

FUNDING UTILITY INFRASTRUCTURE DEVELOPMENT USING PPP AND OTHER APPROACHES

PUBLIC PRIVATE PARTNERSHIPS AND OTHER WAYS OF DEVELOPING OUR INFRASTRUCTURE

Part of the focus of this paper is on public-private partnerships (PPP), but it's important to note that they have limited application to utility development in New Zealand because many of our utilities are owned and operated privately already. In other words, a utility project must be championed by a public agency for it to be a candidate as a PPP.

Perhaps this is just as well, as the recent debacle with TVNZ has certainly raised the profile of PPPs in New Zealand, but not in a positive way. The public will naturally be very wary of proposals for new public services that are framed as PPPs for the foreseeable future, which is a shame because the model has taken hold internationally for good reason. For example, over £20 billion of private finance has been raised for over 400 PPPs in the UK.

To take a step back, though, there is value in looking at the broader concept of public-private partnerships. In their simplest form, a PPP is any arrangement that involves the public sector relying in part or in whole on the private sector for the delivery of a service.

The Government in Northern Ireland has probably got the most useful definition of a PPP and this is that:

“A Public Private Partnership is generally a medium to long-term relationship between the public and private sectors (including the voluntary and community sector), involving the sharing of risks and rewards and the utilisation of multi sector skills, expertise and finance to deliver desired policy outcomes that are in the public interest.”

The important themes to draw from this are that the project:

- Involves medium to long-term relationships
- Between the public and private sectors
- Where risks and rewards are shared and
- Multi-sector skills, expertise and finance are used to
- Deliver outcomes that are in the public interest.

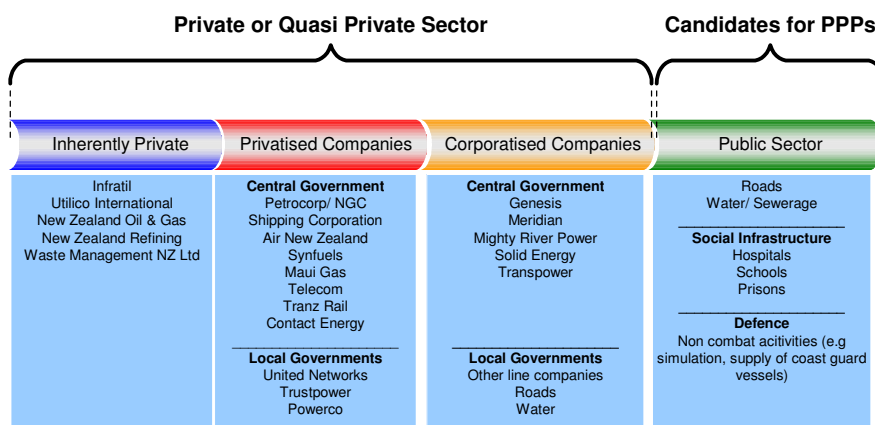
A principal tenet of PPPs is the way in which local and central governments view their role in the delivery of public services. In the past, to deliver a service (or an output) they have necessarily had to become involved in the provision of the inputs. The old Ministry of Works, for example, was largely an input oriented entity and the provision of materials, expertise and labour for the construction of new infrastructure was very much in its domain. The same applied to ECNZ and the NZED before it, for example.

So, PPPs are aimed at the private sector taking the role of delivering and financing not only the inputs to get a new service up and running, but also involvement in the operation and maintenance of the assets that are central to the service. This has meant that construction companies are building up their expertise in operation and asset management services and specialist companies are developing to provide these services as a matter quite separate to construction.

A very useful report that is valuable in the New Zealand context is “*The Changing Balance between the Public and Private Sectors*” by Phil Barry for the New Zealand Business Roundtable, which was published in September 2002

MODALITIES THAT MIGHT APPLY TO UTILITY VENTURES

So, we’ve touched on PPPs and the public sector, but what of the private sector’s involvement with utilities? In the next diagram, we can get a better idea of the breadth and types of businesses that are (or were) involved in New Zealand’s infrastructure.

