

A Value For Money (VFM) Framework Proposal For PFI Road Projects

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Abstract: In PFI procurement the question of VFM has been given the utmost attention together with risk and risk management. VFM is considered to be a controversial issue in PFI projects. The VFM has to be explained with and built on a set of performance criteria to deliver service. VFM is built on economy, efficiency and effectiveness (Butt & Palmer, 1985). The PFI approach offers the prospect of delivering the services required by public sector clients in a way that provides superior Value for Money than conventional procurement, because the PFI approach can give scope for innovation in how services are delivered, better management of the risk associated with projects, more effective exploitation of opportunities, and better management. The Public Sector Comparator (PSC) provides a quantitative analysis to support a qualitative judgement of the best procurement option, taking into account the risks of each procurement approach as a means of informing a wider VFM assessment. The PSC at present is focused only on the narrower benefits and disbenefits of future project options. The UK government believes that a rigorous economic assessment is important to ensure that the right procurement option is chosen on the basis of VFM and it believes that the PSC continues to have an important role. The VFM exercise focuses on this.

The VFM in this paper is undertaken as a holistic approach, it is multidimensional and builds on the economy, efficiency and effectiveness and considers Robustness, Affordability and Risk Transfer as the main features. These features will be detailed in the text. There is a clear need for the public sector to have an objective VFM appraisal for assessing PFI throughout the whole life cycle of the road projects. VFM exercises focus on outputs, Whole life-cycle costs, identifying risks and allocating these to the party best able to manage them. It provides a rigorous framework to ensure that the Public Sector gets the best value for the investment in the priority project.

The paper will propose a framework for VFM: how economy, efficiency and effectiveness apply in road PFI projects and their relation to other parameters that are interrelated and necessary for the public sector in the WLCC environmental supra system.

Keywords: Affordability, PFI, PSC, Road Projects, Risk Robustness, Transfer, VFM, WLCC.

1. Introduction

Achieving Value for Money (VFM), which is an aggregation of issues such as quality, price, technical merit, aesthetics and functional characteristics, cost effectiveness, etc., is a statutory requirement for the UK public sector. Hence achieving VFM is of vital importance in the successful delivery of a PFI road project. In PFI the UK government has put in place, procedures to ensure that approval is given only to PFI projects that are likely to deliver VFM to the public sector throughout the whole life cycle of the project. These procedures require the business case of any project that includes all the costs, benefits, risks and risk transfer and affordability of both traditional and PFI options using Discounted Net Present Value (DNPV) cash-flow analysis. Awarding contracts on the basis of the lowest price tendered for construction works is rarely VFM; long-term value over the life of the asset is a much more reliable indicator. It is the relationship between long-term costs and the benefit achieved by the public sector that represents VFM.

According to ACCA (2004) VFM is the key rationalizing motif for partnering; and its meaning in the context of PFI is more based on economy as reflected in the use of discounted cash flows over the life-time of the project. Akbiyikli (2005) found a slightly different result from two case study road PFI projects in the UK concluding that VFM was not based mainly on economic parameters when the local public sector authorities decided on the PFI option- even though the PFI bid were higher than the PSC in both cases. An extract from the fieldwork clarifies this argument:

Rifat: “It was only the price you judged when you chose the bidders. Do you agree with that?”

Respondent: “In principle, yes! But, there is a big difference between the PSC and Preferred Bidder’s price. £10 million is a lot of money!”

Rifat: “...How do you see PFI and value for money to the Council?”

Respondent: “Principally the Council will get the objectives set and the quality requested in the Output Specification. Although there is £10 m difference between the PSC and the Preferred Bidder’s price (£53 m), I see the PFI deal as “political value for money” for the A92 Upgrading Project”.

2. Literature Review

PFI differs from privatisation in that the public sector retains a substantial role in PFI projects, either as the main purchaser of services or as an essential enabler of the project. It differs from contracting out in that the private sector provides the capital asset as well as the services. The PFI differs from other PPPs in that the private sector contractor also arranges finance for the project (Allen, 2001 and 2003).

In PFI procurement the question of VFM has been given the utmost attention together with risk and risk management. VFM has to be explained with and built on a set of performance criteria to deliver service. VFM is built on economy, efficiency and effectiveness (Butt & Palmer, 1985). *Economy* is related to the cost and quality of resources, *efficiency* is the ratio of output gained for the amount of resources used, and *effectiveness* is the extent to which the actual results matched the desired results.

Rutter & Potter (2003) gave a concise definition of those three performance criteria concerning asset procurement as:

“Economy reflects the quality and cost of resources obtained through the procurement process at the stages throughout useful life of an asset. Efficiency reflects the management of the delivery and operation of the asset throughout its useful life. Effectiveness reflects the level of performance achieved throughout the useful life of the asset”.

Different publications gave different definitions of Value For Money, for example: The definition given by the National Audit Act 1983 in HM Treasury Taskforce-Fourth Report (2000) is:

“The economy, efficiency and effectiveness with which a body has used its resources in discharging its functions”.

