WHY HAVEN'T EFFECTIVE INTERNATIONAL PRACTICES TRANSFERRED INTO THE US P3 MARKET?

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ABSTRACT

Interest in public-private partnerships (PPPs or P3s) in the United States remains strong, but the recent economic recession coupled with mixed programmatic and project outcomes has caused a pause in activity. In short, the wave of P3s that seemed inevitable roughly six years ago has not materialized. While frustrating to some, this offers the United States the opportunity to carefully examine how these complex commercial, legal, and technical arrangements might be enhanced. Notably, a number of practices that have proven effective in international settings have not taken hold domestically. For instance, the least net present value of revenue (LPVR) method for creating variable length concessions while mitigating a project's revenue risk has been relatively successful in South America; yet, while this approach has been proposed for some projects in the US, it has yet to be implemented. Similarly, revenue-risk sharing schemes are utilized elsewhere as are overarching procurement regulations and guidelines. Both opportunities and barriers for such international practices are identified and discussed. Input from a selected set of interviews with public and private sector representatives is provided, so that policy-makers and practitioners can better understand what keeps such practices from being implemented.

KEYWORDS: infrastructure development, infrastructure programs, public-private partnerships, public policy

INTRODUCTION

Over roughly the last two decades, the methods for delivering new or enhanced transportation capacity have evolved dramatically in the United States and worldwide. In the US, the conventional approach of providing new transportation systems through design-bid-build (DBB) has been complemented by an array of arrangements, including design-build (DB), design-build-operate-maintain (DBOM), and design-build-finance-operate (DBFO) – to name just a few. As the scope of activities assumed by a single entity increases, the more likely the delivery method will be deemed a public-private partnership (P3). P3s are most often characterized as having at least two of the following attributes:

- Long-term contractual agreements between public and private parties;
- The creation or enhancement of assets, bundled together with the provision of services; and/or
- Capital financing through a private entity.

Certainly, P3s allow for greater participation of the private sector when compared to the conventional approach. From an historical standpoint, however, the private sector has played a fluctuating but pivotal role in the provision of infrastructure in the United States since the nation's founding (Miller 2000, Garvin 2007). In 1796, a settler named Ebenezer Zane presented what is likely the first unsolicited proposal for infrastructure development to the federal

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government. Zane had blazed a trail while migrating from Fort Pitt (now Pittsburgh) to the mouth of Wheeling Creek on the Ohio River. He founded a town called Zanesburg (now Wheeling) in what is modern-day West Virginia (Miller 2000). Zane proposed to extend his trail into the Ohio valley following a Native American trace that crossed the Muskingum, Hocking, and Scioto Rivers and would eventually wind south to meet back up with the Ohio River at what is now Maysville, Kentucky (Schodeck 1988). Zane petitioned Congress for assistance with the project, requesting landing sites at each of the three river crossings and money to survey the route. In response, Congress offered only a conditional grant of land in tracts one-mile square at each river crossing as well as a franchise opportunity. Zane would be allowed to establish and operate ferries at each of the river crossings on the condition that: (1) he conduct the route survey at his own expense, (2) submit plans with his survey results to the government, and (3) within six and a half months produce proof that the road was complete and open and that the ferries were operating at all three sites. If these conditions were met and Zane provided security that the ferries would be maintained, then Congress would issue deeds to the land at the river crossings (Miller 2000). Congress also stipulated that two judges of the Northwest Territory would set the ferry tolls. Zane took the offer and his road and ferries helped open up the interior of Ohio. Today, his route still exists, having been replaced by both federal and state highways.

This example from our nation's history provides valuable insights. The federal government was short on budgetary resources, but it needed infrastructure to exploit the opportunities afforded through westward expansion. When presented the proposal by Zane, Congress chose to leverage its vast land resources to facilitate the creation of this new road. It also recognized the need to establish strict conditions regarding the road's development and to manage the ferry charges in a manner that would place the public's interest on par with Zane's needs to cover his expenses and take some money home at the end of the day for his trouble.

Interestingly, some of the challenges facing our young nation in the late 18th century are not terribly different today. We need new transportation capacity to improve mobility, environmental performance, and national competitiveness – but resources are constrained. The private sector has an inherent need, if not a mandate from its investors, to generate profits – but these cannot come at too great an expense to the public. Private entities, both domestic and international, have experience in partnering with the public sector – but public institutional capacity to engage with the private sector, while growing, remains limited. In light of this, the search "space" for paths towards solutions to these challenges ought to be broad. Moreover, the general lull in economic activity brought by the recession creates an opportunity to seek out other strategies and consider their efficacy. Accordingly, this paper examines several specific practices in the international community that have strong track-records and considers why such practices have not transferred into the US market and presents practitioner opinions regarding why these practices have yet to transfer into the US. The intent is to generate awareness and reflection on these practices rather than to provide evidence for or against them.

