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Considerations for Government

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When a PPP involves private finance, the investor typically has primary responsibility for developing the finance structure of the project. Nonetheless, government may need to influence its design.

At the most basic level, governments need to ensure that the project design is *bankable*—that is, the project company can raise debt. Although the ability to raise debt is a necessary feature, too much debt can undermine risk-transfer, so governments may want to limit the amount of debt finance (leverage) allowed. More arcane but still important details include: how to manage risks in going from contract award to financial close; how to deal with the possibility of refinancing project debt; and how to define step-in rights for lenders and the government. These points are described in turn below.

Governments may also participate in the finance structure. Governments can provide debt, equity, or guarantees—either directly, or through government-owned financial institutions such as development banks and pension funds. [The Role of Public Finance in PPPs](#) describes the role of this kind of public finance in PPPs.

Bankability

The ability of a project to raise finance is often called bankability. *Bankable* really means that a project can attract not only equity finance from its shareholders, but also the required amount of debt. **Delmon's chapter on bankability** ([Delmon 2015](#), Chapter 4) and **Farquharson et al's chapter on PPP financing** ([Farquharson et al. 2011](#), 54–57), both describe the factors banks will consider in deciding whether to lend to a project.

For a project to be bankable, lenders need to be confident that the project company can service the debt. Under a project finance structure, as described in [Finance Structures for PPP](#), this means operating cash flows need to be high enough to cover debt service plus an acceptable margin. It also means that the risk of variation to the cash flows must be highly likely to stay within the margin. Lenders therefore carefully assess project risks, and how these risks have been allocated between the parties to the contract.

If too much risk has been allocated to the private party, lenders will reduce the amount they are prepared to lend until the margin of cash flow over debt service is acceptable. When this happens, more equity will be needed. At the same time, the project company needs to be expected to generate high enough returns to compensate its equity holders for their level of risk.

From the government's perspective, the key considerations for ensuring bankability are therefore the technical and financial viability of the project, and appropriate risk allocation. [Appraising Potential PPP Projects](#) provides guidance on assessing financial viability of a potential PPP project. [Structuring PPP Projects](#) provides guidance and tools for practitioners on risk allocation.

Moreover, lenders and shareholders both have incentives to reduce their risks and maximize their return. This means that in structuring the PPP, the government undertakes a difficult balancing act—ensuring the project is bankable, while resisting pressure for the government to accept more risk than necessary.

Limiting the amount of debt allowed

Projects shareholders often have an incentive to finance a PPP with a high ratio of debt to equity—that is, to achieve high leverage. As **Yescombe** describes, higher leverage typically enables equity investors to achieve higher returns, and makes it easier to manage the financial structure, since it can be easier to raise debt than equity ([Yescombe 2007](#)). Moreover, as described in **Ehrhardt and Irwin** ([Ehrhardt and Irwin 2004](#)), governments often provide more protection to debt investors than to equity investors, providing a further incentive for high leverage. For example, governments may provide guarantees on demand designed to ensure revenue can cover debt service, or agree to payments in case of early termination that are set equal to the level of debt, such that lenders are repaid even in case of default by the project sponsor on its obligations under the contract.

To ensure a sustainable level of leverage, and large enough equity stake in the project, governments can consider introducing a minimum equity ratio for PPPs. [Example of a Thinly-Capitalized PPP—Victoria Trams and Trains](#) presents an interesting case in Australia where the minimum equity requirements were inadequate to ensure a genuine commitment from operators. As **Ehrhardt and Irwin** ([Ehrhardt and Irwin 2004](#), 49–50) note, equity ratios can be particularly important if the government is also providing guarantees that are designed to protect lenders' investment. However, restricting an investor's ability to choose its capital structure can increase the cost of capital, as described in a **World Bank Gridline note on financing Indian infrastructure** ([Harris and Tadimalla 2008](#)). The authors also note the importance of structuring any guarantees or termination payment clauses to avoid creating incentives for high levels of debt and leverage.