The definition of Johannisse and Coenen (2000) is:

“a qualitatively better product for the same money or the same quality with less money”.

The definition of the SPFM-Scottish Public Finance Manual (2004) is:

“the optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user’s requirements and is crucial to the wider objective of delivering high quality, cost effective public services”.

Value For Money according to ACCA (2002) is the virtual synergy created by and a comparison made between Best and Final Offer (BAFO) and the Public Sector Comparator (PSC). *“Value For Money is an issue that should have continuity throughout the project life-cycle and the assessment of the risk must continue to the end of concession period”.*

The definition of the OGC (2003) has similarities with the above definition:

“Value for Money is an issue and a process which spans the complete life cycle from initial inception to the end of the useful life of the asset or completion of the contract. Value for Money gains are improvements in the user’s requirements”.

The PFI approach offers the prospect of delivering the services required by public sector clients in a way that provides superior Value for Money than conventional procurement. This according to the House of Commons-Public Accounts Committee-Twenty-Third Report (1999) is because the PFI approach can give scope for:

- *Innovation in how services are delivered:* Because the client specifies what is required not how it is to be delivered, the supplier has scope to innovate. The public sector client must not unnecessarily restrict suppliers’ scope of innovation, by prescribing in excessive detail how services are to be delivered. For the higher cost of private sector finance to be offset by bringing in private sector expertise, the public sector must be open to innovative ideas offered by the private sector. Private sector bidders need to be given as much freedom as possible to determine the best way to provide the services required.
- *Better management of the risks associated with projects:* The principle in the PFI is that risks should be allocated to whichever party is best able to manage them. Appropriate allocation of risk between the parties is critical to the achievement of

Value for Money in PFI contracts. Inappropriate risk transfer and risk creation is likely to reduce Value For Money as the party concerned will seek to mitigate the impact of the risks concerned. A proper understanding of where risks lie is also crucial.

- *More effective exploitation of opportunities:* With PFI, the private sector supplier's ability to exploit commercial opportunities can be harnessed to benefit the taxpayer also. Value For Money is not likely to be achieved if the procurement process has not been competitive. Competition is a fundamental requirement for PFI deals.
- *Better management.* The PFI can be a method of finding the most effective management team for a particular service.

The PFI literature has mostly focused on examining VFM at the contract negotiation stage (PricewaterhouseCoopers, 1999; Mayston, 1999; Froud and Shaoul, 2001; ACCA, 2002). These studies have criticised the financial appraisal of VFM, including uncertainty involved in predicting future cash flows, the subjectivity involved in risk transfer processes and the discount rate used in appraisal. Edwards and Shaoul (2004) examined the *ex post facto* VFM and accountability issues in the context of road PFI contracts, which they argue are under researched.

Treasury Guidance 'The Green Book' (HM Treasury, 2003) and 'Partnerships for Prosperity' (HM Treasury Taskforce, 1997) provide guidance on PFI appraisal and how VFM is achieved through PFI contracting. An important issue in evaluating VFM in PFI contract bids is the comparative cost of doing the project within the public sector. This is known as the Public Sector Comparator (PSC). The HM Treasury Taskforce (1997) states that "VFM will need to be demonstrated by comparison of private sector PFI bids with a detailed Public Sector Comparator (PSC)".

The PSC (for a reference project) is the "purportedly neutral benchmark" of the most efficient form of public sector delivery (English and Guthrie, 2003). *The Green Book* (HM Treasury, 2003) explains that the PSC is a discounted cash flow analysis of the costs to the public sector of providing the public service. Risks kept by the public sector are added to these costs to obtain the "risk adjusted PSC" which is then compared with PFI bids. The difference is called VFM. According to the Treasury Taskforce Technical Note No.5 (HM Treasury Taskforce, 1999) on *How to construct a Public Sector Comparator* the PSC may be defined as:

"A hypothetical risk-adjusted costing, by the public sector as a supplier, to an output specification produced as a part of PFI procurement". It:

- *Is expressed in net present value (NPV) terms;*
- *Is based on the recent actual public sector method of providing that defined output (including any reasonably foreseeable efficiencies the public sector could make);*
- *Takes full account of the risks which would be encountered by that style of procurement.*

An output specification defines what the client wants to procure, and what the supplier is expected to provide but it does not generate or describe the costs (including risks) of conventional public sector procurement. It is the costs of meeting the output specification that critically defines the PSC (HM Treasury Taskforce, 1999).

According to Pollit (2000) cross-sectoral comparisons pose three issues:

- Interest rates used in the private sector are higher than in the public sector because the private sector accounts for risk while the public sector does not – this tends to inflate the financial cost of the private sector even though the cost to society may be the same;
- Private contractors will have to pay tax on profits which cannot be recovered by the private sector which inflates their bids relative to the public sector;
- No accurate PSC may exist for big projects and thus the system may be biased towards PFI solutions in the funding of capital projects.

The purpose of the PSC is to provide a benchmark against which to form a judgement on the VFM of PFI bids. This exercise is distinct from the process of establishing what level of service charges is actually affordable to the client. There is no reason to presume that good VFM will be affordable or that an affordable project will represent good VFM (ibid).

