

Public Sector Comparator: A Useful Decision Making Tool in Infrastructure Development

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Abstract -- The public sector comparator (PSC) is an estimate of the net present cost to government if it has to deliver the project under a more traditional procurement method. The PSC contains forecast lifetime cash flows delivered from a reference project based on the infrastructure and services based on the specifications provided to bidders, i.e. on a like-for-like basis to the PPP.

This paper focuses on exploring value for money concept and whether Public Sector Comparator is a right tool to measure it. The overall paper is an exploratory analysis. For this purpose, literature from World Bank data bases, Department of Treasury Western Australia and other relevant sources were explored.

It is expected that the Public Sector Comparator would develop as a useful and effective tool in the decision-making process for choosing partners in infrastructure projects.

Keywords: Public Sector Comparator, Public-Private Partnership, Infrastructure Projects.

I. INTRODUCTION

THE fast growth of the economy in the past 10 years has placed increasing importance on physical infrastructure such as electricity, railways, roads, ports, airports, irrigation, water supply and sanitation. They are important for economy as far as growth is concerned. The current target growth rate of economy can only be sustained if this infrastructure deficit is overcome and adequate investment takes place in support of higher growth for an improved quality of life, both for urban as well as rural communities. A competitive market alone cannot assure the required infrastructure facilities and services. This often justifies for government involvement by directly providing infrastructure services through Public Sector Undertakings.

However, this approach has failed miserably in many countries including in India because of many reasons. Creating Government monopoly could not provide the efficiency and performance and quality of service. This led to government thinking in terms of moving away from the Government control to Private participation in the infrastructure service provision in the country. State owned public sector undertakings by virtue of their ownership have been shielded from competition. Government ownership arbitrarily brings with it a bureaucratic style of decision making. In a competitive business scenario

such enterprises cannot take the challenge by adopting modern techniques, new management and marketing skills and practices. Hence, inevitably private participation is allowed in large scale in all infrastructure service provisions. However, private monopoly will be equally bad and this has necessitated the regulation of infrastructure facilities and provisions in the country. Hence even today, the Public sector is seen as essential to produce a competitive market where both private sector and public sector should compete each other in the same market.

As per second report of the high level committee financing of infrastructure India's average investment in infrastructure was 4.7 percent of GDP during 1992-2010 compared to an average of 7.3 percent across China, Indonesia and Vietnam. India ranks 85 out of 144 countries, as per the World Economic Forum Global Competitiveness Report 2014, in terms of infrastructure quality with 'inadequate supply of infrastructure' listed as the most problematic factor in doing business. It's important for policymakers to focus more on infrastructure growth by creating conducive environment for growth. In this regard it is more important to note that public utility infrastructure plays a significant role in the infrastructure growth of a country. One of the most important aspect is to consider whether financing an infrastructure fully through government or fully private or going for PPP is the best option particularly in terms of value for money estimation and how to estimate it.

One of the important tools to estimate value for money is public sector comparator. The following paragraph will explain the importance of Public Sector Comparator in the evaluation of Public sector performance. As per government of Western Australia (Department of Treasury) Assessment of a PPP offers value of money is an essential part of a PPP procurement process. This entails comparing the PPP proposals with the cost of the public sector undertaking on the project. The public sector comparator (PSC) is an estimate of the net present cost to government if it has to deliver the project under a more traditional procurement method. The PSC contains forecast lifetime cash flows delivered from a reference project based on the infrastructure and services based on the specifications provided to bidders, *i.e.* on a like-for-like basis to the PPP.

As per the World Bank "The PSC estimates the hypothetical

risk-adjusted cost if a project were to be financed, owned and implemented by government. “PSC provides a benchmark for estimating value for money from alternative bids. Once final bids are received from the private sector, the whole of life cost of these bids are compared with the PSC to determine whether the bids submitted provides a better value for money to the taxpayer.

According to the Treasury Task Force (TTF, 1998):

- It is expressed in net present value (NPV) and/or net present cost (NPC) terms.
- It is based on recent actual public sector methods of providing defined output (including any reasonably foreseeable efficiency the public sector could make).
- It takes full account of the risks which would be encountered by that Method of procurement.

II. KEY ATTRIBUTES

Key attributes of a PSC include

- It is forecast based on the reference project – reflecting the cost to government of delivering the project
- Infrastructure and services to the same standards as being procured from the private
- Sector under the most likely traditional procurement model if not a PPP;
- It is expressed in net present cost (NPC) terms;
- It is based on life-cycle costing – i.e. the whole life cost of providing the services and
- Maintaining the infrastructure to standard prescribed for the PPP; and
- It is risk-adjusted valuation
- It is also important to understand the concept of PPP to appreciate the significance of Value for money concept and Public sector Comparator.

