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Risk & Resilience Practice

# A smarter way to think about public–private partnerships

For governments pursuing public–private partnerships for large infrastructure projects, capitalizing on the risk-management capabilities of the private sector could be a more efficient and effective approach.

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**Public–private partnerships (PPPs)** have become an increasingly popular way to get major infrastructure projects built. Compared with traditional procurement solutions, these arrangements show a significantly increased level of private-sector participation, with the goal of boosting the efficiency and effectiveness of the project through its entire life cycle, from development to the end of the operating phase. PPPs can also spread a project's cost over a more extended period and can thus free up public funds for investment in sectors in which private investment is impossible or otherwise inappropriate. However, PPPs should not be seen as an instrument to solve public-sector budget constraints or financing gaps, but rather a tool to deliver effective, cost-efficient projects and associated services.

All too often, however, these initiatives fail to find the optimum level of private-sector participation and, as a result, face the same challenges of traditionally procured public projects—cost overruns, delays, and increased complexity. What goes wrong? A central challenge is that governments may not fully capitalize on the true advantage of involving private-sector stakeholders: their ability to assess, price, and manage certain types of risk. PPPs that do not transfer risk—and benefit from the private-sector's risk-management capabilities—will likely fall short of expectations.

To improve their track record, government policy makers can align with the private sector to better manage the risks of undertaking a large project. Transferring specific risks and responsibilities of the project throughout its entire life cycle—including development, construction, and operation—to private-sector investors (and lenders) leverages the risk-management capabilities of the private sector and the relevant markets, while the public sector often remains the project's legal owner. This approach often entails a risk premium that, in large privately developed projects, is a central part of the cost equation, and as such, should be included in the PPP calculus.

As governments seek to upgrade infrastructure and address the challenges of climate change, among other objectives, the need for private-sector involvement has grown. In considering and pricing risk in a comprehensive and transparent way, governments can tap into the true expertise of private players. Setting the optimal level of private-sector participation and risk transfer should result in more projects being completed on time and on budget, better use of government resources, and benefits to the constituency of end users for these projects: society at large.

To be clear, there are government agencies that repeatably deliver on projects. They have realized the need for specific risk-management capabilities and have either partnered effectively with the private sector or some have even built risk-management capabilities themselves to do so. However, still far too often, other government agencies have not done so, and there are many areas where they have not had ongoing repetitive experience in managing certain types of projects and either acquired or built up the necessary risk-management capabilities. These are the situations in which the misalignment happens and that are the focus of this article.

## Setting the optimal level of private-sector participation and risk transfer should result in projects being completed on time and on budget.

## Different views of risk

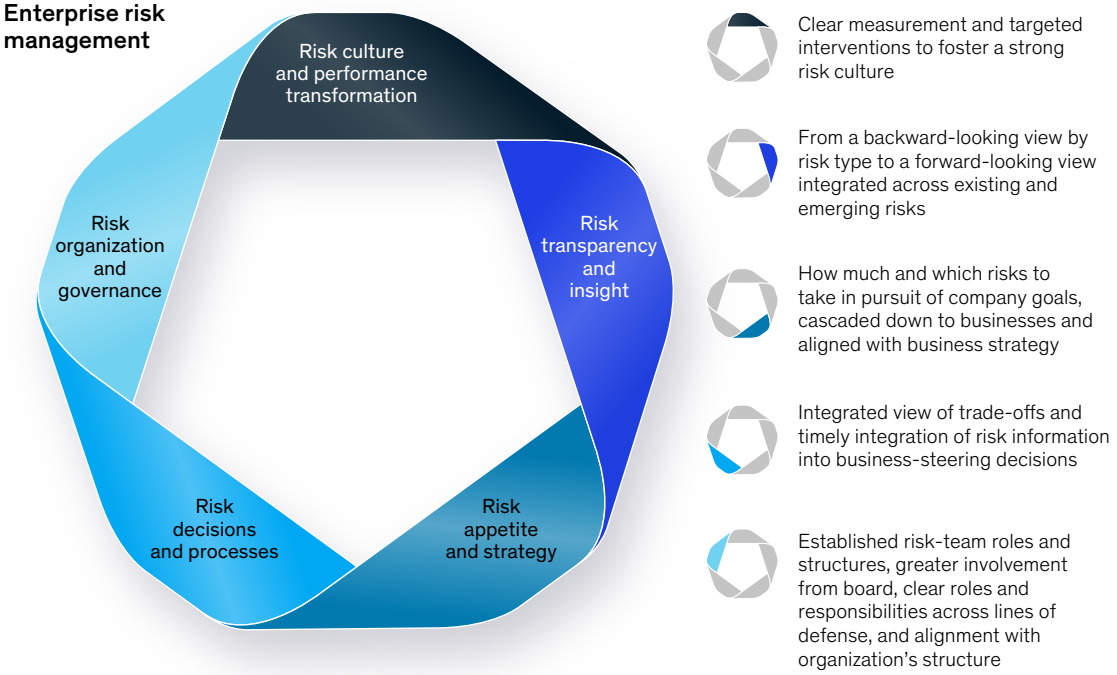
A central reason why PPPs often fail to find the right level of private-sector participation, and thus fall short of expectations, is that the public and private sectors think about risk differently. Many public-sector agencies have become more sophisticated in managing risk. However, such organizations typically focus on a very specific definition of transparency and compliance with procurement laws, at the expense of the effectiveness and efficiency of the project itself. They need to cope with budget constraints, a low deal flow, and other factors. Construction, operational, and commercial risks are always present but usually not a central consideration.