In “*PFI: Meeting the investment challenge*” it is noted that the PSC provides a quantitative analysis to support a qualitative judgement of the best procurement option, taking into account the risks of each procurement approach as a means of informing a wider VFM assessment. The PSC at present is focused only on the narrower benefits and disbenefits of future project options and is often done at a stage where it is not possible to take sufficient account of the wider factors around pursuing a PFI procurement programme, such as pre-contract costs (HM Treasury, 2003).

The UK government believes that a rigorous economic assessment is important to ensure that the right procurement option is chosen on the basis of VFM and it believes that the PSC continues to have an important role, but as the second stage in a three stage VFM process (ibid).

One crucial aspect of PFI is the appropriate division of tasks and risks. The goal is to share tasks and risks so that each party in this process does what it is best at and the sharing of tasks and risks is then enshrined in the PFI contract. The division of these tasks and risks affects the certainty of the end product and the delivery of the services conforming to the requirements and the output specification of the public sector. But more importantly it is a prime element of achieving VFM.

PFI procurement is a long period of collaboration between public and private sectors. This collaboration is based on clearly established criteria and constraints for which the private sector partner can be held to account. Not paying until the service has been made available or delivered as per specification, gives the private sector partner the maximum possible incentive to deliver the service on time and as well as possible (Johannisse and Coenen, 2000).

The combination of an integrated approach involving a long-term collaborative arrangement, careful division of tasks and risks, an output oriented contract, scope optimisation, public procurement and a payment mechanism based on the quality of the service delivered, is a guarantee of better value for money and is what distinguishes PFI from other forms of public private collaboration (ibid).

The objective of the investment criteria in the public sector, in the last decade, through private financing, has been to achieve value for money for the taxpayer. According to Heald (1997) VFM in PFI schemes depends on any gains in efficiency through private sector involvement more than compensating for higher finance costs. To Heald’s view Hall (1998)

says that, it is difficult to obtain clear evidence on this, since many PFI projects are large-scale one-off projects for which it is very difficult to calculate an accurate and uncontroversial Public Sector Comparator (PSC). But, relating the concept of VFM to concepts of efficiency and effectiveness in ways that are rarely made precise, draws auditing deep into the tensions not only between those public auditors who envisage their role as objective technicians and those aspiring to be policy analysts, but also between both groups and policy makers (Heald, 2003). PFI is the policy instrument with which PPPs are associated and Heald (2003) points out that the analysis of VFM has incentives embedded within it which bias it in favour of private provision. Supporting this approach Coghill (2003) notes that those incentives range from informal encouragement by Government Ministers operating in a culture which appears to be committed to a strong role for the private sector to methodological features that distort the distribution of costs and benefits in favour of PFI and PPPs. Furthermore, Coghill (2003) says that accountability is the key area in which private provision can impact both positively and negatively. Insisting that accountability is crucial to maintaining the responsiveness of government to the needs of the citizens and it gives citizens evidence of the government's performance in ensuring the delivery of goods and services effectively, economically and efficiently; requesting financial commitments stretching over the concession period to be handled transparently to test the public sector accountability in front of the citizens.

One of the major arguments put forward as the advantage of PFI, is the improved form of government contracting, which under the right circumstances could yield even greater efficiency savings and value for money (Kee and Forrer, 2002). Several publications in the UK have been issued in the 1990s citing varying cost savings and increases in quality generated by projects following the PFI procurement path. In 1998, the UK House of Commons, Public Accounts Committee in their Forty-Seventh Report and the UK National Audit Office Report reported that the first four design-build-finance-operate (DBFO) roads contracts were likely to generate net quantifiable savings of approximately 13% for the public sector (House of Commons - Forty-Seventh Report, 1998; NAO, 1998). In a report ordered by the Treasury Taskforce, the consultant firm Arthur Andersen, together with Enterprise LSE examined 29 private finance projects (projects representing about a third of those PFI projects that were operational at the time of the research) to reveal an average net present cost saving of 17% (HM Treasury Taskforce, 2000b; OGC, 2000). Arthur Andersen and Enterprise LSE identified six key drivers of value for money in PFI:

1. Risk transfer from public sector to private sector including construction and operation costs, technological change, and the long-term fit between a facility and its public purpose;
2. The long-term nature of contracts enables the private investment to be recovered over a reasonably long period and leads to lower costs to government for public services;
3. The use of an output-based service specification. PFI is based on delivery of a certain level of service, the output desired, rather than on the inputs used to provide the service ;
4. Competition in the bidding process lowers the cost of capital and services over the long term;
5. Performance measurement and incentives are developed and used as the basis for holding the PFI provider accountable for results and can be used to create financial incentives for superior performance; and

6. Private sector management skills increase operating efficiencies including economies of scale and the delivery of the services requiring skills that are non-core to government.