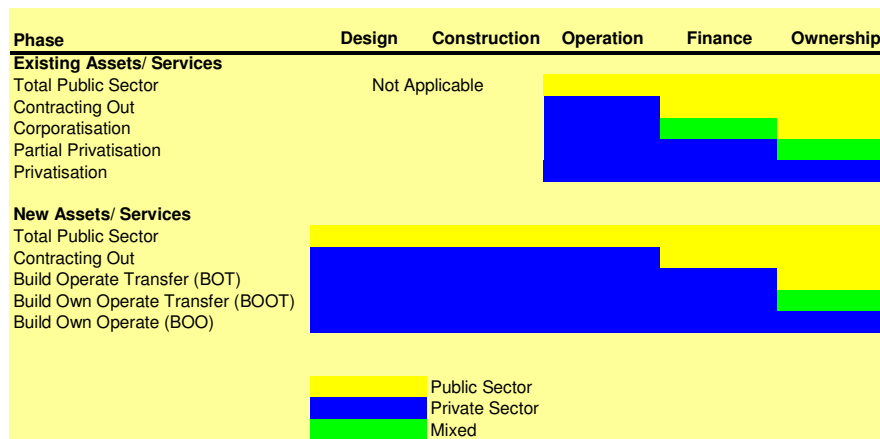


The electricity and gas sectors have been disaggregated so that those elements of each industry that can compete (e.g generation and retail in the power sector) are held privately or quasi privately. In the case of telecommunications, Telecom NZ owns the copper wire network that makes up much of the country’s system and gives third parties access to the network (at much reduced prices since the Telecommunications Commissioner’s latest ruling). The water and sewerage sectors on the other hand are almost without exception owned and managed by local governments. The Papakura concession that International Water has is one such example.

In short, if a project is being procured by a public agency, it has the potential to be a PPP in one of the forms described below. On the other hand, if the project is being procured by a private or semi private company, then it can be corporately financed or project financed.

MODALITIES THAT MIGHT APPLY TO UTILITY VENTURES – PUBLIC PROJECTS

When it comes to applying PPPs to expanding the services provided to the public by central and local governments, first we need to ask whether the expansion will be to an existing asset base or whether new discrete capacity will need to be added. The diagram below delineates between these two states and shows the various methodologies that are available for each.



The infrastructure businesses that are held publicly and are most eligible as PPP candidates involve water/ waste water treatment/ distribution and road transport. Roading is not a utility as such, but Transit is very likely to apply the PPP to new road schemes in future. This will produce models that could well have applications for publicly owned utilities, like water/ wastewater projects. However, many of these projects will not involve the creation of new, standalone assets like tollroads. Instead they are likely to involve existing assets being bundled with system upgrades and expansions, all possibly packaged as a PPP so that a private group also provides the ongoing operation and maintenance of the system.

MODALITIES THAT MIGHT APPLY TO UTILITY VENTURES – CORPORATE FINANCE VS PROJECT FINANCE

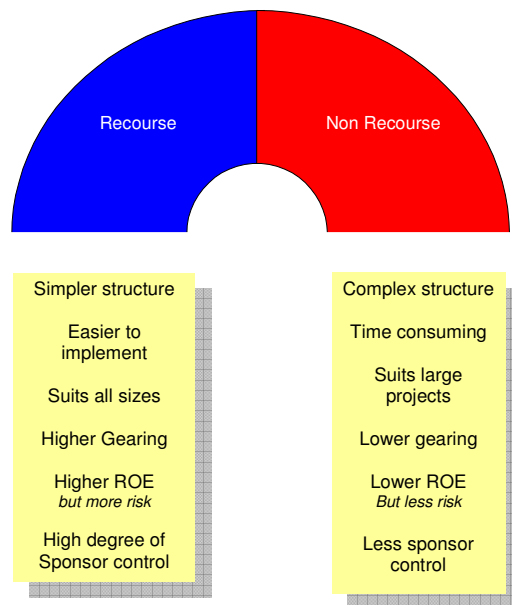
For projects procured by the private sector, projects often involve the creation of separate, standalone capacity. Usually this is corporately financed, but that may very well change in future as the demand for new capacity for all New Zealand utilities gathers pace.