INTERNATIONAL PRACTICES

Procurement Procedures

Several international regions share procurement regulations across boundaries. For instance, the legal framework of the European Union (EU) sets standards and procedures for the procurement of public works and services that apply to all member countries. In general, the basic principles of the applicable laws and regulations are similar to those of the United States –

for example, an advertisement must be placed in EU's official journal, technical specifications may not be discriminatory, and permitted criteria may be used to reject or select participants.

The procedures for procurement may be open, restricted, or negotiated, or may involve a competitive dialogue; participants must be treated equally, and awards must be made under reasonable criteria, which typically translate into the lowest price or the most economically advantageous offer. The open procedure requires a public notice followed by bids from interested parties; in contrast, the restricted procedure requires a public notice followed by bids from invited parties. P3s may use either of these procedures.

The applicability of the negotiated and competitive dialogue procedures is limited. The negotiated procedure is allowed as an exception, when the nature or risks of the intended work make preliminary pricing unfeasible. Typically, parties iteratively negotiate a project's conditions and terms with a public authority until a binding offer is made and evaluated against specified criteria.

A competitive dialogue is permitted when a public authority cannot define a project for procurement because of the technical, financial, or legal complexity. Selected participants then engage in a dialogue with the public authority to develop one or more acceptable solutions. Participants are iteratively eliminated until a winner is identified.

In practice, Spain uses an open procurement procedure for PPPs, but the United Kingdom typically employs a negotiated procedure. Each procedure offers merits; nonetheless, private entities know that the EU's framework governs public procurement. Nuances in the process arise from country to country, but the ground rules remain the same.

Real Tolls as Payment Mechanism

P3s often employ real tolls or user fees. As a result, the issue of revenue risk tends to dominate the risk transfer and the commercial or financial considerations. The magnitude of the revenue risk is difficult to predict and can vary from project to project, involving such factors as expected economic growth, user behavior, price elasticity, and substitute or parallel facilities. Countries have adopted a variety of practices when real tolls are the principal source of revenue for a project.

Revenue Risk-Sharing

In Spain, the law allows the bidding terms to establish a risk-sharing scheme based on user demand. The government establishes a threshold for a specific demand-risk variable, and the bidders propose an upper and a lower boundary in relation to the threshold. The government often sets a limit for the lower boundary, to ensure that the contractor assumes a significant portion of the risk. A traffic- or revenue-based variable may serve as the basis for the forecasts.

If the actual economic conditions differ from the expected conditions, the contract must be rebalanced by adjusting pre-established parameters, such as the toll rate. For example, the government may choose gross revenue as the basis for the threshold and select the toll rate and the contract's duration as the parameters to be adjusted in rebalancing. The government then forecasts the annual gross revenue for the contract's duration and establishes the lower boundary at 80 percent of the annual forecast.

Bidders then propose their boundaries, which will be evaluated as part of the award criteria. If the winning bidder proposes upper and lower boundaries of 130 percent and 70 percent of the threshold value, no change is made to the contract as long as the actual annual gross revenue falls within this range. If actual gross revenue falls below the lower boundary, then a rebalancing must take place.

One option may be to raise the maximum toll rate until the gross revenue comes back within the established boundaries. Similarly, a rebalancing is triggered if the actual gross revenue exceeds the upper boundary (Vassallo and Gallego 2006).

Variable-Length Concessions

In Chile and other South American nations, public agencies have adopted a variable-length concession model to alleviate the revenue risk. In a variable-length concession, the contract ends when certain financial targets are met. Under the terms of the least present value of revenue, the concessionaire has the right to collect tolls until the present value of the total revenue reaches an agreed level (Engel et. al. 2001).

This mechanism can adapt to changing circumstances, such as toll schedule adjustments or the addition of a competing facility, without lengthy and costly renegotiation—this is difficult to accomplish in standard fixed-duration contracts. Alternatively, the least present value of net revenue takes into account the duration-dependent costs of operation and maintenance and uses the net revenue as the threshold parameter (Nombela and de Rus 2004).

Direct Payment Mechanisms

Although direct payments from the government have taken many forms internationally—such as shadow tolls and congestion payments—the availability payment model developed principally in the United Kingdom has received substantial attention in the United States. In this approach, the government pays the PPP contractor periodically during the contract period, and payments are based on meeting project milestones and performance requirements. Often the payment is subject to parameters such as lane availability, route performance, condition criteria, and safety performance. Lane availability, however, is often the principal element.