Example of a Thinly-Capitalized PPP—Victoria Trams and Trains

The State Government of Victoria awarded five franchises (similar to concessions) for operation of trams and commuter rail in Melbourne, and regional trains in the State of Victoria. The financial equilibrium of the projects relied heavily on the expected growth in patronage and reduction in costs. The government expected total savings in subsidies to the projects of A\$1.8 billion over the life of the contracts. However, the total private capital at stake, including equity and performance bonds, was only A\$135 million, which is approximately three percent of total assets. When the growth and cost

reductions were not realized, the franchisees experienced losses. Because the capital at stake was relatively low, the operators could walk away from the franchises, rather than endure the losses trying to improve it. This put the government in a position of having to renegotiate the contracts with the existing operators.

Sources: ([Ehrhardt and Irwin 2004](#)); ([VIC 2005](#))

Minimum requirements on equity levels and composition are also relevant for having a core of strategic equity investors. Governments should limit the ability of equity owners to sell-down until a certain period after construction completion and commissioning, i.e. until the project is fully operational, ensuring that strategic investors keep capital at risk long enough to ensure service performance according to contractual standards. The length of that post-commissioning period depends on the sector and the technology used.

Risks in going from award to financial close

A PPP contract is sometimes awarded and signed before the project reaches financial close—that is, before the finance for the project is fully secured. In the interim period, lenders complete their due diligence process, including detailed review of the PPP agreements. Loan agreements set *conditions precedent* that must be in place before the project company can access funds from the loan.

This process creates a risk that the project could be delayed or even fall through, if the winning bidders are unable to raise finance on the expected terms. As described by **Farquharson et al** ([Farquharson et al. 2011](#), 125) the government may be under pressure to change the contract terms to meet lenders' requirements, since re-opening the procurement process at this stage would cause delays and additional transaction costs for the government.

Governments have a few options available to mitigate this risk. As **Farquharson et al** also explains, bidders can be required to provide a bond, which may be called if the preferred bidder fails to achieve financial close within a certain period. This may encourage bidders to develop more concrete financing plans before submitting bids. Another option to avoid the risk altogether, as described by **Delmon** ([Delmon 2015](#), 445–446), is for governments to require bids with financing commitments already in place (called an *underwritten bid*). In this case, lenders must complete due diligence before the tender process is complete. However, both these options increase the cost of bidding, which may deter bidders and undermine competition. For projects with a small number of potential lenders, requiring underwritten bids will immediately create an upper limit on the number of bidders able to present a proposal, as discussed in the PPP Certification Guide ([APMG 2016](#), Chapter 1, Section 7.2.2).

Another approach is to introduce stapled financing. Stapled financing is a pre-arranged financing package for the project, developed by the government and provided to bidders during the tender process. The winning bidder has the option, but not the obligation, to use the financial package for the project. Stapled financing is common in Mergers and Acquisition deals, and has been used for infrastructure projects—for example, **Russia** used it for Pulkovo airport ([IFC 2017](#)) with EBRD and IFC staple finance, and it is commonly used in PPPs in Europe, with part of the SPV debt offered by EIB under conditions pre-announced to all bidders and subject to further due diligence on the winning bidder. Staple financing is further discussed in **EPEC's 2009 report on the financial crisis and the PPP market** ([EPEC 2009](#)).

The role of output based aid

PPPs are output-based projects—users and procuring authorities will pay for service delivered and asset availability, not for inputs. When serving poor populations, PPPs can be combined with results based financing (RBF) mechanisms that can effectively give underserved populations access to electricity, water,

sanitation, health care, education, and other basic services necessary for growth and opportunity. Output-Based Aid (OBA), an RBF mechanism, has been successfully used as a component of PPPs specifically to ensure that the poor benefit from the PPP scheme—as presented in a **World Bank report on OBA for water** ([GPOBA 2016](#)).

