



Issues and challenges to improve current practice of feasibility studies and increase confidence in vfm tests

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Feasibility Studies (FS)

- Why do them?
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Value for Money (VFM) tests

- Why do them?
- How are they done now?
- What are the challenges to doing them better?
- Why is it important to improve them?

- Connection between FS and VFM
- Consequences of failure to do them properly
- Benefits from making improvements

Why do feasibility studies?

To answer the following questions:

- Is it sensible, **from an economic perspective**, to implement the project?
- Is it practical to procure the project as a PPP? How much will it cost? Is it affordable from the government's perspective?
- Is there adequate market interest and capability to deliver this project? and
- What are the main obstacles for the project's implementation (both the implementation of the technical solution and implementation of the preferred delivery method which may be a traditional delivery or delivery as a PPP)? Can they be overcome in a cost-effective manner? How?

Why do feasibility studies?

- To select good projects. Garbage-in-garbage-out; **say “no” to bad projects**
- To select robust, viable projects for PPP; these are more likely to be financed on a competitive basis and are therefore more likely to provide value for money
- To get approvals early if a project needs Government support. Avoid wasting time and money on projects that do not meet viability and value for money criteria, and the awkward position of Government rejecting support for a project only after preparation.

How are feasibility studies done now?

Malawi

The feasibility study shall

- **Demonstrate comparative advantage in terms of strategic and operational benefits** for implementation as a PPP
- **Describe** in specific terms
 - the nature of the Contracting Authority's **functions**, the specific functions to be considered in relation to the project, and the expected **inputs and deliverables**;
 - the extent to which those functions can **lawfully and effectively be performed by a Partner** in terms of an agreement; and **the most appropriate form** by which the Contracting Authority may implement the project under an agreement;
- **Demonstrate** that the agreement shall
 - Be **affordable** to the Contracting Authority
 - Deliver **value for money**; and
 - Transfer** appropriate technical, operational or financial **risk** to the Partner; and
- **Explain the capacity of the Contracting Authority to effectively enforce the agreement**, including the ability to monitor and regulate project implementation and the performance of the Partner in terms of the agreement.

How are feasibility studies done now?

Pakistan

Project feasibility guidelines set out a simple methodology by which implementing agencies/institutions will be able to:

- Carry out an **initial exclusionary screening of projects** to select projects suitable for development as PPPs
- Carry out a preliminary feasibility study to further **develop the project concept and verify its potential viability** before a full feasibility study is undertaken
- Complete a **feasibility study** that ensures that a decision to proceed with the project as a PPP is based on **awareness of costs, risks, and value for money**
- Conduct a **risk appraisal** methodology
- Devise a basic flow diagram including combining **project and social safeguards** appraisal methodologies
- Carry out a necessary **due diligence** process

file:///C:/Users/d_cor/Downloads/project_preparation_feasibility_guidelines_for_ppp_projects.pdf

How are feasibility studies done now?

In summary

- All countries have regulations and / or guidance on feasibility studies
- Some split the process into two: a pre-feasibility study and feasibility study
- But there is **no standard definition** of what a feasibility study is for, or what the contents of a feasibility study report is
- Take account of internal and external circumstances and also the type of project or sector
- However, regional guidance **rarely deals with the objective or objectives of the study**
- Some elements of the study are done in considerable detail (particularly technical aspects)
- But other elements that should be considered in detail (particularly external matters) are hardly mentioned at all:
 - Macroeconomic issues
 - Financing issues
 - Sovereign and country risks

What are the challenges to doing them better?

- Unwillingness to use the FS to STOP a bad project going forward
- Treating the FS exercise as a “necessary evil” to get approval to go to market
- Lack of time: the project is wanted NOW
- Lack of funding to do a proper analysis
- Lack of internal competence and lack of expert advice
- Lack of understanding of ALL project risks: they all need analysis at this stage
- Failure to consider the challenges that will face a project **from development to contract expiry**

Why is it important to improve them?

- Ensure risks are identified, allocated and mitigated effectively
- Provide Government with sufficient information for proceeding or bidding
- Provide the bases of negotiations during the transaction phase
- Minimize the transaction costs of PPP projects and avoid unnecessary delays
- Establish the technical characteristics of the project, demand, project capacity / size, preliminary design of proposed facilities with their related capital and annual project costs
- Establish the social, environmental, economic and financial characteristics of each project (including its attractiveness to the private sector and the government), based on the projected project, its cost, demand and impacts

Why is it important to improve them?

