



Sharing knowledge, experiences, and innovations in public-private partnerships in infrastructure

### Is the public sector comparator right for developing countries? Appraising public-private projects in infrastructure

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frican officials have shown new interest in infrastructure projects involving private participation. But with so little experience with such projects, these officials often have limited knowledge about how best to assess their "value for money." Some experts have suggested that developing countries use the method centering on the public sector comparator, already adopted by South Africa. But this method has come under criticism in some industrial countries. The debate about its use in the industrial world raises questions about whether it is appropriate in developing countries.

Among public officials in Africa interest in public-private partnerships (PPPs) in infrastructure appears to be reaching new heights. Yet the limited experience with PPP projects in the region means that officials in most African countries have limited knowledge of how to prepare them. For the projects that have been completed, appraisal methods have been left largely to consultants. So there has often been little consistency in the methods used across projects, and almost no effort to build up a body of knowledge about which methods produce successful projects and which do not.

South Africa has been a notable exception. In 2000 it adopted one of the techniques most widely used in the industrial world for quantitative appraisal of PPP projects, an approach that centers on preparing and assessing a public sector comparator (PSC) for each project. This approach plays a key role in project development in such countries as Australia, Canada, the Netherlands, and the United Kingdom, the country where it originated in the early 1990s.

Officials in some of these countries have recommended wider use of the PSC method in developing countries, to help ensure that PPP projects clearly demonstrate affordability and value for money before public partners enter into contracts. Yet the method has come under growing criticism in the past few years in such countries as Australia and the United Kingdom. This criticism raises questions about whether the technique is appropriate under developing country conditions. PPIAF-funded research on this issue, though still ongoing, allows some preliminary conclusions (Shugart forthcoming).

### How the method works

The PSC method is meant to meet the need to make a compelling argument in favor of using private participation rather than traditional public works approaches. Its quantitative approach has been used effectively in many countries to counter critics unconvinced by theoretical arguments in favor of private participation.

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## GRIDLINES

The method also documents the original rationale for using private participation in a project, useful if the project needs to be renegotiated or if similar projects are considered.

The PSC method does all this by allowing a quantitative comparison between a PPP project and a public sector project that would deliver the same services. The PSC is a risk-adjusted financial model of the hypothetical public sector project. It estimates the total costs to the government of achieving the targeted outputs, assuming that the project is handled in the normal way, with reasonably foreseeable efficiency improvements.

The comparison can be made at two points in project development. First, it can be done before bids are received, usually as a way to determine whether to move forward with expensive procurement processes. In this case the PSC is normally compared with a hypothetical PPP project (the PPP reference), a risk-adjusted financial model that estimates the total cost to government of having a private company deliver the targeted outputs.

Is the PSC method just an expensive way of endorsing the choice of private participation?

Second, the comparison can be made after the bids are received, as a way to determine theoretically whether any of the bids are acceptable.

#### What the problems are

In the United Kingdom there has been growing recognition in the past several years that the PSC method has serious problems—and that in at least some cases it has become an expensive way of endorsing the choice of private participation. A U.K. Audit Commission report (2003, p. 37) concluded that "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]."

Problems with the method have convinced some U.K. commentators that it should be scrapped: "The PSC has become a discredited method" (Roe and Craig 2004, p. 42).

Among the key criticisms are these:

- Inaccuracy. Even industrial countries have little objective data on which to base cost estimates. Without such data, calculating with any accuracy how much a project will cost to run over 25–30 years is almost impossible. There have also been difficulties in standardizing methods for determining the "normal way" in which the public sector implements a project, and the "reasonably" foreseeable efficiency improvements that public officials might make.
- Omitted risks. Some risks involve huge potential effects on project costs, but also great uncertainty. These risks are difficult to estimate. One such risk is contract renegotiation, especially in the developing world. Another is that a government will bail out a private contractor rather than let a project collapse. Expected project costs are rarely adjusted for such risks.
- No consensus on discount rate. The comparison between the PSC and the PPP project is made in terms of present values, so the discount rate used is critical. Since PPP costs to the public partner are spread out over more time, using a higher discount rate will favor the PPP project, and the comparative gains in PSC efficiency must be greater to make the PSC approach attractive. Unfortunately, no clear consensus exists among economists, policymakers, or practitioners about what the rate should be and whether it should be the same for the two projects. Countries that have adopted the PSC approach use a wide range of approaches to determining the discount rate.
- Manipulation. Much of the PSC depends on subjective judgment, and small adjustments for risk or in discount rates can have dramatic effects on cost

estimates. Because of this, some U.K. experts were unsurprised when a parliamentary committee found several cases involving "manipulation of the underlying calculations and erroneous interpretation of the results" (U.K. House of Commons, Committee of Public Accounts 2003, p. 7).