Results-based financing (RBF) encompasses a range of mechanisms designed to enhance access to and delivery of infrastructure and social services using performance-based incentives, rewards, or subsidies—see [Performance Based Road Contracts—Improving Maintenance of Infrastructure](#). RBF mechanisms typically have a funding entity (typically a government or government agency) that provides a financial incentive, conditional on the recipient undertaking a set of pre-determined actions or achieving a pre-determined performance or outputs. Resources are disbursed not solely against the completion of specific expenditures or contract effectiveness on the input side, but against demonstrated and independently verified results that are largely within the control of the recipient such as the installation of solar home systems, or the connection of households to water supply systems.

Payments that are based on independently verified results are the principal characteristic of RBF approaches. Subsidies are used to incentivize service providers to offer access to services to underserved poor populations. The subsidies can be used to contribute to the capital cost of the project so that it becomes affordable for the private operator, ensuring commercial returns from the operation. OBA is the RBF mechanism most frequently paired with PPPs. The focus is on access to basic infrastructure and social infrastructure (health, education) and on output-based reimbursement.

For example, consider a water network that reaches neighborhoods that can pay for household connections, yet the same mains line runs past poor neighborhoods that need and will pay for clean water, but cannot afford the household connection—OBA funds can help pay for the expansion of connection to poor households. Thus poor households will gain access to water services and the utility will have new paying customers that it would not have had otherwise. For additional information, see the **Global Partnership for OBA website** ([GPOBA](#)).

Refinancing of project debt

Refinancing means taking on new debt to pay off existing loans. The project company and its shareholders may have two main reasons to refinance debt that was initially used to finance the project.

First, the project may have been unable to obtain a financing package with a long enough maturity to match the project's length. This could occur because long-term debt was not available at the time when the project was awarded, or because lenders viewed the project as too risky to extend credit with a long maturity. In this case, the project could proceed with a shorter-term loan, as described in **Yescombe's chapter on financial structuring** ([Yescombe 2007](#), Chapter 10). This creates a refinancing risk—that is, the risk that the shorter-term loan cannot be refinanced at the expected terms. The PPP contract should specify who bears refinancing risk, as described in [Structuring PPP Projects](#).

One option to mitigate refinancing risk is *take-out financing*, in which a second lender promises to take over a loan at some future point—thereby encouraging the original lender to provide longer-term debt than might otherwise be the case. For example, **the Indian Infrastructure Finance Company Limited (IIFCL)** has established a take-out financing scheme for infrastructure projects ([IIFCL 2015](#)).

Refinancing can also provide an opportunity for the project company and its shareholders if more favorable terms become available. Because infrastructure projects have long durations, capital markets could change during the life of the project and offer better terms on the existing project debt. Lenders also tend to offer better financing terms to projects with demonstrated track records and have already moved past initial risks, such as construction. Shareholders can use refinancing for increasing the debt/equity ratio, re-leveraging the project and freeing equity. **Yescombe's section on debt refinancing** ([Yescombe 2007](#)) further describes the

potential gains to equity investors from refinancing.

Refinancing is also relevant for lenders, allowing banks to release capital to allocate to new projects. Capital markets (and pension and insurance funds in particular) are well-placed to provide such refinancing, as they can generally provide longer tenor, and—as risk is lower after the construction phase—they can often provide cheaper debt.

Refinancing with more favorable terms can lower overall costs for users or government, improve returns to investors, or both. The government needs to consider upfront how benefits of refinancing will be treated.

Options include:

- **Do nothing**—allow equity holders to gain from refinancing through higher dividend payments;
- **Share gains between project shareholders and users/clients**, by including in the PPP contract or PPP regulation a clause which states that benefits of refinancing must be reflected in the price paid for the asset or service;
- Building into the PPP contract the **right for the government to require or request refinancing of the project debt**, if it believes that more favorable terms are available in the market.

Several governments have introduced rules for how PPP refinancing benefits will be treated, as described by **Yescombe** ([Yescombe 2007](#)). For example, in 2004 the **United Kingdom's Treasury** introduced into its standard PFI contracts a 50:50 split of any refinancing gain between the investors and the government ([UK 2012c](#)); this was subsequently revised in each version of contract standards. South Korea has also introduced a similar provision in its legislation governing PPPs. Since 2008, the United Kingdom's government has also reserved the right to request for refinancing of project debt to take advantage of more favorable capital market conditions. A further discussion of refinancing and potential structural issues arising from it can be found in **EPEC's 2009 report on the financial crisis and the PPP market** ([EPEC 2009](#)).

