's cost of finance. Taken to the extreme, this could lead to attempts to erode altogether the (apparent) cost premium through wider use of conventional procurement or through comprehensive government guarantees of private finance. This would, however, be to forget the hard learned lessons of the past, and to fall back into the lazy thinking that (apparently) cheaper is better.

The challenge for the public sector is to allocate risks optimally between itself and the private sector; and then to run procurement programmes and negotiate individual deals, so that the private sector receives an appropriate but not excessive reward.

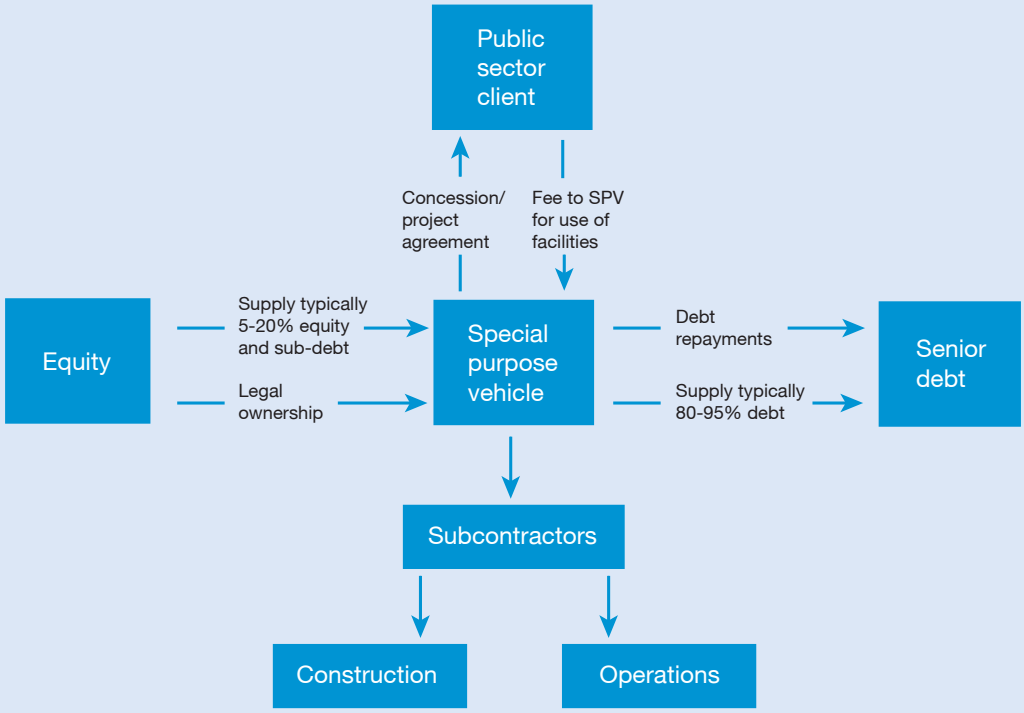
Appendix One

What is Private Finance Initiative (PFI)?

Private Finance Initiative projects are the most common form of Public Private Partnership (PPP) in the UK. They are strictly defined legal contracts, involving private companies in the provision of public services. While they were introduced under the Conservative Government in 1992, PFIs have become more popular since 1996, under the Labour Government. They are now used to provide services in many areas including health, transport, defence and housing. Under a PFI scheme, a capital project is designed, built, financed and managed by a private sector consortium under a contract lasting typically 25 to 30 years. The public sector body pays the consortium a regular stream of payments (usually referred to as a unitary charge) for the life of the contract, after which the assets may revert to being owned by the public sector body. By 2001-02, PFI accounted for 9% of public investment.

PFI is distinguished from other contracting techniques for capital projects by a number of features:

- The contractor is paid based on the ongoing performance of the project over its life, as opposed to the traditional procurement model where costs are paid during and immediately following construction.
- The transfer of risk to the contractor is usually greater than for traditional contracting.
- Responsibility for delivering all aspects of design, construction, maintenance and operation are centralised with the contractor.



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