- **High costs.** The financial modeling required for PSCs and PPP references can be enormously expensive and time consuming.
- Second-guessing. The PPP reference for the prebid comparison has been criticized as a futile attempt by government officials and their consultants to estimate what the private sector will do. Australia's leading state government authority on methodologies for PPP project development, Partnerships Victoria, has recommended not wasting resources on this: "The construction of a theoretical [PPP] model requires government to second-guess the multiple assumptions included in the private sector bid and the resulting figure is generally meaningless" (2003, p. 5).
- Postbid results too late. The bidding process establishes the PPP costs with much more accuracy than a PPP reference does. But by the time bids are received, canceling the procurement process on the grounds that the bid price is higher than the PSC costs is almost impossible. In countries like Australia and the United Kingdom this is almost never done except when departments simply do not have the budgetary resources they need to make required payments to the contractor.
- No public sector alternative. The PSC may be hypothetical, but it must refer to a project that could actually be implemented if private financing was unavailable. If public funding is unavailable, the PSC is largely irrelevant. In Australia the Fitzgerald report recommended against carrying out the PSC comparison where public sector

provision "is not a reasonable option" (Fitzgerald 2004, p. 31).

#### What the U.K. reforms do

In response to criticisms like these, in 2004 the U.K. Treasury initiated reforms in how the PSC method should be used:

- There should no longer be a bias toward private participation; more open-mindedness toward conventional public procurement is encouraged.
- The systematic tendency for appraisers to be overly optimistic in estimating key parameters for PPP projects should be explicitly countered through empirical evidence of this "optimism bias" from past projects.
- After bids have been received, there should be no comparison with the PSC, and no questions about whether the PPP approach is appropriate. The emphasis will be on getting the most from the deal with the preferred bidder.
- The quantitative comparison should be considered just one aspect of appraisal, to be used only in conjunction with a qualitative analysis that looks at a project's potential distributional effects and the track record of similar projects. As the U.K. National Audit Office put it: "PSCs should be used alongside a range of other information when assessing the value for money of [public-private] projects" (2002, p. 29).

The focus in the U.K. government now seems to be on making good use of databases in estimating project costs. Departments are encouraged to refer to these databases and use standard spreadsheet models to prepare preliminary PSCs in-house, relying less on consultants to do costly PSC modeling.

#### What about developing countries?

The original logic for using PSCs remains valid and is especially important in developing countries: governments need to The original logic for using PSCs remains valid—but today's method for doing so may not be the best

# GRIDLINES

think through and document their rationale for using the private sector rather than traditional public sector methods for delivering infrastructure services. The PSC also forces sponsoring agencies to think through how much it now costs to provide similar services, what risks are associated with a project, and how these should best be managed in an eventual PPP project.

But the PSC method, particularly as used in some industrial countries, may not be the best way to do all this in developing countries:

- Many African countries lack public funding for infrastructure projects, so developing and using PSCs in any meaningful way is generally not feasible. In these cases a comparison can still be made, and documented, between the net economic benefits of the PPP project and those of the status quo alternative (or perhaps a less costly, remedial project).
- Where public funding for a project is available and a PSC possible, the revised U.K. approach may not be appropriate. Using databases to estimate costs and counter optimism bias, and shifting more analytical work to in-house staff, are not easily done in developing countries.
- The earlier U.K. approach may be more appropriate, with its shortcomings offset by simple but specific procedural rules for using conventional costing methods and informed expert judgment and for countering optimism bias.
  - Doing PSC comparisons for one or several representative projects of different types might also make sense. Often this could be an abbreviated PSC that estimates the transaction

costs associated with a PPP alternative and determines whether its likely efficiency savings would compensate for those costs. On the basis of these representative PSCs, guidance could be prepared for the routine appraisal of projects of each type.

• In some situations it might be sensible to use the PSC more as a way to achieve consensus among stakeholders about what features a project should have than as an expert judgment for convincing stakeholders that a project is affordable and offers value for money. That is, governments could fully acknowledge the subjectivity of the PSC estimates while using the PSC as a starting point for soliciting inputs on project design.

#### References

- Fitzgerald, Peter. 2004. *Review of Partnerships Victoria Provided Infrastructure*. Final Report to the Treasurer, State Government of Victoria, Australia.
- Partnerships Victoria. 2003. "Public Sector Comparator." Supplementary Technical Note. Department of the Treasury and Finance, State Government of Victoria, Australia.
- Roe, Philippa, and Alistair Craig. 2004. *Reforming the Private Finance Initiative*. London: Centre for Policy Studies.
- Shugart, Chris. Forthcoming. Quantitative Methods for the Preparation, Appraisal and Management of PPI Projects in Sub-Saharan Africa. Washington, D.C.: PPIAF.
- U.K. Audit Commission. 2003. PFI in Schools. London.
- U.K. House of Commons, Committee of Public Accounts. 2003. Delivering Better Value for Money from the Private Finance Initiative. London.
- U.K. National Audit Office. 2002. *Redevelopment of MOD Main Building*. Report by the Comptroller and Auditor General. London.



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