

Cost of Capital: There is No Free Lunch

"The current interest rate on a municipal bond with a 30-year maturity and a AAA rating is only 3 percent. By comparison, equity investors look for annual returns of between 10 percent and 15 percent, depending on the characteristics of the deal. The spread in rates adds up quickly. For instance, the finance charge on \$100 million of municipal debt at 3 percent over 30 years is \$90 million. Over the same period, \$100 million in private equity capital at 15 percent has a finance charge of \$450 million"; so said the Director of Infrastructure Policy at the Center for American Progress, Kevin DeGood, in testimony to the US Senate Subcommittee on Transportation and Infrastructure on May 16th.

Mr DeGood's mathematical example was made in support of the wider theme of his testimony: the public private partnership ("PPP") model is expensive. It is a view that is pervasive in the US and shared by a broad cross section of owners, lawmakers, policymakers, financiers, advisors, academics, and the general public. And it's a view perpetuated by PPP advocates. All of which is to say that it's functionally equivalent to dogma.

But is this view really correct? This article will argue that the public sector cannot borrow at a lower cost of capital than the private sector without changing the nature of the borrowing or taxpayer subsidy. The true cost of capital for an infrastructure project is a reflection of that project's risk, which (if accounted for accurately) doesn't change through a borrowing process.

Consider the following example.

A public sector authority (the "Owner") wants to build a new, toll free bridge. The Owner decides to procure the project as a PPP in which it will partner with the private sector (the "Developer") and have the Developer design, build, finance, operate, and maintain the new bridge. Once the bridge is complete (construction is expected to last 5 years) the Owner will make payments from its operating budget over a fixed number of years (25) to the Developer, the proceeds of which will be used to pay for operating, maintenance, and financing costs. The private sector teams competing for the opportunity to be the Developer are competing principally on the basis of who can perform the scope of work for the least cost (i.e. the lowest payments from the Owner).

When the Owner receives the proposals, it finds that the financing arranged by the winning proposer (A) includes an equity investment roughly equivalent to 10% of the financing which is projected to earn double digit returns, and (B) is supported by two indicative credit ratings of BBB and Baa2 from S&P and Moody's, respectively. However, the Owner has senior lien debt outstanding that is rated AA/Aa2, and neither rating is expected to be adversely impacted by the Owner's payments to the Developer.

Concerned that the Developer's financing costs are "very expensive", the Owner decides to solicit revised proposals with the scope unchanged, except the Owner will now finance the project by issuing additional senior lien debt with a rating of AA/Aa2.

What about the project changes that facilitated the improved credit ratings, and in turn a cheaper financing? Is there a reduced risk of construction cost overruns or schedule delays? Has the Owner resolved the interface/handover risk between construction and operations? Has the likelihood of complex risk issues materializing subsided?

The answer to these questions hinges on who the questions are directed at. From the perspective of the project, the answers are all ‘no’. Nothing has changed. Arguably, some of these risks have gotten worse now that they have fewer vested parties managing them (in the form of debt and equity investors with direct exposure to the project). However from the perspective of the investors in the debt the Owner issued to pay for the project, the answers are all ‘yes’. These investors no longer concern themselves with the performance of the project as they otherwise would under a standalone Developer financing, because their investments are now secured with the full faith and credit taxing power or general revenue pledge of the Owner (the “Public Assets”).

With the project risk unchanged, the Owner has achieved its rating uplift (from BBB/Baa2 to AA/Aa2) and reduced financing costs by shifting the project risk away from private investors and onto taxpayers without, in most instances, adequately reserving or accounting for the possible consequences. The cost of this risk, as measured by the spread in rating outcomes, is swept under the taxpayer rug and buried from public view – facilitating perceptions of public cost of financing advantages. Here are several related observations:

1. **Credit ratings arbitrage does not exist.** The spread in credit rating outcomes is a function of changes in the collateral securing the borrowing. The PPP model requires investors and rating agencies to evaluate the risk of the project on a standalone basis. A publicly financed approach would typically involve pledging other Public Assets to strengthen the credit assessment in the pursuit of higher credit ratings. This “strengthening” has created a fundamentally changed credit. If the risk profile of the borrowing had remained the same, there is no reason for a difference in credit rating outcomes between the two approaches. When all else is equal, there is no credit fairy that magically grants different credit ratings simply because the project borrower is public rather than private.

To the extent an owner pledges Public Assets and assumes greater project risk in pursuit of higher credit ratings, the value of these changes can be quantified. The market value of these changes is reflected in the reduction in financing costs that result. The owner’s assessment of the value of the Public Assets it has levered/exposed may differ from the market’s. The view that the public sector can borrow more efficiently than the private sector is predicated on an assumption that the owner values its Public Assets less than the market. If an owner valued the Public Assets it pledged to secure the financing and the project risks it assumed (i.e. the costs of pursuing a lower cost financing) equal to or greater than how the market values them (i.e. the benefits – the increased efficiency of the financing), then they’d be indifferent or averse to chasing lower cost financing.

