

Rebalancing risk allocation on infrastructure projects





Rebalancing risk allocation on infrastructure projects



Owen Hayford

Partner

+61 412 664 580

owen.hayford@dlapiper.com

With the rise of Australian ‘mega-projects’ and associated ‘mega-losses’ for contractors and engineering companies, calls for a risk allocation reset are becoming louder.

Unusually, there are signs these calls are being heard by governments and other owners, as the reduced risk appetite of contractors is reflected in tendered prices for infrastructure works.

So, what risk allocation changes could we see?

We offer our thoughts below, but first some context.

A profitless boom

Australian governments have long used competitive bidding processes, coupled with their immense purchasing power as Australia's biggest buyer of civil engineering services, to cheaply transfer significant risk to civil engineering contractors eager to win new work. Twelve months ago, John Holland's CEO Joe Barr was reported in the [Australian Financial Review](#) to have said that contractors tend to take risk "without really pricing it appropriately".

When announcing John Holland's after-tax net loss of USD(59.6) million for the 12 months to 31 December 2019 (after reporting profit of USD84.2 million a year earlier), the same newspaper reported Mr Barr to say, "John Holland will no longer bid on projects where it believes the risk profile is unacceptable."

Perhaps more alarming was Mr Barr's admission, "We are in the midst of Australia's biggest infrastructure boom, but as an industry we are teetering on the brink of collapse." And for good reason it seems, looking at the recent financial performance of some of its competitors.

The financial woes of Lendlease's engineering business received much press last year. In August 2019, Lendlease reported an after-tax loss of USD(337) million for its engineering and services business which included a USD500 million pre-tax provision for underperforming projects – predominantly NorthConnex in Sydney and two road projects in Brisbane. The business has since been sold to Spanish contractor Acciona for USD180 million, but Lendlease continues to hold some of the contracts that Acciona

didn't want, such as the contract on the troubled Melbourne Metro project.

CIMIC's Australian business, which includes CPB (formerly Leighton Contractors) and Thiess, is also under pressure. CIMIC reported a net loss after tax of USD(1.04) billion for the year ended 31 December 2019, which included a one-off post tax write-down of USD1.84 billion arising from its Middle East business. News reports that CIMIC is not paying bonuses to its Thiess employees despite Thiess being CIMIC's best performing division suggest that cash flow is tight.



“John Holland will no longer bid on projects where it believes the risk profile is unacceptable”

Most risks are allocated to the PPP company's contractors

Public Private Partnerships involving the use of private sector contractors and private finance have been a popular contract delivery model for major infrastructure projects in Australia for years, well before they were even called PPPs. The model is often preferred over publicly funded contract delivery models because of its additional risk transfer to the private sector.

The basic structure of a service payment PPP is shown in the diagram below.

Typically, government enters into a PPP contract with a new special purpose PPP company that has been established by the successful bidding consortium. Under this PPP contract, most of the risks associated with the design, construction, financing, operation and maintenance of the infrastructure facility are allocated to the PPP company.

Government retains some risks, such as the obligation to acquire and make available the agreed construction site, and the risk of

challenges to the planning approval that government has obtained for the project. However, most risks (represented in the diagram as ~90% of the risks) are transferred to the PPP company.

The PPP company then enters into a fixed price design and construct (D&C) contract with its D&C contractor under which all of the risk associated with the design and construction of the project (other than risks specifically retained by the Government Agency) are transferred to the D&C contractor (say ~60% of the project's risk). The PPP company also enters into a largely fixed price operation and maintenance (O&M) contract with its O&M contractor under which all of the risk associated with the operation and maintenance of the project (other than risks specifically retained by the Government Agency) are transferred to the O&M contractor (say ~20% of the project's risk).

