

Infrastructure Investment: What Trustees Need to Know

Discussion Paper

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Association of Superannuation Funds of Australia

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ASFA Discussion Paper

INFRASTRUCTURE INVESTMENT: what trustees need to know

Purpose of the paper

ASFA recognises that many trustees are considering opportunities to undertake infrastructure investments, or to expand their capabilities in this area. The purpose of this discussion paper is to provide trustees with information and practical guidance about the characteristics of infrastructure investments and investment vehicles, and a description of the risks which are common to these investments, and those risks which are specific to different types of infrastructure assets and vehicles. This discussion paper should be read in conjunction with ASFA Best Practice Paper 34 Trustee Guidance – Valuation and Liquidity of Unlisted Investments.

1. Definition

Infrastructure investment is broadly defined as being investment exposure (debt or equity) to real assets that provide essential or commercial services to the public. This is a broad definition, but infrastructure can be further defined by looking at some of the typical features of the asset class. These are:

- Predictable cash flows – infrastructure assets tend to have a high level of visibility with regards to future cash flows. Depending upon the asset, this visibility can be impacted to some degree by adverse economic conditions, gearing or other structuring techniques and/or regulator intervention. In some cases, asset earnings may be contracted on a long term basis.
- Gearing –the relatively high level of cash flow certainty means that infrastructure assets can service greater levels of debt than most assets.
- Inflation linked – The rates of return set by regulators for many types of infrastructure are often linked to future inflation. Further protection can be achieved through assets that have revenue linked to inflation. This alignment of asset values and income with future inflation makes infrastructure investment attractive to long term superannuation investors.
- Sustainable competitive advantage – in most instances the barriers to entry for infrastructure assets are high. This means that the assets cannot be easily replicated and competition may be limited depending upon their size and market positioning. Some assets may be monopolistic and thus operate within a regulatory environment.
- Low operating expenses as a percentage of revenue – the primary cost of an infrastructure asset is its construction. Once operational, an asset typically has low operating and maintenance costs.
- Longevity – once constructed, an infrastructure asset will tend to have a long economically useful life. Infrastructure assets are generally not susceptible to technology obsolescence given the simple operating nature of the assets (with the possible exception of power generation). Regular maintenance should ensure that an asset can operate for its entire expected useful life.
- Providers of essential services with a low elasticity of demand for their services.

Examples of what is typically considered to be infrastructure includes: airports, roads, energy production and transmission, ports, rail, utilities (e.g. water/waste water) and telecommunications facilities. Importantly, infrastructure is not a homogenous asset class; no two assets are the same. Therefore detailed analysis and due diligence of the specific asset/investment should be considered prior to investment.

The traditional definition of infrastructure has also expanded over time to encompass social infrastructure which includes hospitals, education facilities and various other public/private partnerships. These social assets display the same characteristics as other infrastructure assets with the added feature of revenue being generated by Government concession payments. If the asset revenue is contracted on an availability basis, then the returns from the asset can be compared with those of a Government bond.

In addition to how individual assets are defined, it is also important to understand how infrastructure is defined in an overall

portfolio context. At an asset class level, infrastructure has the following features:

- Diversification – infrastructure tends to have a low correlation over time with other asset classes.
- Low performance volatility – given the long-term nature of infrastructure assets, performance should be less impacted by short-term market sentiment.
- Illiquidity – unlisted investments are considered illiquid with only limited options for investors to realise their investments. Individual funds may have defined liquidity events.
- Cash yield – in the case of mature and operational assets, the predictable and stable cash generative ability of infrastructure assets is likely to mean that the assets can return consistent cash yields to investors.

The above features relate to unlisted infrastructure. Listed infrastructure will tend to provide less diversification for the entire portfolio given its higher correlation with equities, particularly over shorter time periods. Listed assets will have higher performance volatility, but provide access to large infrastructure assets with a high degree of liquidity. In addition, a listed infrastructure portfolio can gain greater diversification through investment across sectors and geographies. The underlying value of identical assets and financial structures between listed and unlisted securities should not in theory be different, but the liquid nature of the sharemarket can create mispricing opportunities. The capital structures of listed and unlisted infrastructure may be different, providing different risk / return profiles.

2. Characteristics

Although what defines an individual infrastructure asset is reasonably prescriptive, there are a number of other characteristics that will impact the risk/return profile of an asset. The expectation of relative earnings certainty from infrastructure investments is based on:

- price inelastic demand for the services;
- price increases determined by indexation formulas (CPI or similar);
- price increases based on periodic reviews by the regulator;
- natural monopoly positions (e.g pipelines, transmission lines, airports);
- monopolies derived from contracts and concessions (roads, assets covered by PPPs);
- capital-intensive, long life assets; and
- economies of scale.

2.1 Barriers to entry

Given the role and responsibilities of a fund trustee, certain characteristics of infrastructure investment can make it difficult for superannuation funds to fully utilise this asset class.

Common barriers to entry may include, but are not limited to:

- Liquidity constraints
- Lack of a secondary market (arguably, this is tied to liquidity constraints)
- Sovereign risk which may arise for example, as a result of government changing contract terms
- Complex and often expensive bidding processes
- Due diligence burden: due diligence processes may need to be tailor made for each individual project
- Immaturity of the post retirement market means the apparent advantages of infrastructure as a long term, cash flow stable asset class are of less value
- Lack of fund scale
- Skill shortages: lack of internal expertise in infrastructure
- Lack of transparency surrounding pipeline and investment opportunities
- Difficulties with valuations, standardised valuation methodologies and unit pricing

Examples of the characteristics of the different types of infrastructure assets are outlined below:

2.2 Regulated/unregulated

Infrastructure assets tend to fall into three broad categories which are described below.

Regulated – under a fully regulated model an asset is permitted to earn a rate of return as determined by the regulator. This is either determined at set intervals (typically 5 years) or on an ad-hoc basis where either the regulator or asset owner believes that the rate of return is inappropriate and should be reviewed. A number of factors drive the rate of return including the cost of capital, operational costs and capital expenditure.

Partially regulated – under a partially regulated model, an asset is generally allowed to operate independent of regulatory intervention, subject to the asset owner not abusing its market position to generate excessive returns. If the regulator believes this has occurred, then it will act to remedy the situation.

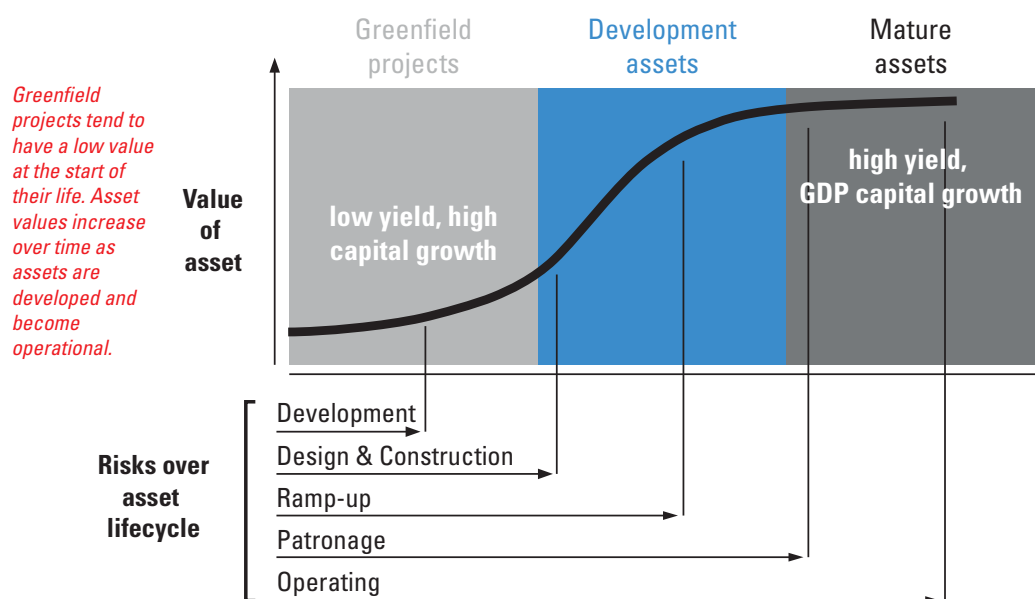
Unregulated – unregulated assets tend to operate in an environment where the barriers to entry are low enough that if an asset is earning excess returns, competition will enter the market. This results in market forces regulating the rate of return, rather than a regulator. Unregulated assets can either be contracted or uncontracted. Contracted assets will have relatively predictable earnings for the specified contract period, whilst uncontracted assets are exposed to market risk.