This report has been criticised (Pollock and Vickers, 2000). Pollock and Vickers questioned the Andersen/LSE findings that on average a PFI is 17% cheaper than the PSC. They argue that this calculation is an average of the 29 Full Business Cases (FBC) analysed by Andersen/LSE. However, they claim that more than half the total project savings came from one project and with two other projects account for 80 per cent of the total savings. Pollock and Vickers claim that, once these three projects are removed, the average saving is 6%. Furthermore, in their view, the FBCs are a “poor source of information” about the value for money of projects.

The above mentioned literature is generally in agreement with the UK government’s claim that PFI projects offer better value for money. In its 2000 study, ‘The role of cost saving and innovation in PFI projects’, the Construction Industry Council (CIC) identified the role of innovation within construction based projects. It stated that cost savings could be accrued from the use of innovative working procedures and new technologies. The results show an overall project saving in the region of 5-10% of which the highest average savings could be found from the construction phase. The savings on construction costs were also estimated to be 5-10% (CIC, 2000).

This reduction in cost and /or improvement would have to come from either the transfer of risks or from improvements in the average unit of productivity. VFM accrues from the private sector being allowed the opportunity to be more innovative, in the sense of cost saving and product enhancement, than is likely to be found in traditional form of procurement.

Most of the above perceived cost savings for the public sector are derived from the evaluation of transfer of risks discussed previously from the public to private sector. 10% of the cost savings cited in the Andersen/LSE report were derived in this manner (CIC, 2000). Indeed, more than a third of the 29 projects examined depended entirely on risk transfer to achieve Value For Money (Reeves, 2001). For the public sector client the value of risk transfer lies mainly in the reduction of variation, i.e. increased predictability of the individual project outcome and in the possibility of obtaining an earlier certainty of the outturn project costs and values (CIC, 2000).

PFI in the UK is the mechanism through which the public sector can secure improved VFM in partnering with the private sector (HM Treasury Taskforce, 1997). PPPs [PFIs] have been linked to a form of ‘network’ between government and the private sector (Jackson and Stainsby, 2000). Casson has linked transaction costs and trust to provide insights into the formation of intra- and inter-firm networks (Casson, 1997). Networks, partnerships and alliances depend on co-operation and inter-dependency, leading, ideally, to mutual interest, shared goals and shared norms (Klijn and Koppenjan, 2000). These forms of contracting, lie between pure markets and hierarchies and over time can result as mutual interest and shared goals and norms and more projects based mutual dependencies are developed.

3. Research Methodology

This paper is based upon two detailed case studies of major UK PFI Road Projects. The findings have been triangulated against a previously published PFI road project case study (Eaton & O'Connor, 2002a, b). The case study was selected as the most appropriate holistic mechanism for data collection. (Akbiyikli, 2005)

The PFI research framework for a typical PFI project as proposed by Akbiyikli (2005) is shown in Fig.1.

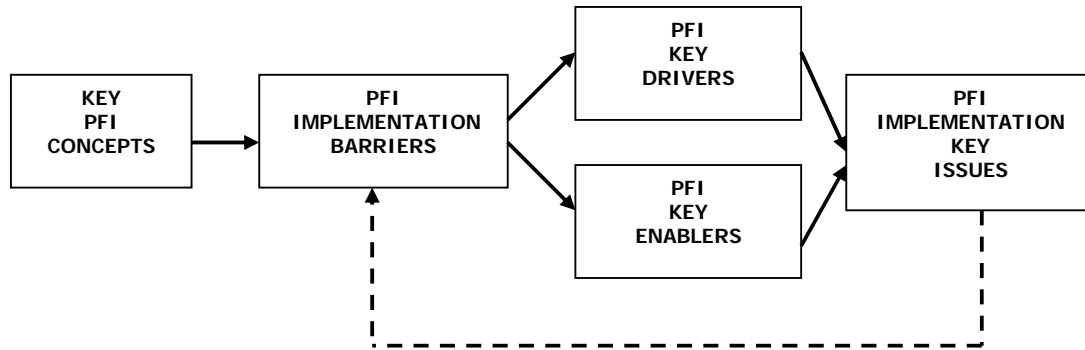


Fig.1: Research Framework for a PFI Project

The key PFI concepts and key implementation issues are an integral part of the above framework. Those PFI concepts, barriers, drivers, enablers, and issues are derived from a critical analysis of the literature review. The key PFI concepts, implementation barriers, key drivers, key enablers and key implementation issues are listed below.

The Key PFI Concepts are:

1. Purchase services not assets;
2. Value for Money (VFM);
3. Optimal Risk Transfer to the Private Sector;
4. Whole-life-cycle costing (WLCC);
5. Incorporate Private Sector know-how and expertise;
6. Alternative techniques requirement.

The PFI implementation barriers are:

1. Size of the PFI project;
2. Information needed to operate effectively;
3. Up-front capital requirements;
4. No perfect competition;
5. Long and costly bidding process;
6. Public sector policy constraints.

The PFI key drivers are:

1. Need for better infrastructure;
2. Demand in public sector services;
3. Search for efficiency and creativity in public sector and in construction procurement;
4. Financial need for infrastructure and road projects.