Public-private partnership (PPP) in infrastructure is a relatively new experience in most developing countries of the Asian and Pacific region. Although many governments have considered various steps to promote PPPs in their countries, lack of capacity in the public sector remains to be one of the major problems in implementing PPP projects. So far, only few countries have established institutional arrangements and developed manuals and resource materials in support of PPP development and for the capacity-building of their public officials. The question still arises whether PPP is the right value model. This paper focuses on exploring value for money concept and whether Public Sector Comparator is a right tool to measure it. The overall paper is an exploratory analysis. For this purpose different literature from World Bank data bases, Department of Treasury Western Australia and other relevant literature were explored to understand PSC.

III. DEFINITION OF PPP

Public private partnership (PPP) is an arrangement between a

public (government) authority and a private (non-government) entity by which services that are the obligation of or which have traditionally been provided by the public authority would now be provided by the private entity under a contractual arrangement containing well-defined terms and conditions. Under this arrangement, the obligation to provide such services and consequent accountability to users would continue to vest with the public authority; though it chooses to deliver them through an entity best suited for this purpose.

As per United Nations foundation true public-private partnerships begin by identifying the central problem, then asking who should help to solve it. They may be initiated from the private, government or civil society sector, but they are not about the narrow plan of any one partner. Public-private partnerships are around shared programs and mutual resources, risks, rewards, and linkages that can magnify scale.

True public-private partnerships:

- Are voluntary and build on the respective strengths of each partner;
- Optimize the allocation of resources; the partnership, governance, as well as exit arrangements.

IV. PUBLIC SECTOR COMPARATOR

It is always important for policy makers to understand the viability of doing a public private partnership and to understand whether it is important to go for a PPP mode or not. One of the important tool which is used for choosing the private player for PPP investment is Public Sector Comparator.

Components of PSC: A PSC comprises cash flows associated with:

- The raw PSC;
- An adjustment for competitive neutrality; and
- An adjustment for project specific risks (retained and transferred).

All future project cash flows are converted to a net present cost by applying the appropriate discount rate

The **raw PSC** includes the expected capital and operating costs to government of delivering the reference project over its full term before any risks are taken into account.

Competitive neutrality adds to the PSC the net competitive advantage that accrues to Government by virtue of its government status. This ensures a like for like comparison with bids received.

Project Specific Risk: The risk is possibility of outcome as better or worse than expected. In terms of PPP, project specific risk is the risk that the actual cost of delivering the project

which will be different to that of forecast based on the information available at the time of the forecast. It is important to note that in PSC calculation the risk is included because the transfer of risk is one of the key objectives of PPP procurement and the price to government of transferring risks is included in private sector bids.

- c. It provide a means for testing value for money
- d. It provides a consistent benchmark and evaluation tool
- e. It encourages competition by generating confidence in the market that financial rigors and probity principle are being applied.

Steps used in the process of using Public sector comparator

Capital Cost
Operating costs
Projected revenues
Asset values
Risk matrix
Sensitivity analysis
Discounted cash flow

The figure explains how public and private services are compared. When the private sector expected cost is lower than public, then the value for money is higher and the project can be better run by private concessionaires.

Before a VFM assessment can be directed, the following steps must be undertaken in order to protect the correctness of the model proposed:

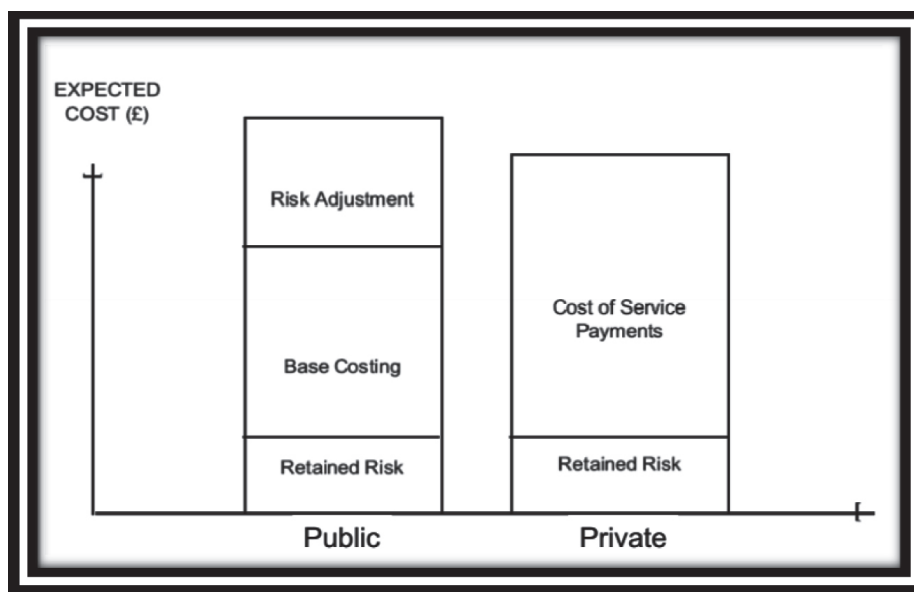
- Identify the variable, parameter and methodologies to be used to assess VFM.
- Select appropriate modeling software to outline key weakness.
- Identify the output or input specification, performance standards and payment mechanism for the project.
- Identify the contracts base costs, program and network of activities (Value-based inputs).
- Identify and insert risks linking them to specific activities (risk-based inputs).
- Adjust for competitive neutrality (hypothetical cost-based inputs).
- Carry out tests and simulations of the model.
- Analyze simulated outputs normally in terms of economic parameters