2.3 Availability/ toll

An infrastructure asset will generally earn a return based on either a payment for use (e.g. toll road or airport) or a charge for making the infrastructure available (e.g. hospital or gas pipeline). Under the toll model, the risk that the asset is not fully utilised is held by the owner and as such a fall in usage will negatively impact the investment return. Availability linked assets are not impacted by throughput, with the owner receiving a fixed amount irrespective of how much the asset is used. Under an availability structure, the owner must ensure the asset is maintained to a specified standard and that it is operated to a pre-agreed level. Any operational or maintenance underperformance will result in lower revenue being received but the owners are incentivised to meet the minimum requirements. Assets based on tolling are considered higher risk, but also have the potential to deliver higher returns.

2.4 Greenfield/ Brownfield

An investment in an infrastructure asset can be made prior to construction ('greenfield') or into a mature, operating asset ('brownfield'). Although the underlying assets may be the same, the decision as to which phase of development the investment is made can have a significant impact on the risk/return profile of the investment. This is illustrated in the diagram below:



**As project risks decrease, the value of the asset increases.
The yield/ capital growth profile of the investment will also change.**

Source: AMP Capital

Greenfield investments are typically higher risk due to the inherent construction risk and forecast patronage risk (some development risk may be mitigated by contracts with project developers). Brownfield assets are typically operational and thus are cash generative and are likely to be able to pay cash yields from the time of the initial investment. Cash yields from greenfield investments will be delayed until the asset is operational and thus have a different return profile for investors.

2.5 Capital raisings and drawdowns

The timing of capital raisings and drawdowns is difficult to reliably forecast. As such it is a challenging exercise for investors to manage liquidity and maintain their desired infrastructure exposure. Various scenario analyses can be done but this is an imprecise science.

2.6 Local/ global

The opportunity to invest in infrastructure is not restricted to the domestic market. Australia has one of the most advanced private infrastructure markets in the world, which has meant that historically there have been a number of attractive opportunities available in this region. Notwithstanding, the infrastructure opportunity set is global; there are investment grade assets and funds available across all regions. These assets may be sold out of Government ownership; divested by corporates seeking to sell non-core assets; or be identified Greenfield assets requiring private funding.

Global investing leads to additional considerations (e.g. currency hedging, tax) but also can provide benefits (e.g. further portfolio diversification).

2.7 Equity/ debt

An investment in infrastructure doesn't have to be made as equity. Traditionally this has been the case, but as global infrastructure bond markets have developed at the same time as bank credit has tightened, the opportunity to invest in infrastructure debt is becoming more readily available. Infrastructure debt provides investors with increased liquidity, less

volatile returns and a more secure position in the capital structure. Conversely, returns from debt investing are capped whilst equity investors can influence how an asset is managed and thus drive operational efficiencies allowing the equity investor to participate in unlimited return upside.

2.8 Internal resource requirements

Trustees considering infrastructure investments should ensure that there are sufficient resources available within the fund to maintain effective due diligence about the management and operation of the asset. The table below indicates broad requirements across different investment structures.

| Type of Investment | Time | Comment |
|--|--------------|--|
| Listed Infrastructure - investment manager | Low | Ongoing monitoring of manager performance |
| Listed Infrastructure - direct | Medium/ High | Will depend on the level of active trading and number of stocks held. The portfolio will need to be constantly monitored. |
| Unlisted Infrastructure - pooled vehicle, small investor | Low | Ongoing monitoring of manager performance. |
| Unlisted Infrastructure - pooled vehicle, large investor | Medium | May potentially involve Board or Investor Advisory obligations |
| Unlisted Infrastructure - direct exposure/ co-investments | High | Will most likely involve Board obligations which can be quite time consuming particularly if there is an issue with the asset. |

3. Investment structures

3.1 Transparency

Investors have greater transparency in situations where they are investing into funds with existing assets or seed assets. This allows the investor to assess the investments that comprise the fund and judge the risk profile of the assets. This is not the case with “blind pools” where there are no such assets and the investor must make their judgement on the manager’s previous investment history.

3.2 Open and closed end funds

Open-ended or evergreen funds do not have a defined fund term. This type of structure has been taken from real estate markets. The thinking behind this fund structure is that it is consistent with the duration and life span of the infrastructure assets (can be 30+ years). Typically, this structure is suited to “core” infrastructure assets where the manager has a “buy and hold” strategy as the assets are not required to be sold within a specified time period. Managers will usually undergo a set time period of fund raising activity each year to grow the fund assuming there are attractive investment opportunities suitable for the fund. Investors required to liquidate their investment would need to advise the manager and the manager would offer to sell the holding on a “best endeavours” basis. Pricing is usually negotiated around independent valuations.

Closed –ended funds have borrowed their structure from the private equity market and have a specified fund term. Investments in these funds are generally suited to early stage (e.g. Greenfield investments), expansion opportunities seeking to capture the growth premium of the asset. (Typically, overseas based managers will use a closed-ended structure for all infrastructure funds, not just Greenfield funds.) The manager will be targeting the capital growth returns over a relatively shorter time period (the fund term is typically 10 years). Also the manager is likely to be less focused on cash yield. A potential risk of this fund structure is that managers are incentivised to grow FUM and this is done by by raising new funds. This can divert focus from the existing fund and management of existing assets. Liquidity is typically available only on wind-up of the fund but there may

be the opportunity to realise the investment through the secondary market.

The table below highlights the differences between the two structures:

| Open-ended | Closed-ended |
|---|--|
| Indefinite fund life | Finite fund life |
| Suited for mature assets with long term steady cash flows | Well-suited for Greenfield assets with unproven revenue streams, which have a high likelihood of being sold in the near term |
| Fees paid on value of fund assets | Fees paid on committed capital |
| Investor has limited ability to redeem investment | Little or no liquidity for investors |
| Independent third party asset valuations, typically conducted six monthly | Valuations performed yearly by Manager; asset values may not be accurately reflected until divestment of the asset |
| Stable returns with high yield component | Majority of returns consist of capital growth |
| Typically pay stable cash yields throughout fund life | Capital tends to be returned to investors in last few years of fund life (similar to private equity) |

3.3 Fee structures

As indicated in the section above, fund structures may vary and equally, fee structures will also vary. Managers with strategies and structures favouring the private equity model will have similar fee structures to private equity, being an annual management fee (1-2%) and a performance fee set over a hurdle rate (generally 8%). Typically, in this model fees are paid on the committed capital. Under the open-ended fund structure it is more typical for fees to be paid on the Net Asset Value of the fund.

4. Risk factors and risk analysis

Like any asset class, there are risk factors associated with infrastructure, and investors need to be aware of these. Importantly, infrastructure assets are not homogeneous and the specific risks of the assets need to be fully understood. It is the manager's role to mitigate these risks as much as possible.

It is important to note that for most of the risks identified below there is both a downside scenario and an upside scenario. For example, just as operating costs can be under estimated at the time of an asset acquisition, it is also possible that additional operating cost savings can be found once the new owner has experience with the operation of the asset. Nevertheless the upside scenario is limited.

Additionally, it is important to note the distinction between listed, unlisted, greenfields (or new build) assets and brownfields (or existing operations). Whilst most risks are common between these types of infrastructure investments there are specific distinctions to be made for certain risks. This paper discusses the brownfield asset risks first (which are essentially common to all types of infrastructure investment over the medium term) and then discusses the specific risks associated with listed and greenfield asset investments.

4.1 Brownfield asset risks

4.1.1 Due diligence risk

- Information risk

Due diligence risk is associated with the quality of information available to the asset buyer on which to assess the investment opportunity. This risk is part of both greenfield and brownfield asset due diligence processes. This is the case for all investment types and may be particularly pertinent for listed assets where the level of information disclosure is significantly different from unlisted assets and greenfields investments (where there is less disclosure of information due to a lack of operating history). This was the case with some toll road assets in Australia where third party experts had forecast traffic projections which failed to be delivered. This is known as demand forecasting risk.