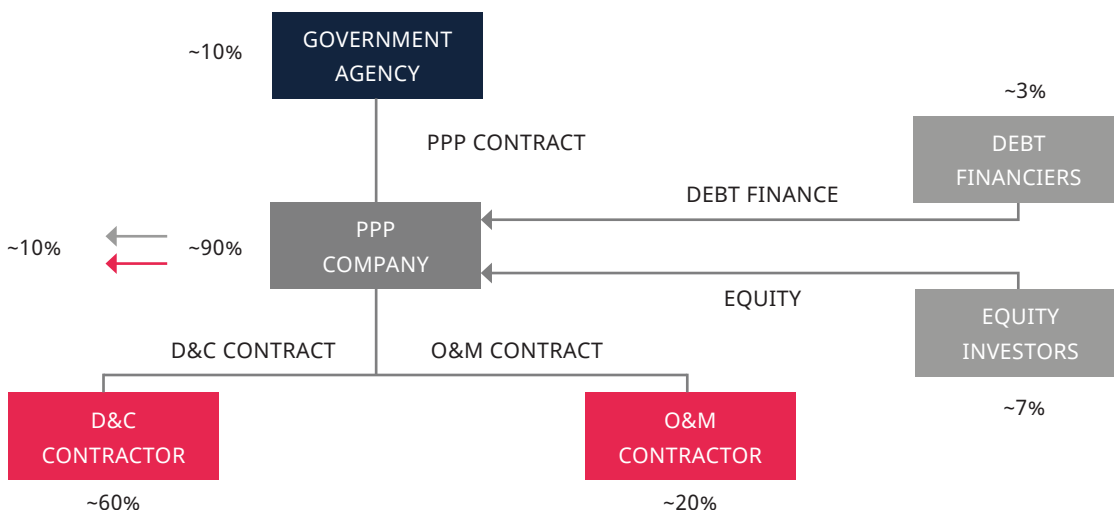
The result is that the majority of the risk that was taken by the PPP company, has then been transferred

to its two contractors, leaving the PPP company with only a small amount of risk (represented in the diagram as ~10%).

This remaining risk is then split between the PPP company's debt financiers and equity investors, with debt always taking less risk (~3%) than equity (~7%).

The contractors will effect insurance for some of the risks, such as the risk of the asset being damaged by a bad storm, or the contractor's activities causing property damage or personal injury to a third party, but the risk of cost overruns and delays is generally borne by the contractors and their supply chain.

The relative percentage of risk taken on by the D&C contractor especially has become even more so with the rise of mega projects, where the size of the D&C contract with its associated risks has increased both in absolute terms and as a proportion of total project value.



Equity and debt shields government from some risks

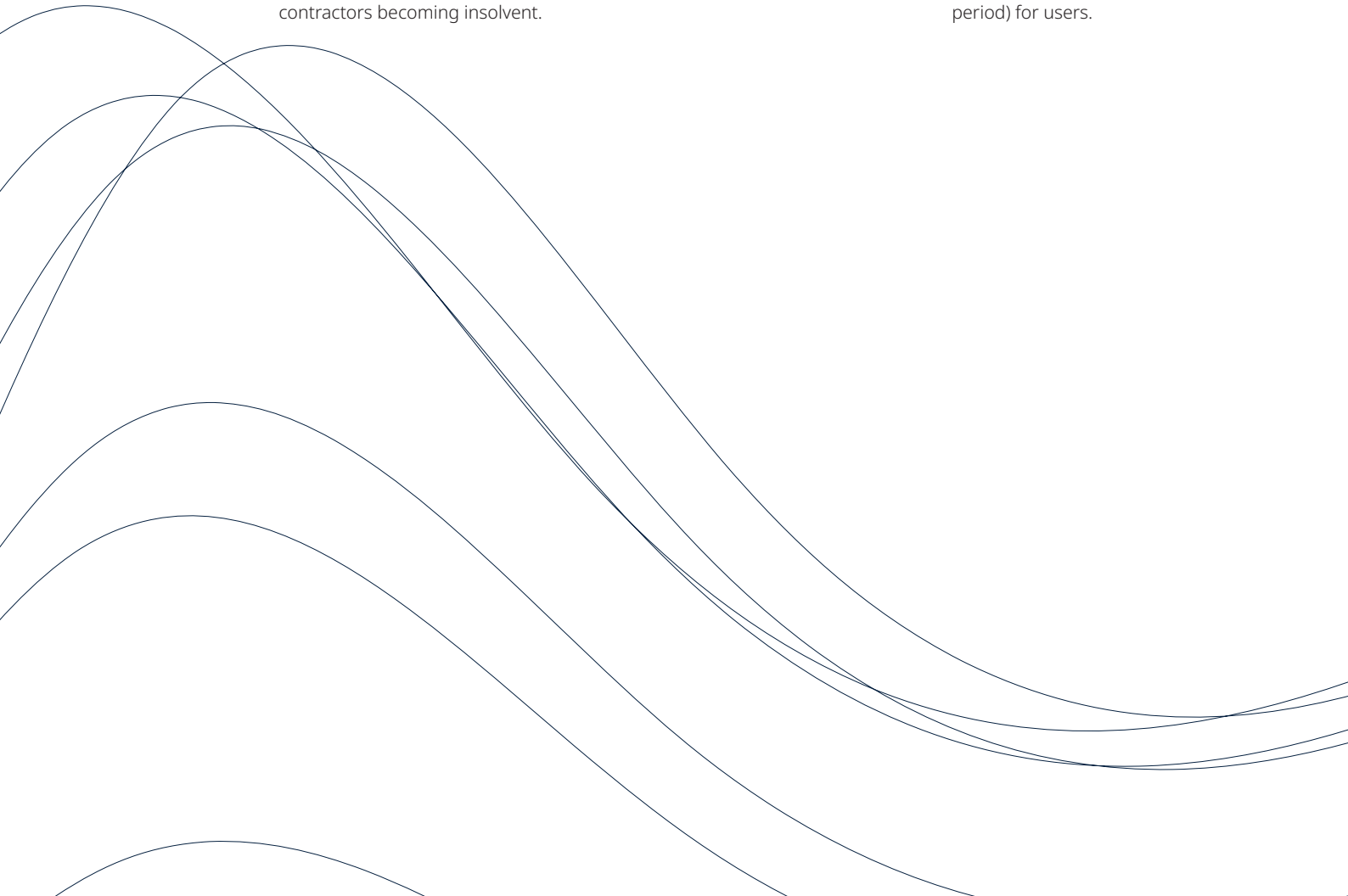
If the PPP company is taking demand risk, this risk typically remains with the PPP company's equity investors and, to a lesser extent, its debt financiers. The demand risk is not typically transferred to the O&M contractor.

