**Rıfat AKBIYIKLI**

Düzce University, Faculty of Technology, Department of Civil Engineering

# VALUE FOR MONEY (VFM) EVALUATION IN PPP PROJECTS: AN OVERVIEW

*Keywords:* *Contract, NPV, PPP, PSC, VFM*

## Abstract

In PPP 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 PPP 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. The PPP 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 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 PPP throughout the whole life cycle of the projects.

## 1. Introduction

One of the key drivers behind the PPP model is the premise that partnership based procurement is inherently more efficient and as a consequence delivers better value for money (VFM) relative to traditional public procurement paths. The decision to pursue projects through PPP is taken on the basis that is the means of procurement that represents the best return for the taxpayer. The VFM concept is difficult to prove or disprove.

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 PPP project. In PPP (PFI) the UK government has put in place, procedures to ensure that approval is given only to PPP 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 PPP 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 PPP is more based on economy as reflected in the use of discounted cash flows over the life-time of the project.

## 2. Literature Review

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 (2000a and 200b) 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".*
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 lifecycle 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 British version of PPP is Private Finance Initiative (PFI). 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.
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 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 (Pollit ,2000).
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 PPP procurement programme, such as precontract costs (HM Treasury, 2003).

One crucial aspect of PPP 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 PPP 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 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 PPP 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 PPP projects are largescale one-off projects for which it is very difficult to calculate an accurate and uncontroversial Public Sector Comparator (PSC).

According to Office of Government Commerce, 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.
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.

## 3. Value for Money (VFM) Analysis

The Treasury in the UK insists that PFI/PPP must provide 'value for money', which means that the estimated cost over the life of the contract (calculated at Net Present Value by assessing future costs at today's prices) should be lower than the notional cost of traditional procurement using a Public Sector Comparator.
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.
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 PPP projects.

### *3.1. Best Value*

In theory, PFI/PPP projects should be subjected to Best Value appraisal and consultation. In practice, Best Value service reviews are running in parallel with the procurement process. In other words, reviews are being used as part of the procurement process to prepare output specifications. Consultation with users is limited to agreeing the service standards to be incorporated into the Invitation to Negotiate, questioning the basis of the PFI/PPP project is not part of the agenda. The combination of a rigged Public Sector Comparator and a severely limited and distorted Best Value service review (in which the option appraisal has already been predetermined) are used to claim 'value for money'.

A good practice approach to Best Value and PFI/PPP should include the following (Whitfield, 2001):
1. If PFI/PPP proposals are included in service review option appraisals they should be fully assessed alongside public sector and other options.

2. The service review must be able to justify a decision to use a PFI/PPP approach and must be subjected to District Audit and Best Value Inspectorate assessment.

3. The entire PFI/PPP planning, procurement and operation phases must be subjected to Best Value consultation with users and community organisations, employees and trade unions and the wider community. This should be accompanied by full information disclosure.

4. Best Value service reviews should not be run in parallel with PFI/PPP procurement.

5. PFI/PPP contracts should include detailed proposals for the achievement of continuous improvement over the contract period including regular service reviews and monitoring of performance.

### *3.2. Discount rate in PPP cash-flows*

Public Private Partnership (PPP) projects involve long-term contracts, typically thirty years, with private sector partners for the provision of services and their related assets. A PPP discount rate facilitates comparison for evaluation purposes, in net present value terms, of the cash flows in both the traditional (represented by the Public Sector Benchmark (PSB)) and the PPP bidder's financial model, for the asset/service to be provided under a PPP arrangement.
The discount rate for discounting whole life PPP cash flows within:
(a) The PSB; and,
(b) The final stages of the Value for Money Comparison (VFMC) of PPP tenders.
This same discount rate (i.e. as applied to the PSB and the VFMC) must also be supplied to the private sector tenderers for use in the compilation of their tenders in order to facilitate a 'like with like' comparison when conducting the tender evaluation process. This differs from an economic discount rate, known as a test discount rate, which may be applied at an earlier stage of the evaluation of capital investment projects (including PPP projects) for conducting a cost-benefit analysis.
The 'time value' of money must be recognised in decision-making specifically where projected costs are spread over many years. The purpose of using a discount rate is to convert future revenues and costs into their value today (their present value), so that they can be meaningfully used for comparison/evaluation purposes. In procuring a PPP project to be financed through unitary payments or