The PFI Key enablers of a project are:

1. Political framework and political will;
2. Legal frameworks;
3. Social (public) acceptance;
4. Quality practitioners;
5. Experience both in public and private sectors.

The PFI Key implementation issues are:

1. Critical Success Factors (CSFs);
2. Whole-life Cycle Costs (WLCC);
3. Competitive Advantage (CA);
4. Optimal Risk Transfer and Risk Management;
5. Value for Money (VFM).

From the in-depth literature review four parameters emerged as central to determining a “Holistic Road PFI Conceptual Framework”. These are: Critical Success Factors (CSFs), Whole Life-Cycle Cost (WLCC) Parameters, Risk Management (RM) Parameters and Competitive Advantage (CA) Parameters. These four parameters are confined and constrained by the requirement to obtain VFM for the Public Sponsor from the PFI project.

In constructing this framework a phenomenological (interpretive) approach is followed.

Interpretive research generally attempts to understand phenomena through the meanings that people assign to them. Interpretive researchers start out with the assumption that access to reality (given or socially constructed) is only possible through social constructions such as

language, consciousness and shared meanings. The philosophical base of interpretive research is *hermeneutics* (making sense of a written text) and *phenomenology* (Boland, 1985). Interpretive research does not predefine *dependent* and *independent variables*, but focuses on the full complexity of human sense making as the situation emerges (Kaplan and Maxwell, 1994). It provides a process of inquiry that encourages the immersion of the researcher in the problem domain. The research approach is intended for the purpose of sense making (Weick, 1995) rather than as a prescriptive guide to action. It is this emphasis on inductive learning that makes the method especially applicable to problems concerned with understanding emergent practice with a complex evolving context.

The research is concerned broadly with exploring and making sense of both the evolving context associated with integrated procurement and emergent practice of PFI Road Projects.

The term phenomenology is derived from the Greek words *phenomenon* and *logos*, and signifies 'the activity of giving an account, giving logos, of various phenomena, of various ways in which things can appear' (Sokolowski, 2000, p.13). A phenomenological approach is a descriptive study of phenomena and is a meaning - making approach. A phenomenon is an observable fact, event, occurrence or circumstance and phenomenology defines the wholeness of the process. It is the description of the groups of successive and simultaneous processes in the PFI deal; and in an effort to understand the relationship and/or distinction between process and result; between the content of intentionality and the context of the intentional process.

A phenomenological (interpretive) approach uses qualitative approaches to inductively and holistically understand human experience in context specific settings. This approach tries to understand and explain a phenomenon, rather than search for external causes or fundamental laws (Esterby-Smith, 1991; Remenyi et al, 1998).

The goal of PFI road project research under the phenomenological approach is the development of wholeness through explanatory methods rather than through creation of generalisations (Akbiyikli, 2005).

Based on the methodological approaches as defined above the authors' set out to explore and answer the following research question:

"Has PFI proved to deliver better service and value for money in public procurement in road projects?"

To answer the generic research question the following section presents the detailed research aim and objectives for this paper.

The aim of this research was to: *Determine a Holistic Road PFI Conceptual Framework (HRPCF) in the UK*. PFI projects are changing the way that infrastructure projects are delivered. The delivery of the service via the creation of an infrastructure solution is also changing the way project objectives are realised. The long-term duration of the service provision is altering and increasing the parameters by which projects are judged as successful or otherwise. The research identified the parameters that are particularly relevant to PFI infrastructure road delivery.

VFM is a relative concept and in this research means the lowest risk adjusted cost to the Public Sector of satisfying the specified Output Specification. *Ceteris paribus* (all things

being equal) the option with the lowest Net Present Cost (NPC) theoretically should be preferred. As explained in the introduction in the case study research the Public Sector Comparator (PSC) was much lower than the Preferred Bidder's Capital Expenditure (CAPEX); meaning that the private sector's final offer is higher than the public sector's best estimate as to the Whole Life-Cycle Cost of delivery for the project via a traditional procurement method. The VFM Framework for PFI projects represents a sound methodology for analysis the full range of project procurement options to determine the VFM for infrastructure projects.

The VFM in this research is undertaken as a holistic approach and builds on the Economy, Efficiency and Effectiveness and considers Affordability, Risk Transfer and Robustness as the main features. Affordability for the Public Sponsor is the ability to access funds and that the expenditure of the available funds provides an adequate return when compared with other investment alternatives. The "Risk Transfer" refers to the balance achieved within the agreements between all of the parties in relation to accepting the financial consequences should a risk occur; and a risk should be allocated to the party best able to manage and control the risk. The "Robustness" of the Project arrangements refers to the congruence of the individual aims with the main project objectives. The project arrangements should be equitable between all parties, such that all parties should have the ability to complete a particular project without the necessity for 'step-in'. Thus no party conceives the agreement as 'unfair'. All parties should feel that they have not been disadvantaged by the arrangements. A satisfactory Robustness arrangement would be one that all parties would be prepared to execute for subsequent projects.