This introduces a feature that is common to both PPPs and private sector expanding new capacity - the need for finance. More often than not, this is the scarcest resource in a project and the private sector is increasingly the source for that finance.

Increasingly, especially for larger projects, it is likely that companies will turn to project finance techniques for the funding of new capacity. Project finance is an alternative to financing projects corporately (or on balance sheet). Project finance involves loans being raised specifically for the project concerned, usually through a special purpose company. Lenders rely primarily on the cash flows generated from the project for repayment rather than on the balance sheet of the sponsor. To the extent that lenders look beyond the special purpose company for security, this is called recourse. In reality there are very few deals done where the special purpose company has completely adequate security for lenders, so non recourse projects are rare. For this reason, project finance is often also called limited recourse lending

There is a further benefit in having a special purpose company own a project, which is that it makes joint venturing eminently more possible. This approach brings skills together and shares the risk associate with the project concerned as well.

If a key issue is that project developers need to consider whether to project or corporate finance a project, the diagram below shows the two ends of the spectrum and their respective advantages/ disadvantages.



Usually, project sponsors choose to finance projects from their own balance sheet until the size of the project becomes too large for the sponsor and it is then forced to team up with others and/ or finance the project on a limited recourse basis.

BALANCING THE SOMETIMES CONFLICTING INTERESTS OF ALL STAKEHOLDERS

There are, of course, many stakeholders in a project, but this paper focuses on those that are involved in the project's financing.

When it comes to the balancing of lender and investor interests, there is a common goal of ensuring that the project is completed on time, to budget and specification and that the company's projected earnings do actually transpire. However, there are two drivers that affect how these two groups prefer to arrive at that point. Lenders receive a lower return on their debt than investors do on their equity, so lenders deal with this imbalance by seeking a greater level of security than investors, so their due diligence is greater than say an incumbent shareholder. Secondly, the involvement of lenders comes later in the project development cycle than investors, so they do not have the benefit of being involved in much of the project's structuring. This is one reason why employing a good financial advisor has merit, because the advisor is able to take a view on what the lending market might expect come the time to raise finance. Those expectations can be built into project agreements during their development, rather than running the risk of contracts being re-opened during the financing and, consequently, project development costs increasing, the risk package changing and development timeframes extending.

KEY INGREDIENTS FOR SUCCESSFUL UTILITY PROJECTS

For a project to be successful there must be a strong rationale for the project, particularly in the mind of the public if the consenting process is to proceed as smoothly as possible. As an example, there is considerable positive sentiment toward renewable energy at present, but even a small wind turbine project near Christchurch faces significant delays because of objections raised by a limited number of people. The issues larger projects face are exponentially greater.

The project must have the benefit of a transparent and efficient regulatory framework. New Zealand certainly rates very highly in terms of transparency, but we have some work to do if we want to install new capacity on time and meet the reasonable concerns the public and other interested groups have regarding new developments.

The strength of sponsors and other project parties cannot be over emphasised. We have in New Zealand a limited number of companies with the balance sheet size and experience to undertake complex and privately financed utility projects.

A project needs to be financially viable. In this context a project may be viable from an overall point of view if all macro and micro economic benefits are measured. The problem is, though, that privately financed projects cannot usually capture macro economic benefits in their revenue stream, so the project must also be viable from a micro economic standpoint. This means that Project IRR, Return on equity, equity payback, debt service cover factors and other financial covenants must all meet the needs of lenders and investors. The project must be able to withstand rigorous sensitivity analysis and reasonable combination downside cases if it is to proceed. If it cannot, lenders are likely to seek additional support from the project's shareholders or the project is fundamentally not viable.

Financial viability, from the investors viewpoint, must also include the risky pre-construction period as this has to be funded with equity. Lenders are unwilling to take a risk at this stage of the project's development and cost blowouts at this time have a marked and adverse affect on equity returns.