Each of the D&C contractor and the O&M contractor will cap their liability to the PPP company for their defaults under the D&C contract or the O&M contract respectively. Consequently, the PPP company and, hence, its equity investors and debt financiers, will bear the risk of losses arising from contractor defaults in excess of the cap on the liability of the relevant contractor. Likewise, the PPP company, and its equity investors and debt financiers, are exposed to the risk of the PPP company's contractors becoming insolvent.

Accordingly, government is shielded from these risks by the PPP company's equity investors and debt financiers, until such time as the PPP company's capacity to absorb such risks is exhausted causing the PPP company to become insolvent. At this point government will need to either:

- provide further financial support to the PPP company so that it can continue to provide the contracted services;
- engage another private sector company to take-over the contract and provide the contracted services; or
- provide the contracted services itself, using publicly funded resources.

- The amount of equity invested in the PPP company determines the PPP company's capacity to absorb such risks, before they fall upon government. If the PPP company raises more equity, it will have more funds available to meet unexpected costs (or lower than expected revenue) and thus greater capacity to absorb the risks that it takes. But the cost of equity finance is greater than the cost of debt finance, because equity investors require a higher return for the higher level of risk they take compared to debt financiers. More equity, and less debt, results in a higher weighted average cost of capital for the PPP company, which translates to a higher service payment for government, or higher user charges (or a longer user charge period) for users.



Who will take risks that contractors are no longer prepared to take?

D&C contractors are saying they are no longer prepared to take risks that they previously under-priced, such as the risk of:

- additional costs or delays due to unforeseeable ground conditions;
- the cost of treating or disposing of pre-existing contamination;
- the cost and time impacts of utility owners adjusting existing utility assets to accommodate the new infrastructure; and
- additional costs arising from changes of law after the date of the contract.

The time and cost impacts of COVID-19 can be added to this list.

If the D&C contractor doesn't take these risks (for a price) then the risks must be taken by someone else. There are only two options as between government and the PPP company. Either these risks will

need to be taken (in whole or part) by government, or they are taken (in whole or part) by the PPP company.

If government takes these risks, it will cease to achieve the value for money outcomes it previously achieved by transferring these risks (assuming the risks weren't previously fully priced, as suggested by John Holland's CEO).

If the PPP company takes the risks, it will need to raise more equity to give it the capacity to absorb such risks. Its weighted average cost of capital increases, resulting in a higher service payment for government, or higher user charges (or a longer user charge period) for users.

In other words, government and/or users must either pay more for the PPP company to take more risk, or government must take the additional risk. It thus becomes a value for money judgement for government. What provides better

value for money: paying more to the PPP company's equity investors to take more risk, or reducing the contract price by taking more risk itself but thereby exposing government to additional costs if such risks eventuate?

For publicly funded delivery models the government doesn't have this choice. If the D&C contractor will no longer take certain risks at any price, they will need to be taken by government.

The PPP model therefore represents an opportunity for private equity investors to present governments with a better value for money proposition in relation to these risks. But the value for money proposition will turn on the ability of equity investors, through the PPP company, to manage these risks with D&C contractors more effectively than government can, and the returns that equity providers require in return for doing so.



