Value for Funding: Expanding the Analytical Framework for Infrastructure P3 Evaluation

JULIE KIM AND JOHN RYAN

Value for Money (VfM) is the standard framework for evaluating a public–private partnership (P3) alternative to traditional public sector procurement and financing for major infrastructure projects. In essence, the framework is used to estimate the net present value (NPV) of the cost of the P3 and of a comparable public-sector approach (the public sector comparator, or PSC) using long-term projections and various adjustments. The goal is to determine which alternative requires the least amount of overall resources from the public sector to deliver a similar outcome. In a context of generally unconstrained public-sector resources, or when both alternatives have comparable impacts on the project’s sources of funding, the VfM framework’s focus on precise, risk-adjusted NPV cost comparisons can be very effective at supporting clear conclusions in an inherently complex situation.

But when public-sector resources are significantly constrained, or when the P3 and PSC alternatives have very different types of impacts on funding sources, the project-specific focus of a VfM analysis might not capture important factors related to the public sector’s overall fiscal situation. For example, compared with entering into a P3 contract for a large infrastructure project, a municipal debt financing for the project’s PSC might increase the chance of a credit rating downgrade for a stressed public-sector issuer. Because a downgrade would affect all of the issuer’s rated debt, this could be a significant and relatively quantifiable cost that should be added to the PSC alternative. Assessing the cost, however, requires an analysis of the public-sector issuer’s overall credit picture and the differential impact of the P3 and PSC alternatives. This analysis is outside of the VfM framework.

Or, as another example, a P3 may in some cases be better positioned to manage and expand volatile project revenues and long-term project value than the PSC alternative, because of the private-sector investors’ portfolio diversification and apolitical objectives. A P3 approach for a major project in such cases could allow the public sector to remain focused within a more stable funding environment, leading to better long-term planning and more efficient use of community resources. Again, this type of analysis would be outside the VfM framework.

Being outside the VfM framework does not mean, of course, that the analysis is not being done. Public-sector officials and analysts already routinely take into account important factors such as a credit-rating downgrade or the potential for revenue management in addition to VfM results when evaluating the best way to deliver a major infrastructure project. However, just as VfM has proved to be an essential tool

JULIE KIM
is the P3 FLIPS program director at the Global Project Center at Stanford University in Stanford, CA. julie.kim@stanford.edu

JOHN RYAN
is a managing director at Greengate LLC in Washington, DC. jryan@greengatellc.com
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**VALUE FOR FUNDING GENERAL METHODOLOGY**

VfF analyses would include such features as the following:

- **Funding/fiscal model.** In the same way that long-term costs are projected as thoroughly as possible in a VfM analysis, the relevant long-term stream of public-sector funding and overall fiscal outlook for the P3 and PSC alternatives would also be specifically modeled in a VfF approach. When funding is not otherwise dedicated or specified, this would be done as a correlated “slice” of the public sector’s projected overall funding resources.

- **P3 and PSC funding impact comparison.** The core of a VfF analysis would be a quantitative assessment of the differential impact to the funding stream that the P3 or PSC project costs and operations would have, including any consequences that might have on the public sector’s overall fiscal position. The impact could be on a constrained funding stream that is relatively independent of the project’s specific operations (e.g., the relative effect on a credit rating of the PSC alternative’s fixed debt service obligations compared with the P3’s contractual obligations). Or the impact might be on a less constrained or expandable funding source (e.g., where an innovative service or specific management capability offered only by the P3 will increase user-fee revenues relative to the PSC alternative). Cases where the impact is zero or insignificant (e.g., a relatively small project or one with very similar P3 and PSC fixed contractual obligations) would serve to confirm the neutrality of funding issues and that a VfM analysis is sufficient.

- **Fiscal metrics based on stochastic modeling.** VfF analytical results would be expressed in terms of the public sector’s overall funding and fiscal metrics. These are likely to include the different effects the P3 or PSC would have on annual budget surpluses or deficits, revenue volatility, proportion of fixed versus variable costs, actual or imputed debt levels, or overall use of community resources. Specific metrics can reflect local priorities. Because the VfF framework is intrinsically focused on the uncertainty of public-sector revenues and costs, analytical results will likely be most usefully estimated in terms of probabilities based on stochastic models. In effect, a VfF analysis is intended to provide a stochastic funding and fiscal context around the precise NPV cost comparison estimates by the VfM framework.

It is important to note that a VfF analysis is intended only as an adjunct to, or expansion of, a full VfM analysis. There should be some directionally consistent overlap between the two, especially in connection with discount rate and qualitative adjustments to the VfM analysis to account for risk transfer under the P3 alternative. But a VfF analysis will never replace a thorough VfM analysis. Regardless of funding and fiscal dynamics, a direct NPV cost comparison between the P3 and PSC alternatives is always necessary to ensure the highest and best use of public-sector resources.

Although innovative P3 financing alternatives often get the most of the attention, funding is really the basis—and the primary limiting factor—of the public sector being able to proceed with major infrastructure projects, regardless of delivery structure. A more explicit focus on innovation in funding management and sourcing would be effective in many situations. This is especially true for the U.S. state and local government sector, where a variety of factors are intensifying fiscal constraints but there is also an increasing openness to new approaches.

**PLANNED ARTICLES ON VALUE FOR FUNDING**

Developing a VfF analytical framework can help aid infrastructure decision making and funding innovation. The potential scope of the development includes a broad area with disparate aspects. In order to introduce
and explore some of the relevant concepts on a somewhat comprehensive basis, we are planning a four-part series of articles on VfF to appear in The Journal of Structured Finance.

• The first article, “Public Sector Deficit Risk and Infrastructure P3s: A Value for Funding Approach to Evaluation,” appearing in this Summer 2015 issue, is narrowly focused on outlining an analytical approach to evaluate the risk-absorption features of various types of P3 contracts with respect to U.S. state and local public-sector deficits. This article outlines a general stochastic framework for the comparative assessment that will likely be the basis of much other VfF analysis, especially where the funding stream is relatively independent of specific project operation and the public sector is fiscally constrained.

• The second article will explore broader topics related to long-term sourcing of infrastructure project funding. It will identify a range of potential funding sources and how each would contribute, directly or indirectly, to reducing the existing infrastructure funding gap. Using the stochastic framework developed in the first article, the second article will also demonstrate conceptually the funding impact comparisons between PSC and prevalent U.S. P3 models and other models that potentially have significant funding implications.

• Our third article in the series will return to a narrow focus and outline an analytical framework to assess the use of “brownfield” infrastructure P3 concessions as a funding source to address major long-term, public-sector funding obligations, specifically U.S. public pensions. This is a special type of interaction due to the large scale and long timeframe of both infrastructure transactions and public pension funding, and it provides a unique basis for innovation and subtle forms of U.S. federal policy support.

• Finally, in our last article of the series, we plan to present the results of a research project examining Value for Funding concepts and methodologies applied on a retrospective basis to an actual P3 transaction.

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