The quantitative assessment of a project must be supported by the qualitative. In this way, risks must be mitigated through balanced contracts and hedging insofar as interest and foreign exchange rate risks are concerned.

Crucially, the balance between social, economic and environmental needs must be met. This is an increasingly tough balance to strike in an ever more environmentally conscious world. Take hydro development as an example – it would not be possible today to embark on the ambitious hydro developments of thirty years ago, yet those developments enable us to state proudly that over seventy percent of our power needs are supplied from renewable sources today. This is an ironic twist, but does not change the standards to which projects must conform.

BUILDING AN ACHIEVABLE FINANCE PLAN

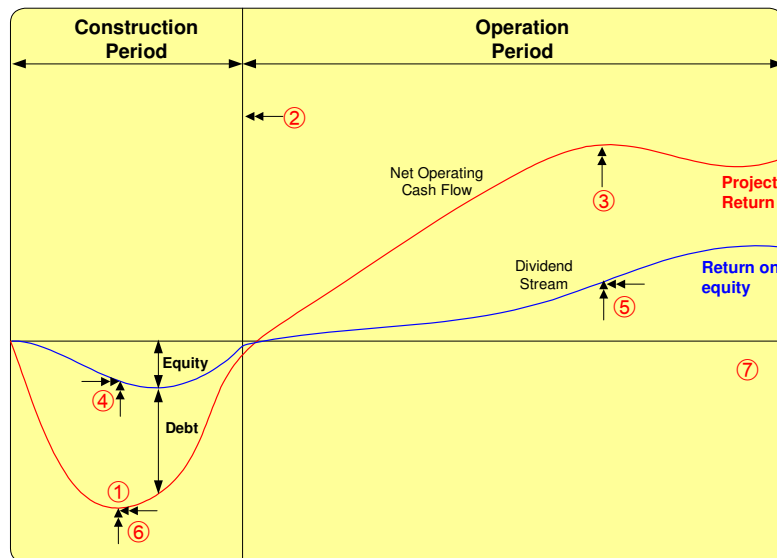
The finance plan comprises several components, including the capital structure, or balance between debt and equity, the sources and amounts of that finance, and the terms on which it is made available. This mix is generated through a quantitative assessment of a project's economics, which is something of an iterative process, and through the development of a security package. The security package is for the benefit of lenders and is made up of rights over the projects assets, agreements and earnings. In project financings however, the core part of the security package is an assessment of the likelihood of a project being completed and earning as projected.

In quantitative terms, developers try and achieve a finance plan that offers the lowest weighted average cost of capital, or WACC. This is usually done by maximising the level of debt that the project will carry and minimising more expensive equity. Investors might also try and inject their equity into a project as late as possible, so that cheaper finance is drawn first and the most expensive capital is drawn last.

Developers also try to obtain the most beneficial terms for the loans they plan to obtain in support of their projects. This is done by maximising the "average life" of their proposed loans, by seeking the longest loan term possible, delaying the first repayment for as long as is achievable and "back-ending" repayments insofar as the market will bear.

Pricing of loans is also a major determinant of the WACC. Loans have several components to their pricing, including front end fees, commitment fees, base interest rates, credit margins and other costs such as loan administration and agency fees. The pricing of loans depends on several factors, such as (a) the depth of the market for the type of loan and industry sector concerned (b) the relationships that the developers have with the proposed lenders, and (c) security particular to the project.

The illustration below provides an outline of the areas that have an impact on a project's economics. Items one through three do not depend on the finance plan itself and in fact should be managed before the finance plan is considered in too much detail. This is less of a possibility in markets that are not well developed as often finance is tied to the supply of goods, services or investment – especially in cross border transactions. In essence though, a benchmark is for projects not to have a project IRR of less than twelve percent. The project IRR measures the investment stream (assuming the project is 100% equity funded) and the earnings stream to arrive at an internal rate of return.