- Determine the extent of government support (if required), PPP modalities and project risks
- Provide a convincing and solid case to both public and private sectors as a basis for procurement of the private partner
- Contribute to the thinking on a draft contract for the project based on the characteristics of the project
- Contribute to a RFP that has sufficient data to allow the tenders to prepare competitive technical and financial bids and which informs them at the time of bidding, how such bids will be subsequently evaluated
- Provide data that allows the Government to negotiate and sign a PPP contract with confidence.



Value for money

What is value for money?

Vfm is achieved when PPPs deliver “improved services for the same amount of money as the public sector would spend **to deliver a similar project**”

(Grimsey and Lewis 2005: 346)

Why evaluate value for money?

ADB, in its own procurement guidance, defines VFM as the principle that

“enables the borrower to obtain **optimal benefits** through effective, efficient, and economic use of resources by applying, as appropriate, the core procurement principles and related considerations, which may include life cycle costs and socioeconomic and environmental development objectives of the borrower. **Price alone may not sufficiently represent VFM.**”

Why evaluate value for money?

The International Institute for Sustainable Development reported on VfM in infrastructure procurement in India

“While VfM is traditionally interpreted to mean the lowest price alternative at the time of commissioning, in the context of sustainable development it is understood as **value for money across the asset life-cycle**. This approach embodies the principles of “total cost of ownership” and “whole-life value” — accounting for the costs of planning, designing, building, operating and maintaining an asset. It can therefore be used **to account for medium- and longer-term efficiency gains and cost reductions enabled by sustainable infrastructure**.

Why evaluate value for money?

To help decision makers evaluate various project delivery methods by comparing the traditional procurement method to a P3 [public-private partnership] approach and to determine the procurement method that **costs the least from the public perspective**. (Kweun et al. 2017: 2)

To help public procurement agencies in choosing the project form that yields the **lowest Net Present Value (NPV)** from the perspective of the public sector and taxpayers (Hodge and Greve 2007)

How is VfM evaluated now?

There are three generally accepted approaches to evaluating VfM of PPP projects

- Evaluating PPPs against a feasibility study report or business case for the project – done after the event by, for example, a national audit department
- Evaluating PPPs against a public sector comparator (PSC) – done before procurement to determine whether or not to proceed further
- Evaluating PPPs against (real) benchmark figures from similar projects – unusual because of lack of enough projects

How is VfM evaluated now?

In China, there are qualitative and quantitative evaluations.

Qualitative evaluation indicators are:

- degree of whole-life-cycle integration
- risk identification and allocation
- performance orientation and encouraged innovation
- degree of potential competition
- capability of government agencies
- bankability

Each indicator is given a weight generally not exceeding 20%.

Each indicator is graded: favorable, relatively favorable, common, relatively unfavorable and unfavorable, corresponding to scores of 100~81, 80~61, 60~41, 40~21 and 20~0.

If the weighted score exceeds 60 points the qualitative evaluation is passed

How is VfM evaluated now?

In China, the quantitative evaluation compares the present value of net costs of government (PPP value) in the whole life cycle of the project with a public sector comparator (PSC), **provided that the output performance of the PPP mode and that of the traditional investment method of the government are the same.**

The PPP value equals the present value of different financial expenditures such as the equity investment, operation subsidies, risk taking and supporting investment in the whole life cycle of a PPP project, which is calculated pursuant to the Guidelines for the Demonstration of the Fiscal Capacity of Public-private Partnership Projects (Cai Jin [2015] No.21).

The PSC is the sum of whole life cycle values of the three costs below:

- net costs of construction and operation maintenance of a reference project;
- competitive neutral adjustment value* and
- all risk costs of the project.

*The competitive neutral adjustment value is primarily the expenses less paid for a project implemented with the traditional investment method of government as compared with the adoption of the PPP mode, and generally includes less paid land costs, administrative examination and approval fees and relevant taxes.

<http://www.cpppc.org/en/Guidelines/4023.jhtml>

How is VfM evaluated now?

In the case of **India**, VfM is integrated into requirements for Feasibility Studies, the Request for Proposals (RFP) and bid evaluation. The government has published a sector-specific PPP VfM Tool which is based on traditional project finance feasibility parameters, including construction-phase risks (overruns in cost and time), operational-phase risks (revenues and volumes), and contract-renegotiation risks. <https://pppinindia.gov.in/toolkit/highways/module2-intro-aadmt.php?links=intro1a>

A quantitative value-for-money (VFM) test compares **the estimated cost of procuring the project in the public sector with the estimated cost of procuring it as a PPP**. Typical VFM tests use just one monetary value for the risk that would be transferred to the private sector in the PPP. **The test is very dependant on the level of uncertainty in the estimate of transferred risk.**

The VFM Indicator highlights the uncertainty by using a range of values for the estimate of transferred risk. This range is based on probability distributions. This means the VFM Indicator can incorporate the uncertainty into the result and give a better indication of how likely the PPP is to deliver VFM or not.