Breaking mega-projects into smaller ones

The emergence of mega-projects has seen governments spread the construction works across several contract packages, rather than combining them into the PPP contract package, as a way of de-risking the PPP package, or to enable smaller or more specialised contractors to compete in their own right and thereby expand the pool of bidders. Recent examples of PPP projects that have employed this strategy include Sydney Metro Northwest, Melbourne Metro, Cross River Rail and North East Link.

But this strategy also brings new risks that must be carefully managed. Most significantly, government ends up needing to

manage the contract interface risks between each interfacing contract. The government agency will need to make promises to the PPP company and each interfacing contractor regarding the scope and timing of the interfacing works that will be performed by the other interfacing contractors engaged by government, some of whom may be yet to be engaged. If these promises aren't met, government will be liable to the parties to whom the promises are made and left to recover from the defaulting contractor.

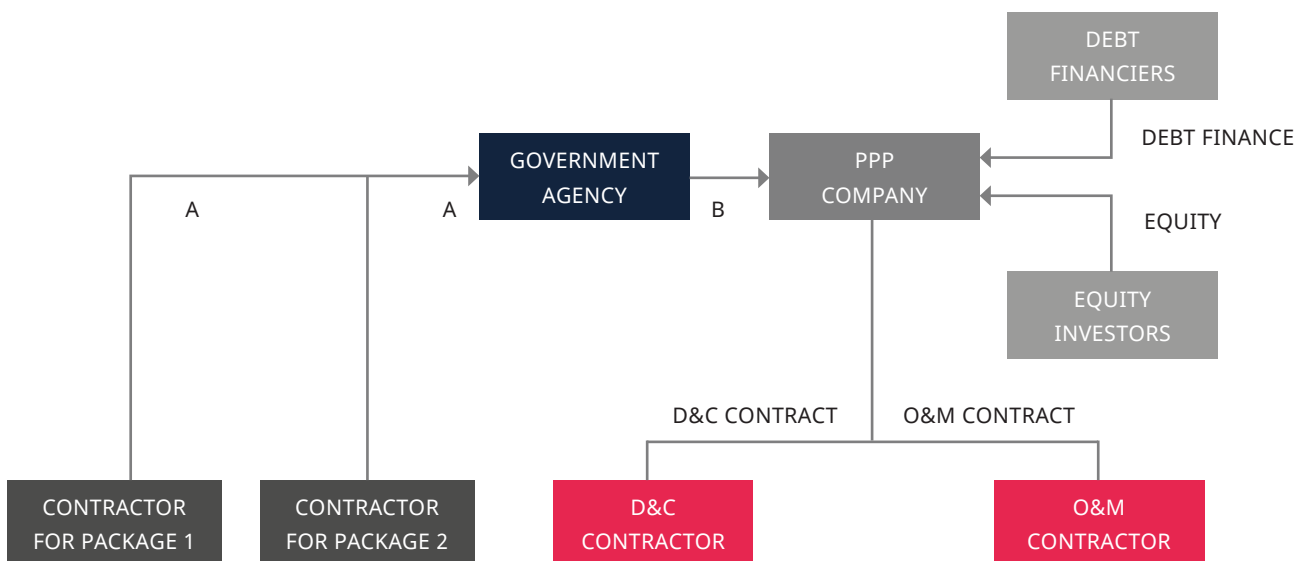
Any liability which government has in excess of the cap on the defaulting contractor's liability remains with government. This can

be a significant risk for government if the value of the defaulting contract (and the resulting cap on the defaulting contractor's liability) is small relative to the government's liability to its other contractors that have suffered loss as a result of the default. If the default causes a delay to service commencement under the PPP contract, the government's liability to the PPP company for loss of revenue and additional financing costs can be massive.

There are several more risks that arise from this strategy that are discussed in '[Breaking mega projects into smaller contract packages – a fraught response to a fraught market](#)'.

A. Capped liability for default

B. Government promises that the P1 and P2 contractors will complete their works on time and to specification



Is there a better way?

Perhaps there is a bigger role for equity and/or managing contractors to play in managing multiple construction contractors. For example, perhaps the contract interface risks could be better managed by a PPP company that has both:

- the expertise of a top tier ‘managing contractor’ (either through its employees, or through an outsourcing arrangement) to manage multiple interfacing subcontractors; and
- the equity, or recourse to a balance sheet, that can absorb the financial consequences of a failure to adequately manage these risks.