the State Authority, as appropriate, must compare two procurement approaches, one which involves significant capital expenditure in the early years and ongoing operating and maintenance expenses in the later years (represented by the PSB i.e. the costs under a traditional procurement), and the PPP approach, which usually involves a relatively even spread of expenditure over the entire life of the project (represented by the Unitary Payment stream to the Bidder). In financial modelling, the discount rate is used to help determine/assess which of these two options has the potential to provide the best value for money over the life of the project.
The discount rate will be used on a number of occasions during the procurement process including:

- The compilation of the PSB;
- The evaluation of the initial tenders;
- At Best and Final Offer (BAFO) stage (where appropriate); and,
- When conducting the later stages of the Value-for-Money Comparison (VFMC) exercise.

All cash flows must be discounted at the same discount rate. There are two types of cash flows in any PPP project – certain and uncertain. It is important to distinguish between:
(a) Financially underwritten and guaranteed revenues/income; and,
(b) Un-guaranteed revenues/income. It is also important to consider the risk attached to the source of those cash flows.

Certain Cash flows

Certain Cash Flows that are financially underwritten and guaranteed should attract a weighting of 100%.

Uncertain Cash Flows

Uncertain cash flows are typically related to: third party income; user charges; sharing of gains; and, in some circumstances the degree of uncertainty in receiving one form of unitary payment vis-à-vis another.
The National Development Finance Agency (NDFA) in the UK assist the Sponsoring Agency / project manager to determine an appropriate weighting to be used in the compilation of the PSB and the evaluation of tenders which reflect the inherent risk and uncertainty attached to each type of cash flow. Tenderers must be informed (prior to the submission of their tender) that different cash flows will be weighted differently. These weightings, or the approach to the calculation of these weightings, must be agreed by the State Authority and the NDFA before tenders are opened.

## 4. Public Sector Comparator (PSC)

Public Sector Comparator has three key components (HM Treasury, 1999; Partnerships Victoria, 2003):

1. Raw PSC,
2. Risk Adjustment, and
3. Other Items.

These in turn will be shortly explained below. PSC must be completed before the project brief is released. The PSC should provide a realistic estimate of the cost of the project. The PSC is used as a benchmark against which to assess bide-s from the private sector. This helps to make sure that a PPP project only proceeds if it offers better VFM than public sector delivery.

### *4.1. The Raw PSC*

Preparing the Raw PSC is about preparing financial forecasts. There are certain points to be included:

a. *Only financial costs and benefits are included* (The PSC is intended as a quantitative financial benchmark against which to assess bids).

b. *The Raw PSC is a cash-flow forecast* (The PSC should only include cash inflows and outflows, not actual items such as depreciation and other accounting concepts).

c. *Exclude risks and contingencies from the raw PSC* (All forecasts in the Raw PSC should be prepared on the basis of "everything going well". Risk issues will be dealt separately. The key issue is to recognise what contingency amounts have been included in the Raw PSC).

### *4.2. Risk Adjustment*

The PSC includes a valuation of all material and quantifiable risks. Non-systematic risk is divided into two components:

a. *Transferable Risk* (an assessment of the value of risks that it is reasonably expected to be transferred to the private party).

b. *Retained Risk* (an assessment of the value of risks that the public party expects to retain).