4.1.2 Governance risk

Generally, infrastructure investments are undertaken with other investment partners (in the listed space there may be many others). There is the potential for investment partners to have different governance requirements and different investment goals which can create longer term issues in managing the operational performance and growth of an infrastructure asset.

4.1.3 Operational risk

- Asset performance

Operational risk is fundamentally associated with the performance of the asset, both from a delivery of services perspective and from a cost management perspective. Operational risk, in essence, is how the asset is performing relative to expectations and budgets. For example, in the case of a power generation facility, how often the asset is generating the expected amount of electricity per reporting period. The risk exists in the ability of the operator to ensure the asset meets or exceeds the necessary operational performance hurdles to generate the required revenues to meet the return hurdle.

The longer an asset has been operating, the more historical performance data is available for analysis to ensure budgets and return expectations are set realistically. However, it is also important to note that the longer the asset has been operating the older the asset will be and the more prone the asset will be to performance issues and the need for additional (or unbudgeted) capital expenditure on maintenance. Operational risk also includes latent (or unrealised) risks that a business faces over a longer period and may not be reflected in an annual budget process. For example, the impacts of the future introduction of a carbon price may be difficult to include in an operational budget if the regulatory scheme for such a price is ill defined and the timeline for the introduction of such a scheme is uncertain.

- Operational cost risk

Buying into an existing asset with an established operating history reduces, but does not eliminate, the operational cost risk associated with the asset. Having an understanding of the cost pressures on a business helps lower the risk of budget over-runs and unbudgeted capital expenditure requirements.

Assets with longer operating histories still face operational cost pressure because older assets are more prone to adverse performance issues.

- Environmental risk

Floods, fires and cyclones can have devastating effect on infrastructure assets and revenues.

- Legal Risks

Class actions, and other law suits

4.1.4 Revenue Risk

- Regulatory revenue risk

Regulated infrastructure assets have regulated tariffs, providing relative certainty around revenue for the duration of the regulatory period. However, there is a risk that the assumptions used by the regulator are inconsistent with the original investment assumptions resulting in a material change in valuation. For example, during a regulated tariff reset period (typically occurring every 3-5 years depending on the sector and jurisdiction) the regulator may reset the tariff at a lower than expected rate, or may factor in larger efficiency savings than could be realistically expected during the new regulatory period, or reduces the allowable levels of capex (on which a return is generated) compared to plan. These risks will have a potentially substantial downside impact on the investment base case model assumptions and the valuation of the asset. The investor should assess the regulatory history of the asset or similar assets, which can provide a guide as to the likely stability and predictability of regulatory outcomes.

- Volatility in inflation for those projects with inflation-linked revenues or debt

Some infrastructure assets have revenue streams and debt facilities linked to an inflation index. As such, a change in the expected inflation rate can have quite significant effects on the growth of expected revenues (contained in a business model used for valuation purposes). We have even seen during the global financial crisis, periods of deflation which can impact inflation linked debt facilities creating short term accounting, taxation and debt covenant issues.

- Changes in the competitive landscape, user preferences or general demand for long-life projects

For unregulated infrastructure assets that do not hold longer term revenue contracts with customers, there is a significant risk to revenues from an increase in competition in the market and a change in user preferences for demand of the asset (i.e. a fall in demand for the asset). Unlisted infrastructure investments are generally long term investments, usually beyond ten years. As such, there is some limited scope for new competitors to enter the market providing direct stress on existing demand profiles. Generally, infrastructure assets have high barriers to entry and therefore the threat of competition is usually low, however in sectors such as public transport where different modes compete against each other there is always tension on demand profiles, particularly over the longer term.

The long investment cycle also means that it is typical for an asset to experience revenue volatility due to economic downturn or supply and demand shocks. For instance, airports suffered from various shocks over the past decade ranging from terrorist attack, airline collapse, epidemic and global economic crisis.

- Credit risk on private revenues

Where an asset's revenue is tied to a small number of large private customers (e.g. a generation facility holding a power purchase agreement with an aluminium smelter) there is counterparty risk associated with the credit worthiness of the private customer. If the customer defaults on contracted payments (and is bankrupt or insolvent) there may be very limited recourse to recover the unrealised revenues in the contract, there may also be limited scope to replace the existing defaulting client with new demand.

4.1.5 Regulatory Risk

- Sovereign risk

Sovereign risk is associated with the direct intervention of the government in the operation or ownership of an asset. This is most likely to occur in countries where a functional democratic process has not been established, where military rule is prevailing or where insurrection is likely. Countries with less developed legal and financial systems also have higher sovereign risk.

- Political and Regulatory risk

Regulatory risk exists for utilities where the rate of return to the asset owner is dictated to by the regulator. Asset owners seek to mitigate this risk by ensuring that there is a long and stable regulatory regime with a history of rational and predictable behaviour.

Australia has recently seen a period of significant regulatory uncertainty related to the proposed introduction of an emissions trading scheme, amongst others things (significant tax reform, specific project approvals such as the Gunns pulp mill project, etc.)

Inadequate clarity in Government policies has made political risk a specific focus for infrastructure investment, placing pressure on project approvals and availability of debt finance.

4.2 Greenfield asset risks

4.2.1 Development risk

- Project approval risk

As outlined above, regulatory (or specifically project approval risk in this instance) can cause delays to the commencement of construction of a new build project. In addition, the approval process may require design changes to mitigate specific concerns that regulators and the community have about the operation of the project. This factor has the potential to add significant capital cost to the original design and construction budgets. There may also be significant legal and other consulting costs associated with contesting regulatory decisions. This risk is typically mitigated by adequate contractual arrangements with the developer. This applies to the sections below on Construction risk (4.2.2) and Operational risk (4.2.3).

- Technology risk

Some newly built infrastructure projects have an element of technology risk associated with the project. This risk rises from the use of technology that has no or relatively limited previous application in the sector. It may also be associated with older,

proven technology that has not previously been used on the scale proposed for the new project. New technology can be prone to 'teething' issues on start up and commission, creating some cost and performance issues and potential discontinuity in operation.

- Bid cost risk

Recently bid costs associated with large infrastructure projects have increased significantly, primarily due to greater involvement by the community in project approval processes and great scrutiny by the regulators.

In a heavily contested bid process, bid cost risk is extremely high and if the bid fails the cost is typically borne by the investors. For large projects where there is a bid consortium including operators and developers, typically the bid costs will "lie where they fall" which means that they are shared across the consortium].

4.2.2 Construction risk

- Budget over-runs and delays to commissioning

One of the highest risks to a greenfields infrastructure project is the ability of the project team to deliver the asset on time and on budget. Many infrastructure projects have experienced significant cost over-runs and time delays due to unforeseen problems arising during construction adding complexity to the project.

Construction delays will cause delays to the commencement of revenue streams for the asset and may impact the ability of the asset to meet debt obligations.

- Well constructed / fit-for-purpose

The quality of build risk is also a key influence on longer term asset performance. If the construction phase has been difficult with disputes between the owner and the construction contractor the resulting asset may not necessarily be to the required specification. Many lengthy and expensive contract disputes have arisen due to this issue. These problems can be mitigated under models in which the trade-offs between building and operating an asset can be optimised over the asset life.

- Variations (externally or internally imposed)

Variation risk is also a potentially significant risk to greenfields projects. It is generally recognised that, despite the enormous amount of planning and technical expertise involved in project design, new issues will emerge during the construction phase that will impact capital cost.

- Maintaining existing services to stakeholder expectations

Greenfields projects may also be attached to existing operating assets and in some instances it may not be possible to develop the new project without impacting the operation of the existing asset. This places service delivery pressure on the existing asset and may impact revenues and cause additional operating expenditure to try to maintain services.

4.2.3 Operational risk

- Commissioning and start-up risk

New build projects must be tested prior to entering into full operation, this commission phase is usually where performance issues are identified and rectified. If modifications or corrections to processes are required then there is the potential for capital costs and start-up timeframes to blow-out.

- Initial operating performance risk.

Once commissioned and into full operation an infrastructure project may not necessarily perform as designed. The reality may not match the theory. If the project is not performing in normal operations as per the expected business case then revenues may be lower than expected, further modifications may be required (creating additional capital cost) and operating costs may be higher than expected.