Step-in rights

Step-in rights refer to a power under the contract or in the country's legislation for the government or lender to take control of the project in certain situations. Step-in rights for the government are normally reserved for situations in which the project poses significant health and safety risks, threats to national security, or when legal requirements call for the government to take over the project. The government may also terminate the PPP contract and take over the project if the project company fails to meet service obligations.

Effective step-in rights by lenders require, besides contractual provisions, a direct agreement between government and lenders, regulating the process for requiring and implementing those rights.

Lenders generally require step-in rights that come into effect if the project company fails to meet its debt service obligations, or if the PPP contract is under threat of termination for failure to meet service obligations. In this situation, the lenders would typically appoint new senior management or another firm to take over the project. Step-in rights do not only protect the interests of lenders, but also protect the public interest, by creating a third-party buffer between the government and the project—so that, in case of project misperformance, the lenders are allowed and incentivized to act, before the government is forced to intervene.

It is important that both the government and lenders have a clear framework and timeline for invoking their step-in rights so they are informed when problems start to occur and can take remedial actions. [Designing PPP Contracts](#) provides more detail on how step-in rights can be built into a PPP contract.

The role of pension funds

Pension funds have long-term liabilities on their balance sheets in the form of future pension payments. To avoid a mismatch of maturities between the two sides of their balance sheets, pension funds need to invest in long-term assets. Thus, the long-term nature of infrastructure investments suits the investment profile of pension funds; and their returns, which tend to keep up with inflation, help hedge pension funds' liabilities that are also inflation-prone. Additionally, pension funds are interested in diversifying their portfolios to lower the volatility of their returns. Infrastructure investments can be attractive when the correlation between their anticipated returns and those of traditional assets is low.

In **Australia** and **Canada**, which benefit from a well-defined investment regulatory framework, funding to infrastructure projects through pension funds has been successfully implemented on a wide scale. In Latin America and the Caribbean—where domestic pension funds in Chile, Colombia, Peru, Mexico, Uruguay, and Brazil hold assets ranging from 12 to 68 percent of GDP—only **Chile's** and **Peru's** domestic pension funds have invested substantially into infrastructure ([WB 2017b](#)). Globally, pension funds' investments in infrastructure are estimated to be less than one percent of their assets ([OECD 2011](#)).

In general, pension fund financing to infrastructure is hindered by rigid investment regulatory frameworks, slow progress in capital market reforms, and the absence of a sound project financing framework for the banking sector. Pension funds' poor ability to conduct effective due diligence and to understand infrastructure risk may also reduce their appetite for investing in PPPs—they are better placed to refinance projects, once construction risk is out of the way and the project has a track record of good service performance. Also, the lack of suitable PPP projects—i.e. lack of well-structured projects submitted to market competition—tends to dissuade the involvement of pension funds in infrastructure schemes. Furthermore, in countries such as **China** and **India**, overly restrictive pension fund laws undermine their investment capabilities ([Inderst and Stewart 2014](#)).

A **World Bank report on LAC infrastructure financing** ([WB 2017b](#)) analyses what pension fund managers want from infrastructure—high returns, low risk, liquidity of the instrument, fair pricing, and reliable partners. Infrastructure bonds can offer a **return** over government instruments that reflect credit risk plus some liquidity risk—but poorly prepared projects may not attract pension funds; and poorly designed PPP programs may create long-lasting distrust among institutional investors. Preference is given to **liquid** instruments such as standardized infrastructure bonds more easily valued in the market, and used for the whole concession program, instead of for individual projects. To reduce **risk**, pension funds may require government guarantees, particularly during the construction phase, but governments need to carefully manage the added contingent liabilities brought by contractual guarantees. Otherwise they require a two-stage financing mechanism, where the long-term financing comes only after completion of construction—therefore creating some refinancing risk. **Fair pricing** may not exist where governments control or cap investor returns or where the tax regime is not clear and appropriate.

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