### *4.3. Other Items*

a. *Transaction costs* (The PSC should only include estimated transaction costs directly relevant to public side's delivery of the project)

b. *Inflation* (Inflation should be taken into account in constructing the PSC).

c. *Sunk Costs* (These should not be included in the PSC cash flows).

d. *Residual Value* (The PPP project will have a defined concession period, say 30 years. The PSC needs to be analysed over the same term. The private party contractor is to be paid for the facilities and equipment acquired under the project having value beyond the concession period. This should be reflected in as "residual value" forecast in the PSC.)

e. *Competitive Neutrality* (Although it is important to estimate this component, it will be a relatively minor part of the total PSC).

Shortly a PSC structure, as stated by Cruz and Marques (2013) the first component, raw PSC, corresponds to the baseline cost, accounting expected revenues. The cash-flow is then discounted, for all life-cycle costs of the infrastructure and/or service, deducted from expected revenues. The cash-flow is then discounted, and the sum of all cash-flow for the entire duration represents the raw PSC.
Competitive neutrality intends to correct the PSC for biases arising from public ownership and management. In many countries, public owned companies are exempt from some types of taxes, construction permits or environmental permits. This component corrects the PSC for the potential benefits of such a status.
Transferable risks are those risks that fall under the private sector responsibility in the PPP model. This might include construction, availability or demand, among others. Finally, retained risks are those risks that even in the PPP model are managed by the public sector.

**[PSC = Raw PSC + Competitive Neutrality + Transferable Risk + Retained Risk]**

## 5. Evaluation Value for Money (VFM)

Cui et al (2010) report about the Feasibility Study Guideline for Public Private Partnership Projects summarises the Value for Money Assessment in the UK quite well in the following manner.

### 5.1. Analysis Outline

The Value for Money (VFM) Assessment Guidance provides guidance to the sponsoring agency to verify if the Private Finance Initiative (PFI) – the PPP form in the UK - option is a better procurement option when compared with traditional procurement options. The VFM assessment is divided into a 3 stage process. During Stage 1 of the assessment the sponsoring department is required to conduct qualitative and quantitative analysis at the program level. If Stage 1 assessment favours PFI then the assessment passes to the Stage 2 assessment keeping the option of using traditional procurement approach open. During the Stage 2 of assessment the sponsoring department is required to conduct a more detailed qualitative and quantitative analysis at project level considering Outline Business Case (OBC). If assessment during the first two stages of assessment finds PFI to be more suitable than traditional procurement methods then the Stage 3 of continuous assessment shall begin at procurement level following the notice of the Official Journal of the European Union (OJEU) -which is actually the tender notice- and continues up until the financial close. If VFM assessment finds conventional procurement better than PFI then the project is procured through conventional procurement method.
During the first two stages VFM a relative concept is used which compares potential or actual outcomes of alternative procurement options. The first two stages cover factors addressing viability, desirability and achievability.

#### 5.1.1 Stage 1: Program Level Assessment

HM Treasury developed PFI Quantitative Evaluation Spreadsheet (Spreadsheet) with the purpose of providing a simple tool to the procuring authorities to assess VFM on projects under consideration. In the UK the use of this spreadsheet is mandatory for all projects at Stage 1 and
Stage 2 of assessment. The inputs to the spreadsheet can be broadly classified as contract period, escalators (for capital expenditure, operating expenditure and unitary charge), discount rate, capital expenditure, operating expenditure, optimism bias, life cycle costs, transaction costs, third party income (which may result in a reduction in unitary charge), flexibility, tax, gearing, Sterling Swap rate, credit spread, bank margin, and a few indirect factors. The spreadsheet gives output in terms of Net Present Value (NPV) by comparing the PFI alternative with the conventional option. The Spreadsheet also allows varying inputs and testing sensitivity of input variables.