The second element is needed because of the PPP company’s use of limited recourse debt. It won’t be able to borrow the limited recourse debt unless its debt financiers are satisfied that the PPP company has the equity needed to absorb the additional contract interface risks, or has the ability to recover its losses from the party to whom it has outsourced the management of the contract interface risks. Again,

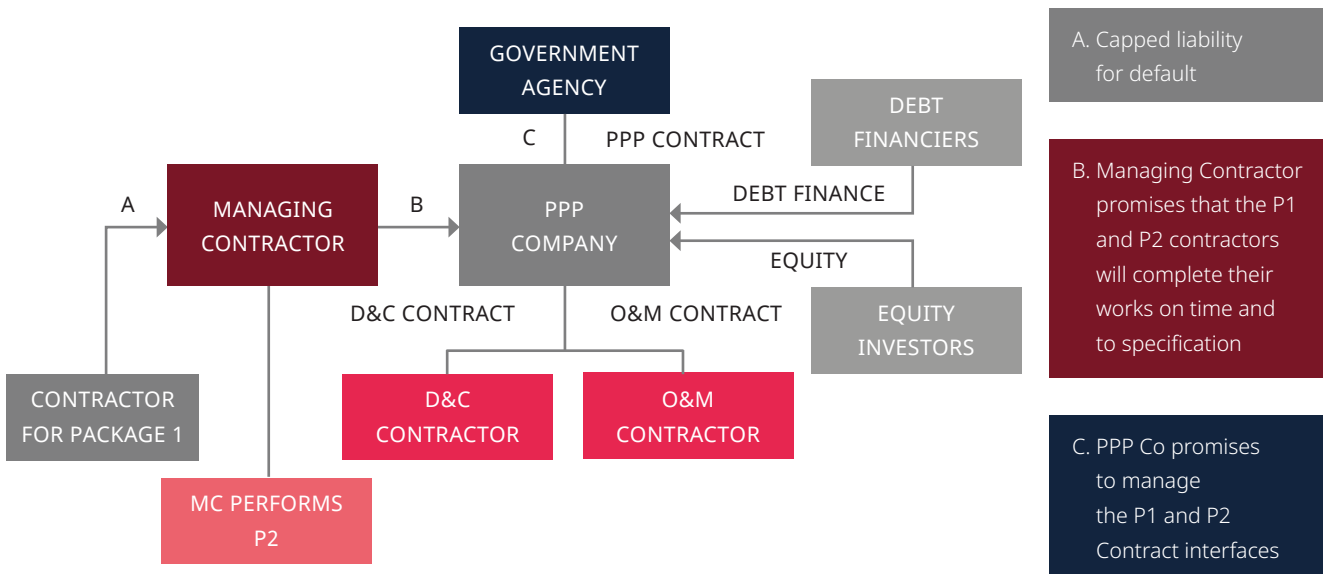
this presents another opportunity for equity investors to add value to a PPP by sharing more risk.

There are many top-tier contractors in or looking at the Australian market that could perform the ‘managing contractor’ role. But managing contractors typically seek to limit their liability by reference to the price they are paid for the performance of their services, which may not provide the PPP company with sufficient recourse. One way to lift the limit on the managing contractor’s liability for its managing contractor services might be for the managing contractor to also perform significant D&C services for the PPP company under a separate D&C contract, and for its potential liability across both contracts to be aggregated based on the combined value of the services under both contracts.

As mentioned above, one of the reasons why governments are creating separate contract packages is to enable certain works to commence before the PPP contract is awarded. This creates a timing issue that would need to be

addressed under the arrangements just discussed, as the early works contracts would be awarded by government ahead of the PPP contract. The subsequent novation of the government’s rights and obligations under the early works contracts to the PPP company (or its outsourced managing contractor) is one potential solution to the timing issue.

Another approach to optimising the sharing of contract interface risk involves the government retaining the risk (in its contract with the PPP company), but then sharing it with a managing contractor. The managing contractor is the one engaged by government to assist it to manage the contract interface risks. This shields the PPP company’s equity investors and debt financiers from the contract interface risk. Consequently, the PPP company avoids the need to have additional equity, or recourse to a balance sheet that can absorb the financial consequences of a failure of the PPP company or its managing contractor to adequately manage these risks. This approach also avoids the timing issue mentioned above.



Conclusion

The PPP model will continue to evolve in response to market conditions. The risk allocation re-balance that D&C contractors are seeking presents opportunities for other PPP participants to re-optimize PPP risk allocation. Many participants want governments to take back risks that were previously

transferred to the D&C contractor. But opportunities exist for equity investors and managing contractors to manage these risks and earn an appropriate return for doing so, and at the same time reduce the overall risk-adjusted project cost for government and taxpayers.



Owen Hayford
Partner
+61 412 664 580
owen.hayford
@dlapiper.com