4.2.4 Revenue risk

- Demand forecast risk

Demand forecasting has been in the spotlight in Australia in recent times as several major infrastructure investments have collapsed on the back of inaccurate forecasting (Lane Cove and Cross City Tunnels in NSW are an example). Infrastructure

projects that do not have a previous operating history rely heavily on educated “guess-work” to ascertain how many people are willing to pay for the service provided. This guess work is complex and relies heavily on a range of inexact and changing inputs. Previously, many investment models have used bullish estimates to provide an appropriate business case rather than recognising the complexity of the forecasting and being conservative.

- Operational cost risk

The downside case of operational cost risk is caused by underestimation of operating costs and/or an overestimation of the output from the proposed infrastructure facility. In many cases the pricing of infrastructure services is regulated by the government, and as such the downside burden of underestimation of operating costs cannot be passed on entirely to the asset users. Where an asset has limited or no operating history estimating operating costs is difficult and complicated (not dissimilar to forecasting demand).

The greenfields initial operation phase can be divided into the introductory operation phase and project stabilization phase. During the introductory operating phase, the revenue stream is thin and operational bottlenecks can hinder achievement of high-capacity utilisation as issues are ironed out. It is only during the project stabilisation stage that risks reduce considerably and revenues are more steady and predictable.

4.3 Listed investment risks

4.3.1 Volatility

Listed infrastructure investments typically exhibit higher volatility than unlisted infrastructure, and a somewhat higher correlation with other asset classes (e.g. fixed income, listed property, other equities). In theory, liquidity should be the only differentiator between the value of listed and unlisted assets. If the assets and financial structure are identical, the real value of the assets should be identical, apart from the liquidity factor. In practice, listed assets are not always traded at their book value. Values can be affected by market sentiment, natural disasters, speculation about performance and regulations, etc. Moreover, the capital structure may be a differentiating feature between the public and private markets.

4.3.2 ‘Short Term-ism’

A listed investment vehicle will have a broader shareholder base and therefore appropriate governance is more difficult to organise. There is a greater risk that agency issues arise, with the agents potentially having shorter term incentives or focus, which are inconsistent with the long term nature of the underlying infrastructure assets

4.3.3 Control/Governance

Listed investments are generally minority stakes in a corporation with relatively limited influence and control (compared to a large stake in an unlisted asset). This limited control means that the desires of the investor are not necessarily matched with the controlling entity of the corporation. Whilst a listed investor is usually able to exit an investment should this issue arise they may not necessarily be able to do so in a timely fashion related to market price and required liquidity at that market price.

4.3.4 Information access

Investors in listed vehicles do not have access to the same level of information that investors in unlisted asset have access to. This means that, to some degree, listed investments are operating in a limited information space, and is a more passive approach to investing in infrastructure than unlisted assets where the investor can have an influence in driving the asset’s performance

4.4 Portfolio risks

- Concentration risk

Unlisted infrastructure funds can often have a relatively small number of assets in their portfolio, contributing to a potentially higher concentration risk than for other asset classes. Diversification in asset type is a critical management approach to ensure concentration risk does not overly expose an investment portfolio to any one sector. Listed infrastructure portfolios offer greater diversification of investments, typically both geographically and across sectors.

- Portfolio cash flow requirements

Many infrastructure assets can be capital intensive at points in time, soaking up the profits of a business for heavy capital expenditure programs and potentially requiring continual capital injection from investors to ensure capacity and bottleneck issues do not develop. Typically, the timing and size of future capital requirements are forecast-able, and should be factored into return expectations. However, sometimes these capital requirements are unforecast-able due to the development of unforeseen circumstances and unbudgeted maintenance. For a portfolio that was expecting cash flows from the asset, this can create significant cash flow stresses on a portfolio that requires liquidity to function appropriately.

- Exit strategy

Exiting a longer term unlisted investment can be a difficult and protracted process. Markets for assets can be volatile and sporadic and dependant on external forces such as the cost and availability of debt or equity financing. Additionally, in many cases, pre-emptive rights can hamper an owner conducting a competitive open tender process to achieve the best market price for the sale of their stake.

The sale of a minority stake in an infrastructure asset may also be difficult to sell as the stake may not contain desirable shareholder rights.

5. Leverage, debt and refinance risks

5.1 Finance risks

- Taxation structuring risk

Taxation structuring in portfolio construction for infrastructure investment is now complex and in some instances open to interpretation. As with any regulatory reform, taxation legislation changes can have wide ranging impacts on the operation and revenue streams of infrastructure assets.

- Interest rate and foreign exchange risk (currency hedging risk)

Where investment portfolios contain assets and investors from different international jurisdictions there can be significant risks around the management of currency flows between these jurisdictions.

Similarly, interest rate changes can also put pressure on the revenue side of an operating asset. Interest rate risk is discussed further below.

- Refinancing risk

Almost all infrastructure investments contain a level of debt and in many cases there is significant leverage. Gearing ratios vary depending upon the nature of the infrastructure asset and range between 50-90%. Asset owners will typically seek to lock in debt funding for long periods, wherever possible, however, refinancing will occur during the life of the asset. Debt market issues associated with the global financial crisis created a range of issues associated with refinancing debt structures. Pre-GFC credit margins were tight but have since returned to more “normal” levels, generally considered to be near long term expectations:

- o The availability of debt – recent liquidity issues in the debt market as a result of the global financial crisis. In some instances, corporate bond issuance has been preferred over bank funding.
- o The cost of debt refinancing – due to the liquidity issues outlined above and the altered risk profiles of lenders the cost of debt during the GFC significantly increased from previous long term expectations. This placed additional cost burdens on assets that were required to refinance their existing debt facilities.
- o Debt covenants – as a result of the pressure associated with credit availability, increasing debt cost and, in many cases, decreasing revenue streams, lenders tightened debt requirements in loan contracts, and gave bankers more power (such as step-in rights) over specific infrastructure assets. This greatly increased the risks associated with both operation and ownership of the underlying assets.

6. Target returns and forecasts

The profile of target annual returns for various types of infrastructure assets and the different cash yield components in the table below were estimated in 2010 by KPMG¹. There is an underlying assumption that inflation remains within the Reserve Bank of Australia's target range of 2% - 3% per annum.

| Infrastructure Types | 3yr Equity IRR | Expected Cash Yields | Risk |
|------------------------|----------------|----------------------|--------------|
| Social | 9% - 11% | 4% - 12% | Medium |
| Regulated | 11% - 12% | 6% - 10% | Low |
| Rail | 12% - 13% | 8% - 12% | Medium |
| Airports/ Ports | 11% - 13% | 5% - 10% | Medium |
| Power Generators | 12% - 14% | 4% - 12% | High |
| Toll Roads/ Greenfield | 13% - 15% | 3% - 5% | Medium/ High |

Source: KPMG

Given the variability of risk factors as described above, infrastructure investments can span the full risk spectrum, ranging from relatively low risk to high risk 'private equity like' returns. The risk and the return profiles for different types of infrastructure assets in the table below are just for illustrative purposes; the changes in the risk factors mentioned in the previous sections may alter these numbers dramatically.

| Risk Profile | Type of Assets | Return characteristics |
|-------------------|--|---------------------------|
| Core/ Mature | Brownfield - Social infrastructure; regulated utilities; mature toll-roads | Focus on Income |
| Core Plus/ Growth | Brownfield + Growth potential Airports, ports, etc | Mix of Income plus Growth |
| Opportunistic | Greenfield and Emerging Markets Power plants; telecommunication assets; Greenfield toll roads | Focus on Growth |

| Risk Profile | Expected returns (IRRs) | Expected cash yields (%) |
|---------------|-------------------------|--------------------------|
| Core/ | 9 - 13% | 7 - 12% |
| Core Plus | 12 - 17% | 5 - 9% |
| Opportunistic | 15 - 20%+ | 3 - 5% |

Source: Mercer

For more extensive data for listed and unlisted infrastructure risk adjusted returns and correlations from the period 2000 – 2006 refer to Peng, Hsu Wen and Newall, G. (2007) *The Significance of Infrastructure In Investment Portfolios*.