#### 5.1.2. Stage 2: Project Level Assessment

The Stage 2 assessment for VFM is carried out at the project level. Stage 2 includes qualitative and quantitative assessments, and the assessment confirms or contradicts the conclusions, arrived at during Stage 1, about using PFI

approach as the best option delivering VFRM. Since all projects have variations in characteristics, not all the projects under the VFM generating program will generate VFM. Stage 2 assessment is conducted by the project team and the team gives feedback to the sponsoring department to identify all those projects that do not generate VFM when PFI is considered as the procurement option.
The Stage 2 qualitative assessment is also conducted by the Local Authority by answering the questions related to viability, desirability, and achievability. Although many of the questions are similar to Stage 1 qualitative assessment, the level of analysis for Stage 2 qualitative assessment is much deeper when compared to Stage 1 assessment. Moreover the stage 2 assessment requires that the Local Authority focuses on all the merits of transferring or not transferring the soft services to the contractor.
The quantitative assessment at Stage 2 requires the project team to revisit the Spreadsheet and assess the PFI project again by using project specific characteristics and past experiences from similar projects. Since the Spreadsheet used during Stage 2 is the same Spreadsheet used during
Stage 1 assessment the project team needs to bear in mind about the importance to attain a particular level of accuracy during Stage 2 assessment.

### *5.1.3. Stage 3: Procurement Level Assessment*

The Stage 3 assessment is conducted by the sponsoring department. It involves series of continuous checks to ensure VFM from the project and ends with the financial close. These checks are related to quality of competition, risk sharing, and stability of costs, financial flexibility, financial structure, and contractor distress.
It is recommended that before reaching any conclusions from the results of the quantitative model a sensitivity analysis should be conducted by the procuring authorities. The sensitivity analysis can be conducted by using the indifference points feature of the spreadsheet. It is recommended that the user organization defines its tolerances ranges within which indifference points can be considered as acceptable. The guidelines recommend that if the level of uncertainties is high and/or if the outputs are extremely sensitive to the input variables then the decision makers should also consider qualitative assessment before reaching to a judgment.

The VFM assessment does not provide an answer to the question of whether or not the project is a good use of societal resources. However, it will guide decision makers to determine which delivery method returns the greatest value when comparing different delivery methods.
The VFM assessment does not determine whether the project is affordable. Because budgetary constraints are usually a crucial consideration when deciding to undertake a project or choose a delivery method, it is important to conduct a separate affordability or financial feasibility assessment. Although the type of

analysis, tools, and the timing generally differ - for instance using Benefit Cost Analysis (BCA) in the early stages and VFM in later stages - the elements of the underlying methodologies (for instance life cycle valuation) are the same for each instrument. This also means that the elements of the analyses are interchangeable and must be consistent. The purpose of a VFM assessment is to provide a structured approach for a government to assess the value for money it can expect from a project using the PPP approach.
The VFM assessment provides the government with:

a) An approximate quantitative range of VFM outcomes;
b) Sensitivity analysis and scenario analysis to determine the robustness of the outcomes; and
c) Qualitative considerations.

For investment decision making purpose there are three analysis approach in use. These are shown in Table 1 below.

Table 1. Financial, Economical and Value for Money Analysis (Adapted from: FHWA, 2013)

| Analysis | Tool | Technical description | Key question |
|---|---|---|---|
| Economic Feasibility | Benefit-Cost Analysis | Net Present Value (NPV) calculation of all social and financial costs and benefits of the project | Is the project attractive from the perspective of society? |
| Financial Feasibility | Financial viability assessment | NPV calculation of all financial cash-flows of the project and comparison of cash-flows to available budget | Is the project financially feasible? Can the project be afforded? |
| Value for Money | VFM assessment (PSC versus shadow bid or actual bid) | Comparison of the NPVs of (expected) PPP cash flows and expected conventional delivery method cash flows | What is the optimal delivery method? Is the actual PPP bid still more attractive than the conventional fall back? |

In the evaluation of VFM for a PPP Project as explained above the PSC is used as a quantitative benchmark against which to assess bids. Any evaluation criteria

against which bids are to be assessed must be set out in the brief (Partnerships Victoria, 2003). In Table 2 it is explained the VM Evaluation Process.