PSC can perform the following roles

- a. It promotes full costing at an early stage in project development.
- b. It provides a key management tool in the procurement process by focusing attention on the output specification, risk allocation, and comprehensive costing.

It is important to note that Public Sector Comparator (PSC) has its own defects which need to be minimized throughout

Value for money for PSC is explained in the following diagram



Source : World Bank

its lifecycle and that can be done through sensitivity analysis. The diagram briefly explains how sensitivity analysis is done.

the underlying calculations and erroneous interpretation of the results.

The important parameter to increase the robustness of PSC is to perform a sensitivity analysis as explained in the following table.

There are likely to be qualitative and non-financial differences between the options that cannot simply be subsumed in a difference in forecast cost.

Input Assumption	Summary of National Guidelines	Additional Policy Guidance
Sensitivity Analysis	<p>To be performed on key cash flows and assumptions to determine the robustness of the PSC to potential changes in assumptions, risk components and the forecast operating environment over the term of the Project.</p> <p>Variables that are typically analysed include:</p> <ul style="list-style-type: none"> • capital costs • operating/recurrent costs • discount rate • inflation rate • maintenance and • refurbishment costs 	<p>Sensitivity analysis allows estimates to be made of the impacts and likelihoods of individual risks. Guidelines allow flexibility in selection of what variables to analyse, individually or simultaneously.</p> <p>Sensitivity or scenario analysis may help on the calculation of project specific risk.</p> <p>Sensitivity analysis should also be carried out on when comparing the PPP bids received to the PSC. As part of this, the PPP bids should be discounted by both the Project Discount Rate and PSC Discount Rate. The difference between the two calculations will indicate the net present value of the systematic risk adjustment.</p>

(source:<http://www.treasury.wa.gov.au/>)

Merit of PSC as a tool for value for money: As per U.K. Audit Commission report (2003 p. 37) “the PSC has lost the confidence of many people, and risks being seen more as a hoop to jump through on the way to government funding than a valuable exercise that can help ensure better VFM”.

“Value for money” test is sometimes problematic. In particular, it is difficult to factor in the cost of things going wrong over the total life of the project. More generally, the public sector comparator is necessarily hypothetical, so its credibility is difficult to test.

As per report from Public Accounts Committee Publications (UK):

The use of public sector comparators has been the subject of considerable debate about their reliability, accuracy and relevance in the contexts in which they have come to be used. They have observed many cases where the public sector comparator has been incorrectly used as a pass or fail test. In these cases the desire to show that the PFI deal is "cheaper" than the public sector comparator has led to manipulation of

V. CONCLUSION

Public Sector Comparator (PSC) calculation is one of the most useful tools used to perform value for money calculation for making the decision between the PPP procurement route or conventional procurement options. However due to its hypothetical nature of valuation throughout the life cycle of the project, the merit of PSC is still a debated issue. Much work still needs to be done in all the areas such as to reduce the gap in the valuation of projects by understanding the risks in the project, closing the gap between hypothetical assumption of vfm and to assess how close the value of vfm can be with real value of the project. The public sector comparator should be used with other similar tools to provide better results. This is due to the fact that some of the factors which are used for value for money comparison are more qualitative than quantitative for which data is used based on certain assumptions.

A thorough review is required by policymakers, researchers and academicians as to how best PSC can be utilized for infrastructure development evaluating the various options with

guaranteed outcomes. Further research is also required to understand PSC as a tool whether it needs improvement and what best can be done to modify its methodology to improve its efficiency in determining accurate values of project with less information asymmetry.

It is expected that the Public Sector Comparator would develop as a useful and effective tool in the decision making process for choosing partners in infrastructure project and will be handy for Policy makers and planners in future and surely it will safeguard the larger Public interest.

VI. REFERENCES

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