7. Regulatory factors and different regulatory regimes

Infrastructure assets may operate under a regulatory environment and in these instances different regulatory regimes may apply. These regimes are broadly classified as regulated, partially regulated or unregulated. The definitions of these broad categories are described in Section 2 of this discussion paper.

Under any regulatory regime, there are a number of different factors that need to be taken into consideration when assessing the merits of a particular infrastructure investment. These include:

7.1 Geography – the location of an asset can have a significant impact on regulatory issues that need to be considered. Within some countries, the regulator is a national body and has power across all the underlying states/municipalities. This is the case in the UK water sector. In other instances, regulation can have multiple levels with both national and state regulators. This is the case in the US electricity market. Having multiple levels of regulation can significantly increase the complexity of owning an asset, particularly where an investment can sit within multiple jurisdictions (e.g. across state lines).

7.2 Frequency of reviews – reviews generally focus on the rate of return that an asset is permitted to generate for its owners, so they are crucial to the investment returns that are achieved by investors. Reviews are either conducted at set points in time or on an ad-hoc basis as requested by the owners of the regulated asset. These are described in more detail below:

- *Set Intervals* – under this style of regime the rate of a return that can be generated by an asset is reviewed at regular intervals (e.g. UK water utilities have a review every five years). These reviews are generally industry wide, and thus take into consideration factors that maybe affecting all participants in the relevant market.
- *Ad-hoc* – under this type of regulatory regime, a participant can approach the regulator for a rate case review when they believe that they are no longer earning an acceptable rate of return. Depending upon the changes in the market place and changes to the asset, these reviews can be requested on an annual basis or can occur relative infrequently (e.g. every ten years).

7.3 Track record of regulator – the track record of a regulator is critical when evaluating a regulated infrastructure investment. Where a regulator has a history of surprising the market participants (either positively or negatively) with regulatory outcomes, this needs to be considered as a potential risk and should increase the hurdle rate of return for the investment. Where the regulatory environment is fairly benign, the expected potential return is likely to be lower, but subject to a greater degree of confidence on the part of the investor.

7.4 Economic factors – regulators operate in both a political and economic landscape. As such when an economy within which a regulator operates is under stress, there is likely to be political pressure to lessen the burden on consumers at the expense of asset holders. This may materialise through a lower allowable return at particular rate reviews. This is offset by the fact that regulators need private funding to provide essential services and if private investors are not achieving a reasonable return they are unlikely to invest in similar assets in the future.

7.5 2011 Federal Budget incentives for infrastructure investment

To increase private investment in infrastructure, the Federal government announced several initiatives in the 2011/12 Budget:

- Increased funding for Infrastructure Australia (IA) to establish a National Infrastructure Construction Schedule that will prioritise infrastructure projects (over \$100 million) across all levels of government. This is designed to provide a transparent and deeper pipeline of infrastructure projects, thereby improving investor certainty and guiding private investment in projects prioritised through IA's cost benefit analysis. IA will also establish an Infrastructure Financing Group comprising key private and public sector players to further identify obstacles to private financing of infrastructure.
- Tax incentives in the form of enhanced treatment of tax losses to mitigate wastage and preserve their real value for certain infrastructure projects. Investors in "designated" projects will continue to access tax losses after any change in project ownership and / or business structures. These projects will be exempt from the current tax loss tests (of "continuity of ownership" and the "same business"). The value of the project's tax losses will also be preserved over the project life by indexing at the Government bond rate. Project designation is subject to a global cap of \$25 billion of projects and eligibility is until 30 June 2017.

- To facilitate the financing of long term infrastructure projects, the Government will continue to lengthen the Commonwealth Government Securities yield curve, when prudent to do so.
- An additional \$36 billion to be directly invested by the Government in developing new and existing roads, railways and ports; and a further \$6 billion allocation to the Regional Infrastructure Fund over the eleven years to 2020/21.

The ultimate success of the Government initiatives will be largely dependent on the extent to which IA is able to proactively engage with the State and Territory Governments and private sector investors to identify and address the fundamental obstacles to private and superannuation fund investment in infrastructure. The states remain ultimately responsible for the implementation of most infrastructure projects. It is they who hold the primary levers to attract private investment into greenfield and patronage-based infrastructure on a sustained basis.

Due to fiscal imperatives, the tax incentives are modest in supporting investment returns from infrastructure and are quarantined to “designated” infrastructure projects, with eligibility only available until 2017. Importantly, the proposed tax loss changes do not fundamentally change the economics and risk profile of investing in greenfield infrastructure projects. Long term investment decisions should not be driven by tax considerations. The tax loss wastage measure does not necessarily advantage investors with “buy and hold” strategies typically employed by Australian superannuation investors; instead it favours early investors who seek to exit post-greenfield risk, such as investment banks and construction companies with early stage balance sheet exposure to infrastructure projects.

Further Reading:

1. Peng, Hsu Wen and Newall, G. (2007) The Significance of Infrastructure In Investment Portfolios. Pacific Rim Real Estate Society Conference 21-24 January 2007.
http://www.prrs.net/papers/PENG_NEWELL_%20THE_SIGNIFICANCE_OF_INFRASTRUCTURE_IN_INVESTMENT_PORTFOLIOS.pdf
2. Mercer House View March 2011 “*Unlisted Infrastructure*”
3. Georg Inderst, The Pensions Institute, City University, London. Discussion Paper P1 1103 (2010) - “*Infrastructure as an asset class*”
4. ASFA Best Practice Paper 34 *Trustee Guidance – Valuation and Liquidity of Unlisted Investments*

ASI 2010

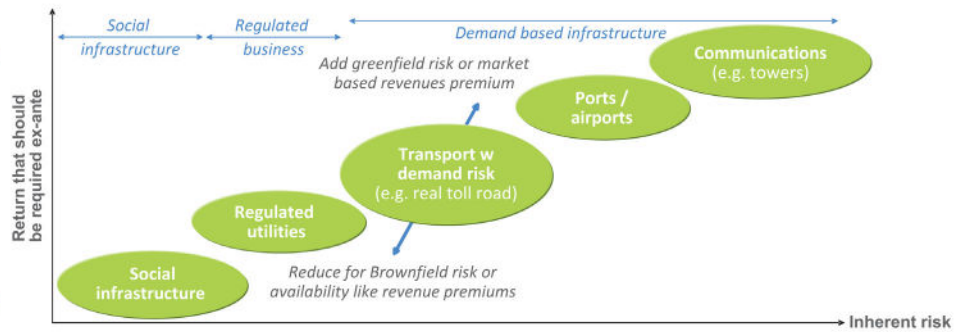
Australian Super Investment Conference

Investments

On the move post-Cooper

Infrastructure has many sub-classes....

....with various risk vs. return profiles



| | Mature Toll Roads | Social Infrastructure | Regulated businesses | Rail | Airports | Toll roads – Greenfields | Broadcast networks | Power generation |
|-----------------------------|-------------------|-----------------------|----------------------|--------|----------|--------------------------|--------------------|------------------|
| Risk | Low-Med | Med | Low-Med | Med | Med | Med-high | Med-high | High |
| 3 Yr Equity IRR | 8-10% | 9-11% | 11-12% | 12-13% | 11-13% | 13-15% | 14-15% | 12-14% |
| Expected cash yields | 4-9% | 6-12% | 6-10% | 8-12% | 5-10% | 3-5% | 8-10% | 4-12% |
| Capital appreciation | Limited | Limited | Limited | Yes | Yes | Maybe | Maybe | Yes |