2. **Tax subsidies have limited relevance.** 88% of PPP projects (by value) that have closed in the US in the past 20 years have been in the transportation sector. Developers in this sector have access to similar tax-exempt sources of finance that is available to public agencies. The other 12% of PPP projects were in sectors like social and water where developers aren't subsidized by federal and state governments to the same extent as public agencies.

Even in those other sectors, the cost advantage to subsidized agencies should be understood, but not form the basis for a decision as to how to finance a project. Most countries consider competitive neutrality adjustments that equalize for tax advantages an owner may have over a developer. They do this in recognition of the fact that their tax systems are closed-ended. The US tax system is no different. In such a zero-sum environment, claims of savings due to subsidized tax-exemption are tantamount to a shell game: borrow from one part of the public interest (federal, state, and local through a reduction of tax revenues) to give to another (beneficiaries of the project being financed through lowering interest costs).

Admittedly, the countries that consider competitive neutrality adjustments have central governments that play a relatively more significant role in infrastructure delivery. Local and regional owners of infrastructure who are responsible to their own constituents arguably have no reason to consider such adjustments if the tax exemption they benefit from is perceived as being subsidized by other taxpayers.

"Whether you like that idea depends, in part, on how you personally reconcile the tension between two long-cherished, core American values—our passion for individualism and our regard for community—and whether you see "community" as encompassing the whole country." John Tierney, The Atlantic

3. **Equity pricing is risk appropriate.** A common refrain to the "PPP is expensive" dogma, is that the rate of return required by PPP equity investors is too high. The amount of equity investment required in a PPP project is positively related to the project's risk profile. The greater the risk, the less leverage rating agencies and lenders are willing to accept and the more equity is required. The rate of return required by equity investors is related to their risk exposure: the greater the risk, the greater the required return. While there is reasonable basis to question whether the pricing of equity returns in PPP transactions is as efficient as other markets, the relationship between risk and required returns predominantly holds true. To suggest that equity is an expensive form of capital is to underestimate the risk being priced. To suggest equity is an expensive form of capital, and that this is reason to avoid it, is to undervalue the public balance sheet that is assuming the project risks that equity otherwise would have.

There are many legitimate reasons why a public agency may decide that it makes greater sense for it to procure, deliver and manage public infrastructure using models other than PPP. A perceived difference in cost of capital between procurement models is not one of them, for the simple reason that the difference is illusory. There is no cost of capital "free lunch".

This is not a new concept as highlighted by the excerpt below from the 2003 UK Treasury report “PFI: meeting the investment challenge”. The quotation is a reference to a 2002 PwC study into the rates of return bid for PFI (the UK equivalent of PPP) projects. It should be remembered and shared.

“[A] common assertion made to justify the claim that the private sector cost of capital exceeds the public sector cost of capital [is]: ‘Governments can borrow at a risk free rate of interest’. This is not the case, there is a risk premium either way, it is just explicit in the price of private capital. Where gilts are used, tax-payers effectively underwrite the associated risk and the price reflects this fact. The taxpayer takes on the contingent liability, and where the risk materializes, they carry the cost as a result. If the taxpayer were to be compensated it would be equivalent to paying the risk premium at the point of raising the capital, making the public and private sector’s cost of capital equivalent.”

The PPP industry in the US has perpetuated the perception that the PPP model has a cost of financing disadvantage by selling a line of logic that generally follows “yes, PPP is more expensive, but it’s worth it because of its benefits”.

That’s neither accurate nor compelling. It’s understandable why the industry has defaulted to this line of reasoning: it resembles a line-item approach to quantifying risk that tracks some of the value-for-money (“VfM”) models used in more established PPP markets to evaluate the value proposition of PPP. While intellectually interesting, VfM is a practitioner’s exercise best done once the proverbial foot is in the door. There are 50 States, over 3,000 counties, and almost 20,000 cities and towns in the US; all of which have varying degrees of autonomy over their infrastructure procurement. This is not a market that has the benefit of a UK Treasury, Infrastructure Ontario, Infrastructure Australia or their procuring authority equivalent. And given the relationships among federal, state, and local governments it likely never will.

Instead of affirming perceptions that PPP is expensive and debating why a premium is justified using international precedent and esoteric VfM vernacular, the industry conversation needs to pivot towards challenging the notion that there is a premium unique to PPP. As this article argues, the PPP model shines a light on the cost of risks that exist regardless of the delivery model; risk that can often go unaccounted for under traditional delivery models. The bait-and-switch that can occur when highlighting financing savings, while disregarding the risk to the taxpayer that bought those savings is contradictory to good stewardship of the public interest. Ensuring public stakeholders are informed of this relationship and helping to quantify these exposures/risks in terms that are widely understood is what will form the basis of a more thoughtful and compelling discussion of the role PPP should play in the procurement of US infrastructure projects.