When such risks do emerge—for example, when a project faces cost overruns or construction delays—they typically do not trigger major consequences. Governments seldom face liquidity problems, and the failure of a single project will, in most cases, not affect a government's credit rating. The additional funds will come from government budgets (that is, from taxpayers), and the benefits of the project will simply take longer to appear.

In the private sector, by contrast, construction and commercial risks can have massive financial consequences. (Consider, for example, the holistic enterprise-risk-management framework that McKinsey uses with its private-sector clients, as shown in Exhibit 1.) A 10 percent cost overrun can mean that a company no longer earns a profit on a specific initiative—and that a project manager is looking for a new job. Several such projects can mean that the entire company goes bankrupt. For this reason, successful private contractors have built up strong capabilities in risk management across the entire life cycle of a project, from development through construction to the end of

Exhibit 1

### The enterprise-risk-management framework illustrates an integral cycle of best risk practices in public–private partnerships.



## The consequences of risk are different for private and public sectors, so the sensitivities to risk are different as well.

the operating phase. And private investors and lenders have developed sophisticated controlling mechanisms—the "muscles" that companies cannot survive without.

In addition, companies don't just accept and assume risk; rather, they actively manage it, price it, and determine the financial compensation that they will need to take on the risk. This is a central element of private markets—risks carry costs, and entities that take on risk need to be paid for doing so. This central difference in risk management between the public and private sectors leads to misalignments in PPPs and in what each party considers to be an optimal allocation of risks. The consequences of risk are different for each party, so the sensitivities to risk are different as well.

### How PPPs 'can' go wrong

Here's how that misalignment in considering risk often plays out. A government entity asks a private developer to bid on an upcoming project. As part of the bid, the developer considers all risks—construction risks, commercial risks after completion, and others. In addition to the baseline costs required to deliver the project, the developer adds a risk premium to cover the additional measures and activities required to mitigate and manage these risks. These include additional controls, higher-quality inputs, more experienced project managers, and maybe even a financial bonus for the developer to successfully avoid these risks.

This is standard in the private-sector world: if you take on specific project risks, you charge a premium.

To the government, however, some risk premia look like unnecessary costs (for example, the additional premium charged by a general contractor for absorbing the interface risk between subcontractors and offering a lump-sum, turnkey solution). This scrutiny may seem like good governance and financial control, but it is shortsighted in that it considers budgetary elements alone rather than risk across the project life cycle. The assumption, therefore, is that these risks should be managed for free.

When the private developer explains that managing risk requires a premium, the government often reassumes the risk by providing additional support via guarantees or comparable instruments. The risk premium goes away, but the risks do not—and the private sector's capabilities in risk management are not leveraged. The project may initially be less expensive, but this supposed initial savings can come at a high cost if the risks materialize later on. In such cases, the project is no longer a true public–private partnership; it is closer to traditional procurement.

Because the specific risks have reverted from the private developer (which is good at managing these risks) to the government (which is not), the risks are not effectively addressed, leading to the usual issues of cost overruns, complexity, and delays—

and all sorts of adverse incentives on the side of the private partners (Exhibit 2). In most cases, the resulting excess costs end up being significantly higher than the up-front risk premium that the developer sought at the outset. Why? Because problems are generally easier and less expensive to prevent than they are to solve.

To be fair, some public-sector entities are becoming more sophisticated and are starting to price in the risks from large infrastructure projects. But even then, they tend to underestimate those costs. For example, they may charge a risk premium of 5 to 10 percent, even though they may have consistently seen cost overruns of 20 to 30 percent in the past.

The entity, therefore, is not charging the actual cost of those risks, but rather the cost of what those risks could be under ideal circumstances (or what they currently have the budget for).