Source: KPMG



Annexure 2

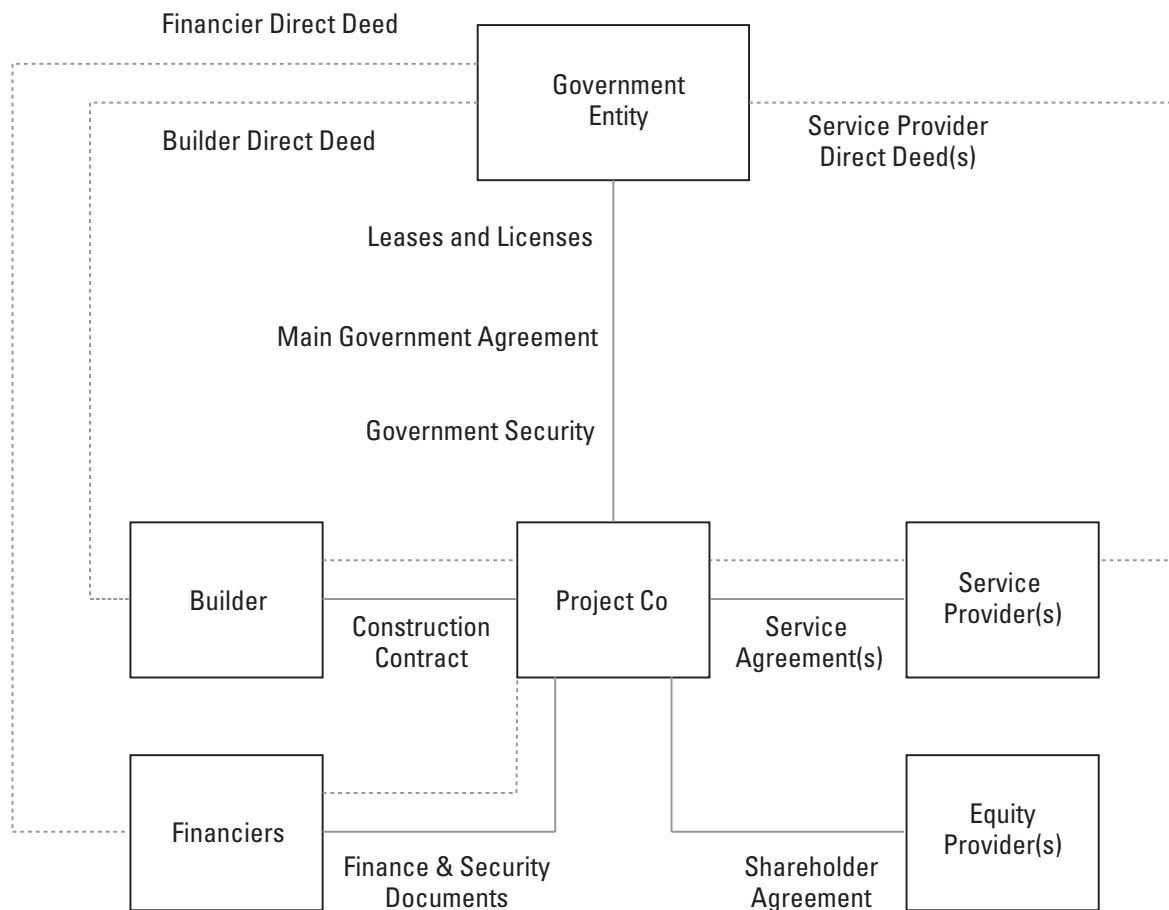
Legal structures for infrastructure projects

(Prepared by Clayton Utz - Jane Paskin)

The underlying legal structures for public private partnership infrastructure projects can be complex, particularly when innovative financing structures are used.

A typical fairly straight forward contractual structure for a greenfields project is set out below. In this structure, the project vehicle (Project Co) is typically a special purpose vehicle and the project is limited in recourse to Project Co and the project cashflows and assets, not to the sponsors and their balance sheets. Project Co enters into the main agreements with the government entity. Project Co must contract with its consortium (its builder(s), and in the operating phase, its service providers (an operator, if Project Co is to operate the infrastructure after development, and the providers of maintenance and refurbishment services)) to pass through to them the obligations to build, operate (where relevant) and maintain the infrastructure assets. Project Co will fund its obligations to government with debt and equity, and to do so will enter into a suite of financing documents and a shareholder agreement.

Project Structure:



Annexure A gives a brief description of the principal government and consortium documents for both a social and an economic infrastructure project.

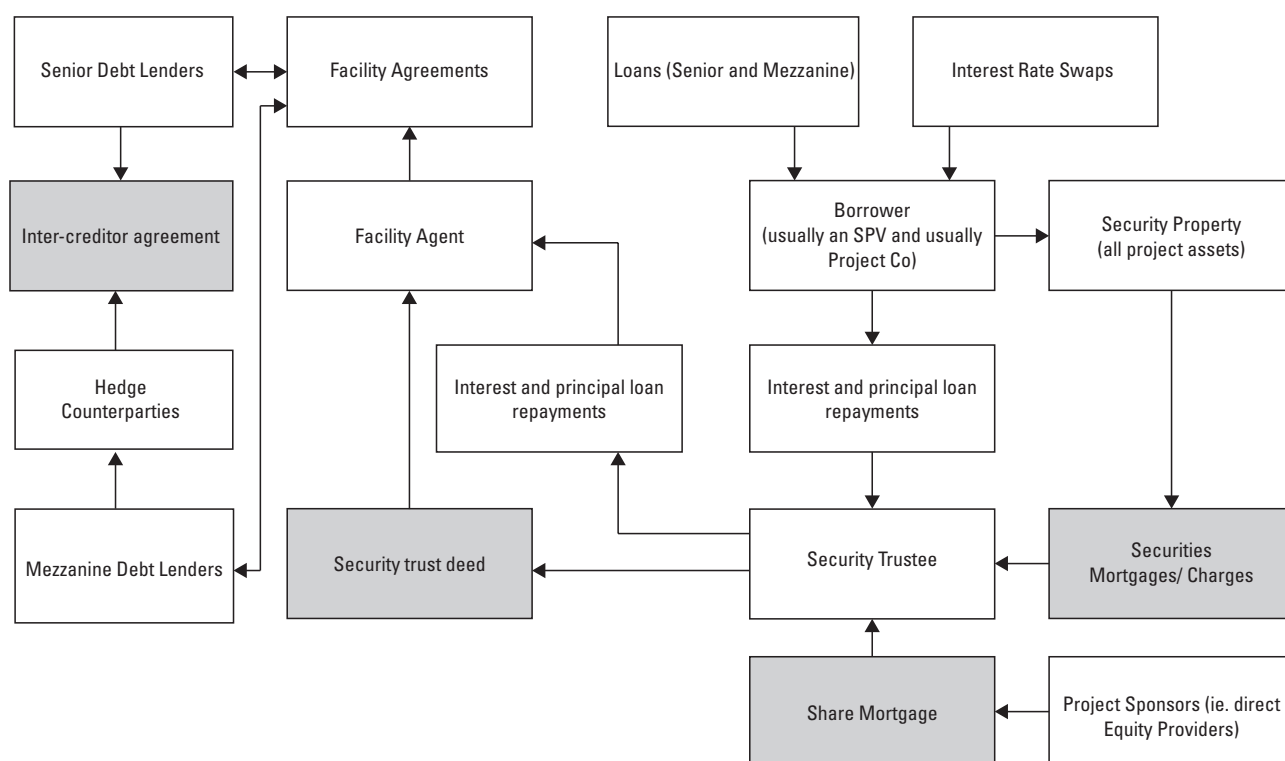
In a PPP context, the term “economic infrastructure” is used to describe infrastructure considered essential for day to day economic activity, as for example, transport facilities (including roads, ports and airports) and utility networks. “Social infrastructure” as previously mentioned, is infrastructure considered essential for the functioning or the structure of society such as schools, hospitals, prisons.

The split between economic and social infrastructure is also used to describe the commercial structures used to pay for that infrastructure. Typically, an economic infrastructure project will be amenable to a “user pays” system where the use of an asset attracts a charge, a toll or a fee and there is a market for that use by end users (whether that end user be the government (as in the case of a motorway which has a shadow toll) or whether that end user be private citizens). Social infrastructure is typically used by the government to provide core services, and it pays an availability fee for the relevant infrastructure being made available to it to enable it to provide the core services over a lengthy project term.

Financing Structure:

Financing of the project will be by both debt and equity.

A common form of infrastructure financing, which includes senior and subordinated mezzanine debt and hedging, is represented in the diagram below.



As illustrated within the diagram, participants in the project financing arrangement include:

- Senior Debt Lenders;
- Mezzanine Debt Lenders;
- Hedge Counterparties;
- Facility Agent;
- Security Trustee;
- Borrower; and
- Project Sponsors.

The senior debt lenders provide the senior level of debt by way of loans, while the mezzanine debt lenders provide the mezzanine level of debt as subordinated debt. Mezzanine debt ranks below senior debt in repayment and in any claim on the project assets, but above equity. It is cheaper than raising funds through equity, reduces the amount of senior debt and equity required, reduces the risk of senior debt, and so should create cost savings for a project.