The approach has several advantages. First, the public sector amortizes its budgetary commitments to a project. In a way, the public entity is opting to pay a contractor for a specified level of service in lieu of paying debt service. In addition, the public sector can avoid the sociopolitical issues associated with instituting a toll or transferring the toll-setting and collection rights to a private entity. Finally, payments can be structured to create incentives for performance or to penalize lack of performance.

INTERNATIONAL PRACTICES AND THE DOMESTIC P3 MARKET

Procurement

Currently, 33 states and one territory have enabling legislation in place to permit some form of P3s for transportation infrastructure. Not surprisingly, the legislation varies from state to state. However, creating unique state markets for PPPs could deter private participation and drive up transaction costs. Some level of standardization, therefore, is essential. States will want to exercise jurisdiction over infrastructure projects since they fund the majority of its development, enhancement and maintenance, but some consistency is advisable in procurement processes and contract provisions. FHWA is working on various models to normalize policies and processes in the P3 arena. Most of their tools, though, are advisory in nature.

One procurement route unique to the United States is the predevelopment agreement (PDA). PDAs provide advantages for public agencies unable to define or scope a project—even with consultant support—without engaging a private partner. EU's competitive dialogue process was designed to offer similar benefits. Recent evidence from the Netherlands, however, indicates that the procedure is time-consuming and costly—but that may be inherent in the procurement for any complex infrastructure project. A comparable or derivative procurement standard is likely needed so that PDAs maintain a level playing field and foster accountability and transparency during implementation – if this approach continues to be employed domestically.

Payment Mechanisms

Indeed, forecasting traffic demand is problematic, and for real toll projects, the question is whether the public sector should transfer the revenue risk fully to a private entity. Several nations have adopted techniques to reduce the risk burden via revenue-risk sharing and variable length concession, but these approaches may not be viable in the U.S. financial market—the nations employing these techniques have markets that are tailored to support public–private transactions. Further, the socio-political challenges of imposing tolls where none existed previously are proving rather difficult to manage or overcome. This has heightened interest domestically in the availability payment model for P3s. This model certainly has its advantages and is worth considering, but it does not necessarily solve the fundamental problem of marshaling budgetary funds for projects. Even the United Kingdom, which has led the way in the use of direct payment mechanisms, is reconsidering its model and assessing the use of limited tolling of its motorways as governmental budgetary pressures mount.

Practitioner Perspectives of International Practices

Several experienced practitioners in the domestic P3 market from both the public and private sectors were consulted to obtain their perspectives regarding issues related to the transfer of international practices into the domestic market. Specifically, their views on the revenue-risk practices in Spain and variable-length concessions were of particular interest. While practitioners felt the time was appropriate to consider such techniques, they expressed some reservations.

Revenue-Risk Sharing

One common theme amongst practitioners was the potential liabilities that public agency might assume when providing the downside "backstop." This is not unlike the current debates occurring about availability payment obligations and whether they should be viewed as "debt-like" obligations. Similarly, how would rating agencies and state treasuries view these types of conditions? Would they be seen at least as a contingent liability? Another common perspective was whether this approach would diminish the risk transferred to the private entity. While an ex-ante Value for Money (VfM) analysis could demonstrate adequate transfer, confirmation of this would not occur until proposals were received when another VfM could be performed. Interestingly, Spain does not employ a risk-transfer approach to justifying P3s. In other words, Spain does not complete VfM studies where risks are identified, quantified and allocated. Rather, they conduct feasibility studies and if a project has the economic characteristics for a P3, then this route is pursued. Finally, some concerns about the process of rebalancing were expressed. In other words, rebalancing is essentially a form of structured renegotiation, so how easily this might be implemented is questionable.

Variable-Length Concessions

Two common themes were found with the variable length concession. First, the auditing burden would increase with either LPVR or LPVNR, and LPVNR would likely have a higher burden since the concessionaire could manipulate its operations and maintenance expenses to its advantage. Second, the variable length model does allow investors some flexibility to restructure the financial plan should actual demand turn out lower than expected. In addition, some concerns were expressed regarding the challenges that this model would pose to the private sector with respect to pricing – particularly the up-front pricing of O&M or rehabilitation events in proposals.

CONCLUSION

This paper presented and discussed several practices in the international P3 market that have yet to transfer to the United States with an emphasis on the revenue-risk sharing and variable-length concession practices employed in other countries. Opinions regarding these practices were solicited from several public and private sector practitioners. In short, these techniques have certain advantages, but their implementation potential in the US requires further investigation. Future research will expand the assessment of these methods and the perspectives of key US players to further comprehend the opportunities and barriers to implementation.

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