4. VFM Framework for Road Projects

The Procurement and Value for Money (VFM) Process Framework for the A92 road project is detailed below in Fig.2.

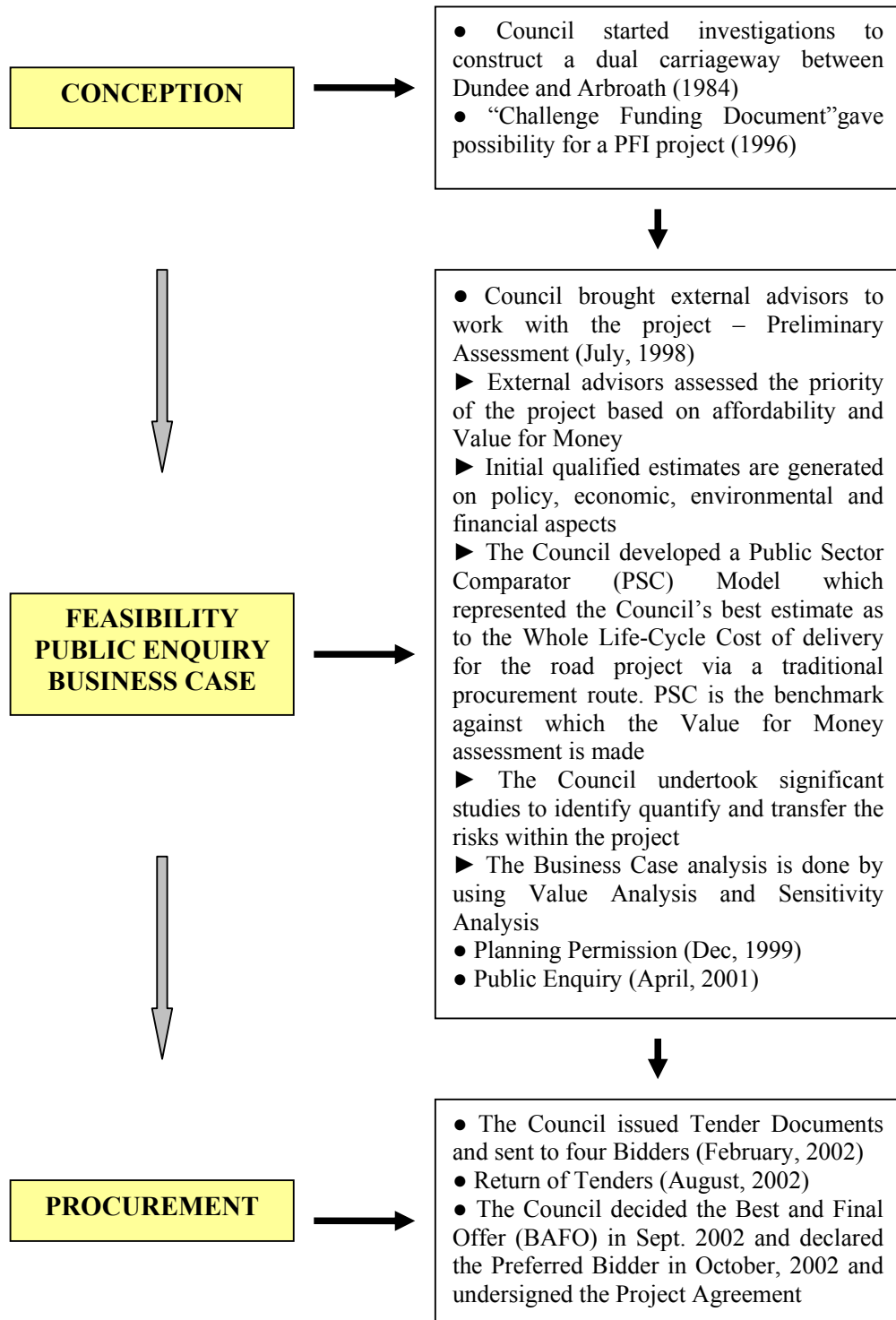


Fig.2 Procurement and VFM Process Framework for A92 PFI Road Project

The key issues for the Council in the Procurement and Value for Money Process Framework were:

- There was a clear need for the road project;
- The procurement itself was handled well;
- A notional PSC was calculated;
- Risk allocation was considered from an early stage in the process;
- The Project Agreement (PA) has in place mechanisms to protect Value for Money (VFM) in the future (Benchmarking, Market-testing and Step-in-rights);
- The Service will seek to share in the benefits of any future refinancing;
- The Payment Mechanism has been developed and risks were transferred before Project Agreement signature;

The proposed VFM framework for PFI road projects studied is shown in Fig.3.