The result of the VFM Indicator is a range of expected VFM results that may occur from the project: If the range is all positive then this indicates that the project can be expected to provide VFM. If it is all negative, then VFM may be unlikely. If the range covers both negative and positive VFM outcomes then the focus should shift to a careful qualitative assessment to check where the risks to VFM are and to mitigate these risks where possible.

https://pppinindia.gov.in/toolkit/pdf/ppp_toolkit_user_guide.pdf

What are the challenges to evaluating VfM better?

- The PSC is a hypothetical model for establishing a counterfactual basis against which a putative PPP option can be evaluated. It is a way of comparing all future expenditures in a possible PPP solution with all costs of a (fictional) conventional procurement of the same project.
- All costs are discounted into either net present value (NPV) or net present cost (NPC) depending on the terminology and method adopted in different settings.
- The calculation of NPV is subject to considerable interpretation and, sometimes, manipulation of the discounting factors

(Heald 2003 'Value for money tests and accounting treatment in PFI schemes', *Accounting, Auditing & Accountability Journal*, 16, 342–371.; Reeves and Ryan 2007 REEVES E. and RYAN J., 2007, 'Piloting public–private partnerships: Expensive lessons from Ireland's schools' sector', *Public Money and Management*, 27, 331–338.)

What are the challenges to evaluating VfM better?

- Research also suggests that significantly different conclusions about better VfM are reached when discount rates are changed by just a few percentage points (Bain 2010 “Public sector comparators for UK PFI roads: Inside the black box”, Transportation, 37, 447–471.).
- The pricing of risk involves a large amount of discretion within individual and collective judgements. Essentially, evaluators have to estimate (i) probabilities of selected risks occurring and (ii) the impact, in monetary terms, of the risks occurring. Use of statistical tools such as Monte Carlo analysis leads to spurious accuracy.
- This is a consequence of lack of publicly available data about operating costs, financial performance and other key information. A public sector comparator is a tool used in the decision-making phase, whereas details about the real costs are usually not available because there are a few earlier projects and / or accessible data.
- Empirical studies suggest generally that PPPs are **more costly** than conventional procurement. Whether or not this likely additional cost is outweighed by quality (on time and on budget, and better services) and risk transfer away from government cannot be determined from the literature – it is an empirical “black hole”.

Why is it important to improve evaluation of VfM?

- PPP is still not universally accepted as a legitimate procurement model
- Because of mixed evidence of PPP being superior to traditional procurement, governments expect more detailed and comprehensive evaluations before approving procurement
- These additional requirements lengthen the PPP process, complicate the process for public officials, require expensive advisers thus increasing transaction costs.
- This is a VICIOUS CIRCLE

A new VfM methodology 1

- The key word is **value** but value to whom? Government or the beneficiary of the service AND the taxpayer?
- Need to move away from the supply-side efficiencies and effectiveness, and consider demand-side efficiency (allocative or Pareto efficiency)
- But much easier to do in private transactions where consumers reveal their demand, i.e. indicate how much they are prepared to pay for a good or service to improve their welfare
- Most government goods and services suffer from the “free-rider” problem – demand is not revealed

A new VfM methodology 2

- Governments therefore need to judge this unrevealed demand for a project – how valuable are the improved service outcomes underpinning a project for **all** stakeholders?
- Thus, the first element of a vfm **assessment** (not **calculation**) should be a qualitative description of a range of social, economic and business benefits
- Some, but only a few, of these benefits can be monetised – but a list and description must certainly be possible (or why would the project even be considered?)
- The second element of the vfm assessment will relate to the possible cost of the **improved** goods / services, which, necessarily, will be imperfect estimates – the key point is to estimate the amount that taxpayers / users can **afford**

A new VfM methodology 3

- The question for government is then judgemental, not scientific.
- There is no single figure for VfM – there is no need to try a comparison between an estimated PPP price with a fictional, traditionally procured service
- But there will be
 - A Value Statement that sets out as clearly as possible the social, economic, environmental, individual, collective, business, countrywide..... **Benefits**
 - A budget allocation, including a statement on contributions expected to be made by users.



THANK YOU FOR YOUR ATTENTION!