Table 2. Value for Money (VFM) Evaluation Process (Adapted from: Partnerships Victoria, 2003; FHWA, 2013 & World Bank Institute, 2013)

| VALUE FOR MONEY (VFM) EVALUATION | |
|---|---|
| **QUANTITATIVE** | **QUALITATIVE** |
| **1. PSC versus BID** (Net Present Cost – NPC Comparison). NPC is compared with the PSC. The difference between NPC and the PSC is very important.<br>**2. Impact on Core Services** (The Government project complies fully with the service specifications and it is expected that the Bid also should. If the private sector bid incorporates additional innovations which will make it cheaper (or more expensive) for government to deliver core services, this needs to be taken into account). | **1. Service Delivery** (The quality of the service offered is a vital and non-quantifiable aspect in evaluation).<br>**2. Design Amenity** (Design amenity means the environmental values offered by good quality. This is very important for projects which involve creating new physical structures).<br>**3. Sustainability** (Sustainability can be thought of as a low likelihood of default. The government needs to examine factors which could make any bid more prone to default. Credit issues, tax structuring, experience and capacity are some examples to sustainability).<br>**4. Unquantifiable Risk Transfer** (The value of all risks proposed to be transferred to the private party is not quantifiable. The actual allocation of some of these risks between government and the private party can significantly impact the VFM assessment. |

## Conclusion

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 projects. In many cases there are usually two components in VFM assessment process: financial and non-financial assessment. The financial components include all the factors that can be valued. In general, the VFM assessment process involves some financial comparison of the net present cost of PPPs with conventional approach called Public Sector Comparator (PSC). As a neutral benchmark of financial aspects, PSC is used by procurement authority for demonstrating VFM potential of the proposed PPP projects. While the nonfinancial aspects regard factors such

as quality of services, facilities management, environmental aspects, protection of public interest and contractual matters which cannot be quantified (Takim et al. 2011).

A PPP project of any reasonable size will have a macro-economic impact. However, when comparing public and PPP projects the relative difference in macro-economic terms is likely to be small, except possibly for extremely large projects in small low-income countries, where particular care, in terms of macro-economic impact, is needed under both PPP and public procurement. a VFM process is required to choose between conventional public procurement and a PPP modality for funding, the level and extent of the analytical process is still debated. In general, the developed economies have used a far more sophisticated procedure to test and ensure value for money. However, there still remains some debate over both its theoretical basis and practicability of application and especially; (a) Whether the use of the sophisticated procedure (PSC) in developing economies is justified if, through lack of finance, the project will not be implemented; (b) Whether its use, in fact, in both developed and developing economies can also be justified on the grounds of assumptions and data needs as it always involves comparing two hypothetical. The key-determining factor in deciding whether to develop any specific project as a PPP is value for money, whether in general or in comparison to public procurement. Each project is evaluated on its own merits under both scenarios and if it does not offer VFM, it will not be undertaken on a PPP basis. Most experienced PPP organizations indicate that the VFM check will be undertaken at a number of stages in the PPP implementation process. It is important to note that Value for Money analysis is performed on a financial, and not an economic, basis. (PPIAF, 2009)

PPP should only be pursued where it represents VFM in procurement. VFM is the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user's requirement. VFM is not the choice of goods and services based on the lowest cost bid. To undertake a well-managed procurement, it is necessary to consider upfront, and at the earliest stage of procurement (HM Treasury, 2006). As noted by Burger and Hawkesworth, (2011), what constitutes value for money is not just a quantitative exercise. Because of all the difficulties highlighted above, what constitutes value for money usually also requires a significant level of qualitative judgment on the part of the government. A government needs to judge what the appropriate services to deliver are and, in the case of each service, what will constitute the optimal combination of quantity, quality and features. It then needs to deliver these services with economy, technical and economic efficiency, and technical and economic effectiveness. The achievement of a value for money outcome in the use of public funds is an overarching consideration in the procurement and delivery of each public investment project. Value for money is a consideration for the government throughout the procurement process and its achievement should be continuously to the forefront in all aspects of the PPP project.

The assessment of VFM is a balance between qualitative and quantitative factors.

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