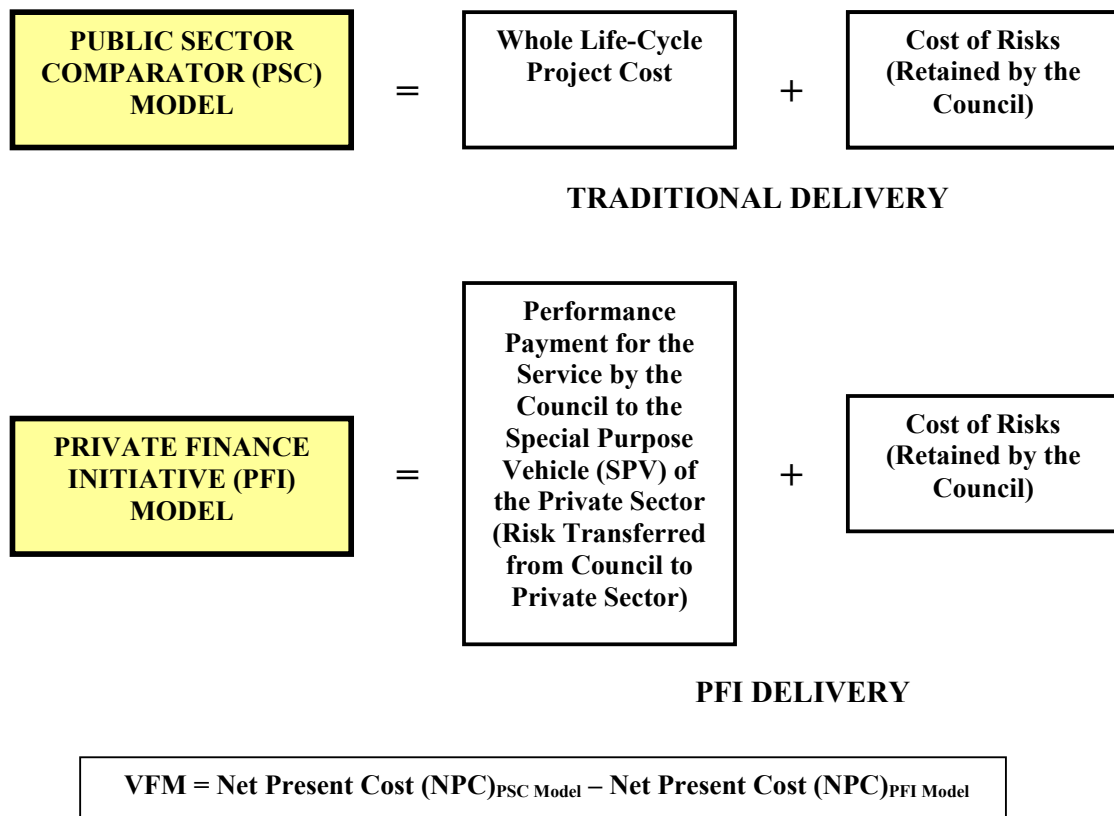


Fig.3 Value for Money (VFM) Framework for PFI road projects

Value for Money is not only the cost implication but an aggregation of issues such as quality, price, technical merit, aesthetics and functional characteristics, running costs, cost effectiveness, technical assistance, delivery date, etc. There is a clear need for the public sector to have an objective VFM appraisal for assessing PFI throughout the whole life cycle of the road projects.

The Value for Money exercise has to be carried out throughout the Concession Contract Period and the Project Agreement (PA) for the A92 road project required the SPV to carry out a review of Operations in the Concession period on each of the 5th, 10th, 15th, 20th and 25th anniversaries of the Permit of Use Date (the “VFM Review Date”).

The VFM Review shall consider and report on:

1. any material innovations in technology which have come to the attention of the SPV and which could enhance the Operations; and
2. jointly with the Council, the O&M Requirements in order to assess whether any alteration in the O&M Requirements would represent increased VFM for both Parties.

The VFM Review Report submitted by the SPV shall include:

1. the methodology of the review;
2. any material innovations in technology or material efficiencies in best working practices relevant to the delivery of the Operations which represent VFM; and
3. any proposed changes to the O&M Requirements.

VFM Review and Internal Rate of Return (IRR) Clawback provisions have been included on 5 yearly cycles after PTU (Permit to Use) Date to:

1. secure continuous assessment of whether improved VFM could be achieved by innovation;
2. to recover 50% of “super profits” gained by the SPV subject to there being no double-counting with Refinancing and also subject to reconciliation of any super-profit recovery with under performance over the life of the project. The Threshold Equity IRR (Internal Rate of Return on equity invested) figure above which super-profits are shared was negotiated to 22.5%.

The proposed framework for VFM exhibits clearly how economy, efficiency and effectiveness apply in road PFI projects as shown in Fig.4.