The interest of all the lenders and the hedge counterparties in respect of the securities over the project assets are set out in a **security trust deed**. The security trustee holds all security provided by or on behalf of the borrower on trust for the lenders and the hedge counterparties, and will agree to act in accordance with the terms of the security trust deed. Typically, it will not be able to take any action under the securities unless instructed to do so by the facility agent acting on the instructions of the majority lenders.

The hedge counterparties have the benefit of these securities for any losses they suffer on closing out their hedges when there has been default under the finance documents and the lenders have instructed the security trustee to take enforcement action.

There is also an **inter-creditor agreement**. This deals with the order of payment of senior and mezzanine debt and the financial tests which must be met before instalments of interest and principal on the mezzanine debt can be paid. It also deals with the rights of the various lenders and the hedge counterparties to take enforcement action, the priorities of payment on enforcement of securities and the consent, waiver and variation rights which the mezzanine lenders and hedge counterparties may exercise.

The facility agent is appointed to act on behalf of the lenders in the day to day administration of the lending arrangements.

This structure assumes separate **facility agreements** for senior and mezzanine debt. The facility agreements deal with the mechanisms for funding, payment of interest and repayment of principal. Often there is a **common terms document** which contains the representations, undertakings and events of default, which are standardised for both senior and mezzanine debt lenders. Alternatively, these provisions and the arrangements in the inter-creditor agreement can be incorporated into the security trust deed.

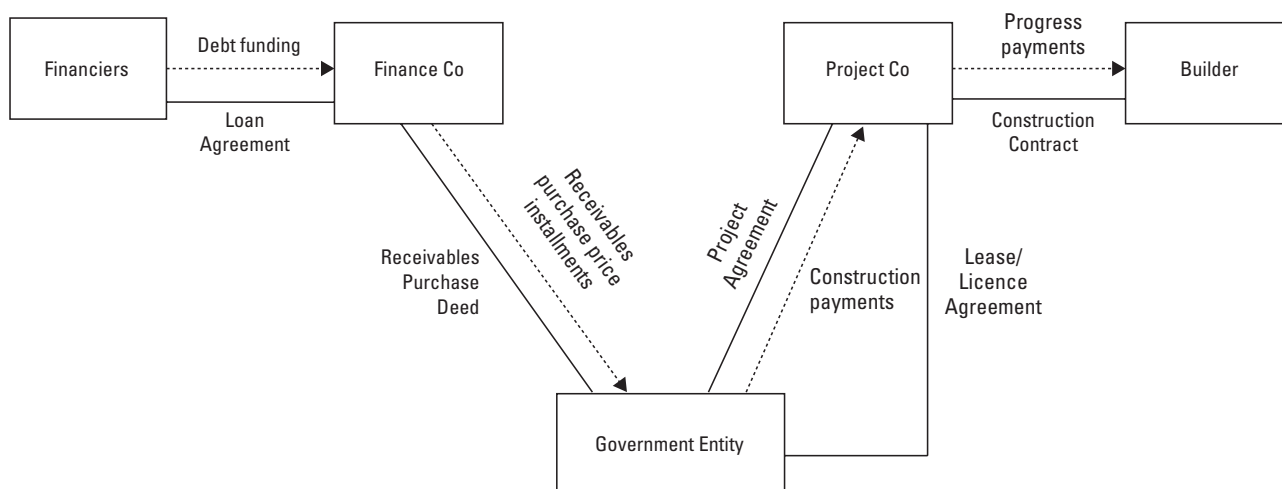
The **securities** are given over the project, and typically would not be given over any other assets. Project Co will give a fixed and floating charge over all its assets and undertaking and also a mortgage of its interest in any project land or project lease.

The project sponsors, being the parties that own Project Co, will give a **share mortgage** over their shareholding in Project Co. Typically the obligations of the project sponsor will be limited recourse, so that the lenders can only have recourse to the share mortgage security provided by the project sponsors and not to the project sponsors themselves for the repayment of any moneys outstanding. The share mortgage gives the lenders the flexibility, should they take enforcement action and have to exercise their power of sale, to sell the project by selling the project vehicle instead of the project assets.

Financing by a securitised lease structure:

An example of a more recent innovative financing structure which is being used to finance social infrastructure PPPs is the securitised lease/licence structure set out and explained below.

Construction Phase:



The Government Entity grants rights (lease or licence) to Project Co to undertake the project (under the **Lease/Licence Agreement**). In exchange Project Co agrees to make scheduled fee payments (**Fee Payments**) during the operating term.

Project Co does not claim depreciation on the facility, but the Fee Payments are tax deductible.

The Government Entity sells its rights to the Fee Payments (**Receivables**) to Finance Co (under the **Receivables Purchase Deed**). Finance Co agrees to pay the purchase price for the Receivables to the Government Entity as instalments during construction.

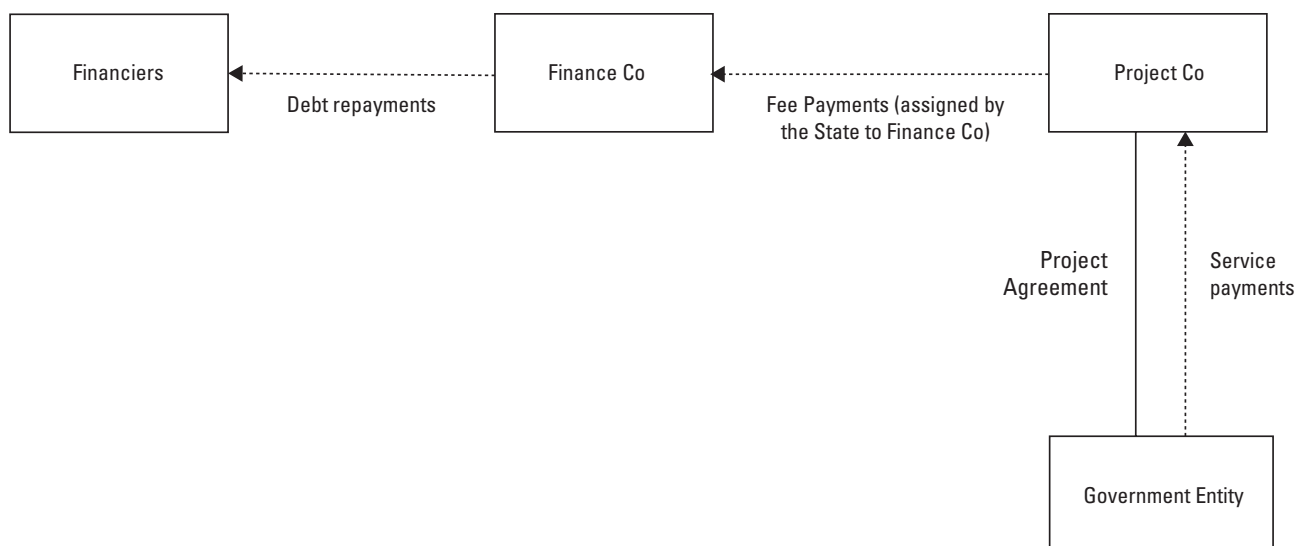
The Government Entity agrees to make progress payments to Project Co for construction of the facility (under the Project Agreement).

The construction payments from the Government Entity to Project Co will match (and be conditional on receipt of) the Receivables purchase price instalments payable by Finance Co to the Government Entity. These will also match the profile of construction payments due from Project Co to the Builder.

The parties will enter into a payment directions agreement so that during construction the financiers lend to Finance Co, Finance Co directs that the funds be paid to the Government Entity (for the Receivables purchase price instalments), the Government Entity directs that the funds be paid to Project Co (for the construction payments) and Project Co directs that the funds be paid into the construction proceeds account (for disbursement to the Builder in due course).

The net cashflow effect is that the financiers deposit funds directly into the construction proceeds account (as would be the case if Project Co were borrowing directly from the financiers).

Operating Phase:



The Government Entity pays the monthly or quarterly service payment to Project Co (under the Project Agreement).