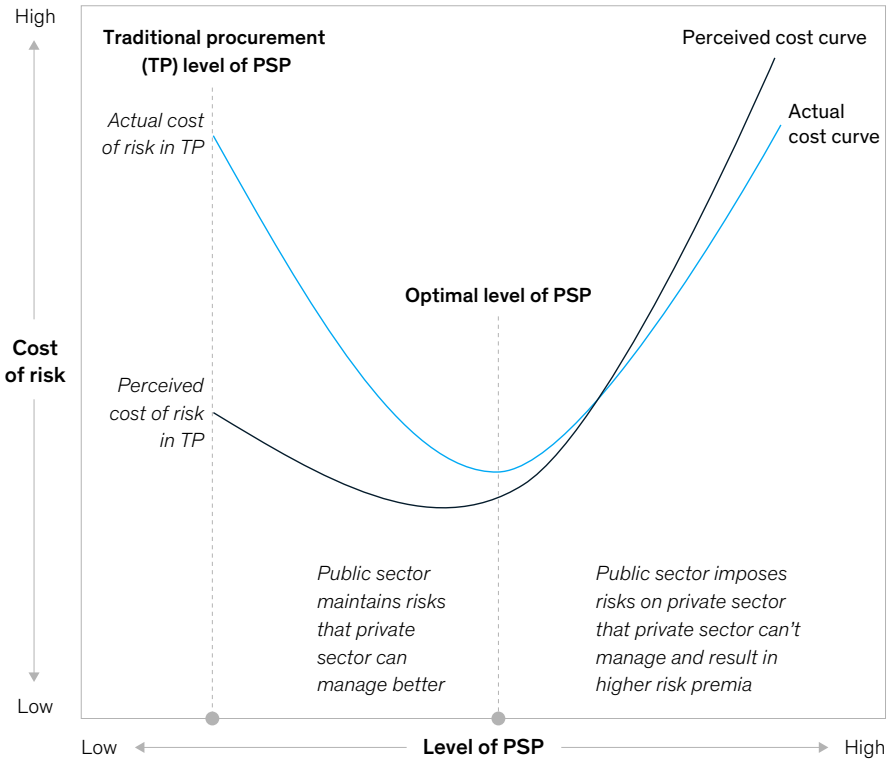
## The real value of private-sector participation: Multiple layers of risk management

Modern infrastructure projects are highly complex and require effective, reliable, and cost-efficient planning, structuring, delivery, and financing. Such projects require a strategy that appropriately reflects the uncertainty and huge variety of risks they are exposed to over their life cycles. The

Exhibit 2

### Finding the optimal level of private-sector participation minimizes cost of risk.

**Optimal level of private-sector participation (PSP),** illustrative




The actual cost of risks borne by public-sector procurers in traditional procurement models are often higher than the perceived cost.

Failure to price risks objectively and transparently can lead to risks not transferring to the private sector due to fear of the private-sector's risk premium.

This can lead to suboptimal risk allocation and PSP levels—as much as transferring more risk to the private sector than it can manage.

Source: Symbulos Management Consultancy

complexity of these projects requires division of roles and responsibilities among highly specialized players (such as contractors and operators), yet this leads to significant interface risks among the various stakeholders that materialize throughout the project's life cycle, which must be anticipated and managed from the outset.

Private-sector risk-management capabilities ideally look at the entire spectrum of relevant risks, often with a particular focus on their potential commercial and financial effects. The fact that risks can materialize in later stages of a project when they in fact arose in earlier stages, under different responsibilities, makes it clear that an end-to-end risk-management process is required. The private sector can only provide the much needed robust risk-management processes from the outset—in the planning and structuring phase, and apply and continuously develop those processes throughout the project's life—if the same private-sector risk-taker is in charge of the project's delivery and operation. This role requires equity (or equity-like) ownership in the project vehicle.

In addition to the equity shareholder (typically the developer), there is a secondary layer of risk management: the project's lenders. Since debt providers don't share in the project's upside, but rather only receive a fixed and lower risk premium than equity investors, they consequently focus more on the potential downside, and are also more risk-averse. Lenders, therefore, tend to take a more granular view of risk analysis, risk management, and risk monitoring.

The dominant debt-financing structure for PPPs—project finance—imposes a life-cycle, or at least a "loan-cycle," risk-management approach on the project. Project finance is a nonrecourse (or limited-recourse) structure in which the project company shareholders' liability is limited to their equity investment. The project lenders rely primarily on the project's cash flow for repayment, with the project's assets, rights, and interests held as secondary collateral. Because project finance is mainly used for new projects, there is no history of project cash flows and no balance-sheet assets at the time of credit approval. Lenders have to rely on expected future cash-flow numbers and business plans (and an estimate of the above-mentioned risk management capabilities and their allocation between the parties).

For this reason, project finance lenders are exposed to all risks impacting future cash flows throughout the life of the loan. To assess those risks, lenders undertake a financial and risk analysis of the project's complete life cycle. They influence the project's contractual structure to allocate risks

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and responsibilities among all project stakeholders and monitor project risks during the entire life of the loan. The life-cycle approach of project finance is an essential—if not the most important—component of risk management for any PPP project.

The fact that the private sector's commercial and financial risk-management capabilities generate efficiency gains for PPP projects explains why ensuring a meaningful risk transfer to private-sector stakeholders is crucial for any PPP project to succeed.

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Increased private-sector participation in infrastructure projects—in particular, private money at risk—can lead to efficiency gains but only if private developers have the opportunity to apply their risk-management skills through a meaningful transfer of risks and responsibilities. Traditional procurement approaches with little consideration of commercial and financial risks do not unlock the same gains. At the optimal level of private-sector participation and risk transfer, private-sector participants not only contribute specific risk-management skills but also benefit from the public sector's ability to take a long-term view and interest in the project and absorb other risks without the fear of bankruptcy.

Policy makers and private developers must align on how they consider—and price—risk. Given the historically different risk cultures among public- and private-sector participants, this can be challenging. Yet, the potential gains from successful project procurement and service delivery will justify the effort.

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