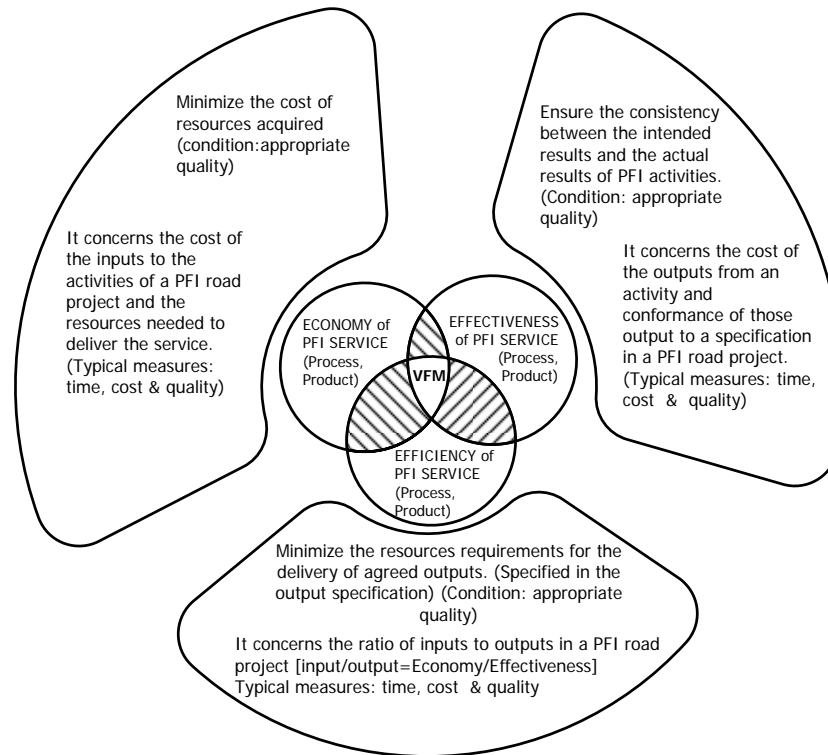


Fig.4 Value for Money (VFM) and the interrelated parameters

5. CONCLUSIONS

Awarding contracts on the basis of the lowest price tendered for construction works is rarely VFM; long-term value over the life of the asset is a much more reliable indicator. It is the relationship between long-term costs and the benefit achieved by the public sector that represents VFM. For the Public Sector Sponsor demonstrating VFM is a statutory legal obligation. Hence achieving VFM is of vital importance in the successful delivery of a PFI road project.

In the NSDR PFI road project the Construction Contractor worked closely with the Client at all stages (Tender, BAFO and Financial Close) to manage costs within their budget. All cost increases (eligible changes) were discussed with the Client and value engineered before execution. Capital expenditure and maintenance costs were considered throughout the various bidding stages in order to arrive at an effective whole life costing for the 40+10 years residual life of the project. An agreement was also in place that detailed the share for Client and SPV of savings made through value engineering. It is this understanding which resulted in a cost reduction of £6.53m due to innovative and sustainable whole life solutions to the project.

In both road projects (A92 between Dundee and Arbroath and NSDR in Newport) the SPV felt that they had the ownership of the problems and the associated risk was theirs. Furthermore, the SPV knew that the PFI contract was lump-sum and there was no additional capital beyond the agreement and, they could not ignore or delegate problems but they had to solve them. The Client and SPV chose a collaborative problem solving approach instead of claims and this attitude created more transparency between the contracting parties. They felt that collaboration provided benefits. The SPV together with its sub-contractors (Construction

Sub-Contractor, Designer, and Operation and Maintenance Sub-Contractor) created forward looking solutions - looking long into the concession period while designing and constructing. Since no payments were permitted as per the Project Agreement, by the Client, before the service became available the SPV, Construction Sub-Contractor and Designer all felt responsible for monitoring events and tracking procedures and expediting critical path operations earlier which delivered better quality and better service throughout the concession period of the projects.

The PFI procurement encouraged early start-up and “no service - no payment” which led to early completion solutions which led to innovative solutions that reduced the construction schedules and provided better and more reliable, conformant and durable solutions.

The Construction Sub-Contractor’s and the Designer’s team integrated at the earliest stages of the tender and construction process (and later with the Clients’ team during the execution of the works). The integration of the supply chain benefited the SPV by reducing bid failure risk at tender stage, by creating realistic constructible design and realistic work programs and cost savings through innovations increased the quality of the constructed asset.

In the case studies the internal quality monitoring was excessive with regard to long-term maintenance and service guarantees. The SPV understood that the quality of the constructed road was ensured and constructed better than a traditional road contract because of the 40 years concession (operation and maintenance liability) period. Value for Money evaluation in the case studies took into consideration both the technical, financial and economic parameters and also the non-financial parameters. The target according to the informants was to achieve a high quality and fit for purpose road to the satisfaction of the end users. Both projects award criteria, according to the public sector informants, satisfied a combination of both financial and non-financial factors which covered the Whole life cycle cost (WLCC) of the PFI contracts and areas such as deliverability, service quality, innovation, organizational culture, risk management, team-working and environmental issues. The award criteria in both projects contributed to improve the competitiveness of the bidders benefiting to the public sector investment and economy. All these financial and non-financial features in aggregation including a competitive tender process and a genuine risk transfer and performance related reward created VFM for the local authorities in both PFI road projects.

The PFI incentive in both projects added to the combination of WLCC and quality in meeting the user’s requirements, cost effectiveness throughout the project-life cycle, innovation in how services are to be delivered and the effectiveness in exploiting opportunities creating transparency, accountability and sustainable development.

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