Project Co is obliged to make the Fee Payments to the Government Entity under the Lease/Licence Agreement. As the Government Entity has assigned these to Finance Co, Project Co makes the payments to Finance Co. Finance Co utilises the payments to repay the financiers. The Fee Payments will be structured to match the repayment profile of the debt. Under the payment directions agreement the payments from Project Co to Finance Co are directed into the debt repayment account controlled by the financiers. Again the net cashflow effect is the same as if Project Co were directly borrowing from and repaying to the financiers.

Clayton Utz, Sydney
6 April 2011

Annexure A

The major Government documents for a Greenfields Infrastructure PPP

The Project Agreement

This is the main contract between the government entity and the private sector contractor (usually a special purpose vehicle incorporated specifically and solely to undertake the project) ("**Project Co**"). Typically it is called a Project Agreement (or Project Deed). In economic infrastructure projects such as toll roads, where payments to Project Co are market-sourced, it can be called a Concession Deed, as here the government is granting concession rights to Project Co to implement the project but is not paying for the services to be provided.

The Project Agreement will include provisions to deal with:

- (a) the development of the project;
- (b) its operation and maintenance;
- (c) payments to Project Co; and
- (d) provisions of general application.

(a) Development Provisions

This section of the Project Agreement sets out the government's requirements for Project Co to design, construct and commission the facility (ie the infrastructure the government requires). Schedules and annexures to the Project Agreement will contain the government's design brief, described in terms of the outputs the government wants. For example, for the acute inpatient areas in a hospital, the technical specifications in the design brief will describe the types of medical services to be provided in those areas, the demographics of the patients who will use the hospital, the need for outdoor spaces and current and future trends in medical treatments. The design brief may also include more prescriptive input-based specifications, such as the number of acute medical and surgical beds required, the number of different inpatient units and how these units should be configured.

This section of the Project Agreement will also deal with the tests which must be conducted to establish when the facility is commissioned and ready for operation.

(b) Maintenance and Operation Provisions

This section of the Project Agreement sets out the specifications for the services to be provided to the government (or to end users in the case of economic infrastructure) by Project Co once the facility is operational. They will include an obligation to ensure that the facility is at all times available for use by the government (or the end users) and obligations to maintain it in accordance with an agreed asset management and refurbishment plan. Project Co will be required to hand back the facility to the government at the end of the project term in a prescribed condition. Systems and procedures must be put in place under the Project Agreement to monitor performance of Project Co's service obligations.

(c) Payment Provisions

For social infrastructure (or economic infrastructure with availability payments from government), Project Co will be paid for providing the services to government during the operational phase of the project. Service payment will be calculated and payable in accordance with an agreed payment schedule to the Project Agreement, usually on a quarterly basis. If under the performance monitoring provisions Project Co is shown to be in breach of the service specifications, these quarterly service payments will be abated, the size of the reduction based on the severity of the breach, in accordance with an abatement schedule to the Project Agreement.

In economic infrastructure projects with market-based payments, Project Co will be required to pay concession fees to the government for the right to implement the project, and there may be some sharing of revenue in excess of threshold amounts. Revenue can only be derived from a tolling or fee calculation schedule which has been agreed to in advance by the government.

(d) Provisions of General Application

This section of the Project Agreement will deal with provisions common to both the development and operating phase of the project, such as:

- (a) how to deal with modifications to the design of the facility or to the services to be provided;
- (b) who is to bear the additional costs of complying with different types of changes in law;
- (c) who bears what risks of the project, including if a force majeure event occurs or in an emergency;
- (d) the requirements for insurances over the project;
- (e) the default and termination provisions; and
- (f) provisions to deal with resolution of disputes.

State Security

The government will take security from Project Co over all its assets and undertaking (which are basically all of the assets of the project and the interests of Project Co in all of the project documents). This security will give the government better rights of access to and possession of all of the project assets if Project Co is in breach of its obligations under the Project Agreement.

Licences and Leases

Usually the government entity will own the land on which the project is to be developed.

Licences or leases need to be entered into so that Project Co can obtain the appropriate right to access and occupy the project site for the purposes of development of the project, and then for performance of its service obligations during the operating term.

In social infrastructure projects if Project Co is to be granted a lease over the project site, it will be necessary for Project Co to grant a sublease back to the government entity for the operating phase of the project, where it is the government entity, not Project Co, which will be actually operating the facility.

Financier Direct Deed

This deed is between the government entity, the financiers of Project Co and Project Co. The Financier Direct Deed deals with the following matters:

- (a) it regulates the order of priorities as between the financiers' securities and the government's securities over the project assets, if circumstances arise where one of these parties wants to take enforcement action under its securities;
- (b) the financiers are to be kept informed of breaches by Project Co under the Project Agreement and, are granted rights to rectify those breaches, before the government can exercise its rights to terminate the Project Agreement; and
- (c) the government recognises that the financiers may wish to exercise their rights to enforce their securities and sell the project because of a breach by Project Co of its obligations under its finance agreements. The government permits exercise of those enforcement rights, provided that the financiers or any receiver or manager they appoint continues to comply with the obligations of Project Co under the Project Agreement and provided that government approval is obtained to the entity to whom the project is proposed to be sold.

Builder Direct Deed

Because Project Co is a special purposes vehicle, without the expertise to design and construct the facility, it will engage a builder to do this under a construction contract. The government entity however will want certain rights in respect of that construction contract.

This is the function of a Builder Direct Deed, to which the government entity, the builder and Project Co will be parties. Under this deed:

- (a) the builder undertakes to the government that it will design and construct the facility in accordance with its obligations under the construction contract;
- (b) the builder agrees that if Project Co is in default under the construction contract, it will give notice of that default to the government and will give the government the opportunity to rectify the default before the builder exercises any rights it has to terminate the construction contract; and

- (c) the builder agrees that if the government so wishes, in the situation where the government has terminated the Project Agreement, that the builder will agree to transfer the construction contract from Project Co to the government or to an entity nominated by the government. In this way, if the Project Agreement is terminated, the government can obtain the benefit of the fixed price, fixed time construction contract with the builder.

Service Provider's Direct Deed

Project Co will enter into operating and/or facility management agreements with service providers, which will agree to perform the operating and/or facility maintenance obligations of Project Co during the operating term for the project. The government entity will want the same sort of rights from such service providers that it procures from the builder. Under the Service Provider Direct Deeds, each service provider:

- (a) undertakes that it will operate and/or maintain the facility in accordance with its obligations under its service agreement with Project Co;
- (b) agrees that if Project Co is in default under its service agreement, it will give notice of that default to the government and will give the government the opportunity to rectify the default before the service provider exercises its rights to terminate its service agreement; and
- (c) agrees that if the government so wishes, in the situation where the government has terminated the Project Agreement, that the service provider will agree to transfer of its service agreement from Project Co to the government or to an entity nominated by the government.

Project Co's major project documents for a Greenfields Infrastructure PPP

Construction Contract

Project Co will have agreed with the government entity under the Project Agreement to design, construct and commission the facility to the required technical specifications of the design brief. Its bid price for the project will have a fixed component for the development costs of the project. Under the construction contract between Project Co and the builder, Project Co will negotiate back to back arrangements with the builder, so that in effect the builder will assume to Project Co those obligations to design and construct the facility which Project Co has assumed to the government entity. Project Co will want that Construction Contract to be a fixed price contract, with a fixed time to complete the development.

Service Agreement(s)

Project Co will want to pass through to an operator and/or facility management sub-contractor the obligations it has assumed during the operating period to operate and/or maintain the facility. The operating agreement and/or the facility management agreement will therefore require the operator or facility management sub-contractors to undertake these obligations of Project Co. Project Co will also want to fix the service payments to the operator and/or facility management sub-contractor so that they are no greater than the payments attributable to the maintenance and operating services that it has bid to the government entity.

Finance and Security Documents

Project Co will finance the development of the project with both debt and equity. It will procure its debt facilities through a syndicate or a club of financiers or through a bond issue and will enter into finance agreements and give securities to the financiers or trustee for bondholders over the entire project.

Shareholder/Equity Subscription Agreements

Equity will be subscribed either through Shareholder or Equity Subscription Agreements or as subordinated debt through Subordinated Loan Agreements or both . If the equity providers will provide any of their equity by way of subordinated debt, Project Co will also have to enter into a subordination agreement with the financiers and the equity providers, to ensure that the financiers' debt has priority of repayment .