Once the project IRR has been massaged so that it has been maximised, the finance plan comes into play. Logically, the cheapest source of debt should be applied to project costs until that source is exhausted, then the next cheapest and so on. Equity should be applied last, but lenders generally require that equity and debt are injected at least pro rata to the construction schedule. Some investors have got around this issue by providing letters of credit in support of their equity obligations.

STRUCTURING THE SECURITY PACKAGE - THE RISK IDENTIFICATION AND ALLOCATION PROCESS

The security package for a project financing depends very much on how well the project's risks are managed. Project risks are a little like matter - in that matter can neither be created nor destroyed, just moved around. Risks can certainly be created but more often than not it is that they are overlooked or not fully dealt with during the project planning process that is the cause of later angst. It is for this reason that the risk identification process needs to be treated as a serious undertaking by the senior executives involved in planning a project. Having identified the risks, the next step is to work through the risk allocation process with the various project parties. Assigning risk has a cost attached to it. For example, asking an operator to take a risk on the project's specification will result in a disproportionate increase in the O&M fee, because the operator is not able to control something that is in the domain of another party. This drives the oft told rule that risks should be allocated to the party best able to control those risks.

The slides that accompany the paper look at a couple of projects that demonstrate how risks can have a knock-on effect when a risk event is triggered. They then appear to act in concert to defeat the project. This is a problem that is compounded if there is a pre-occupation with finger pointing rather than moving on and resolving the problem. Which way this goes depends on whether there is a well thought through and systematic dispute resolution process to follow.

SOURCES OF FINANCE – A REVIEW OF DEBT AND EQUITY CAPITAL MARKET APPETITE FOR INFRASTRUCTURE

When a utility borrows on its balance sheet to corporately fund a new project, there is plenty of lender experience to take a view on the utility's capacity to repay the debt. However, if the project is to be project financed, the pool of skilled lenders in New Zealand reduces significantly. Even then much of the structuring work might be done out of Australia for a larger transaction. This is fair enough, because there has not been much call for project finance in New Zealand, but that seems to be changing fast.

The New Zealand debt capital market has sufficient depth to fund utility projects through commercial banks and institutional lenders such as the pension funds and insurance companies. The availability of equity is less clear.

When it comes to the equity capital market, there are very few investors that have the skill to take a view on the project concerned, especially if it is to be a Greenfield project. These investors are usually trade investors, i.e already involved in the sector concerned. The development of specialised infrastructure funds in New Zealand would be time well spent. Additionally, for PPP projects, there is value in requiring a certain proportion of the equity to be floated on the sharemarket so that the investing public can become more familiar with infrastructure as an asset class. Sponsors to projects that are financed on a standalone basis might also seek a rating from an international rating agency to widen the pool of potential investors.

There are overseas sources of debt and equity finance as well. These are worth tapping provided foreign exchange risks can be managed, either by creating a natural hedge in a finance plan (by matching currencies of expenditure and finance during the construction period in particular) or through using treasury instruments if there is sufficient availability to cover the exposure.

Developing markets have often got themselves in a pickle because they have been forced to borrow heavily offshore to finance new capacity, simply because they do not have the depth in their local capital market. New Zealand does not have that problem, but we need to ensure that supply of finance keeps up with demand, which is likely to expand substantially over the next few years.

CONCLUSIONS

Public private partnerships have their place in New Zealand when it comes to publicly owned utilities looking to the private sector for help in expanding and/ or operating their capacity. This is most likely to affect water and waste water businesses owned by the councils.

Most other utilities are privately or quasi privately run, so while PPPs don't apply some of the principles do. An increasing issue for private utilities will be whether they fund projects on a corporate or a project finance basis.

The pre-construction period is a major risk period for projects in New Zealand and this is partly due to the process required by the Resource Management Act. The principles of the act are fine, but need some streamlining to speed the pace of development for projects that can meet the reasonable expectations of the public and special interest groups.

New Zealand has the depth in the market to fund new capacity, whether public or private, but we have some catching up to do to become fully familiar with PPP approaches and the complexities of project financing utilities.