

H2020 CB/MEP

Financial Modeling and Inputs

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Introduction and Basics

- PPPs are often funded and repaid through the Government's budget, but may also be partially or completely repaid by the users of the service (e.g. a toll road or port water charges).
- Example: toll roads and ports projects, the concession fee is based on the use of the service or the net income, giving the government a vested interest in the success of the project. In this case, the government's interests are comparable to those of an equity investor
- PPP projects vary significantly in terms and in structures. Every project requires a certain level of financing
- Most of these PPPs provide social services to the public.

Objective of Project Financing to Raise Capital

- Create a structure that is bankable (of interest to investors)
- Limit the parties' risk by diverting the risks to parties that can better manage them
- Independent legal vehicle (Project Company) is created to raise the funds required for the project
- Payment of principal, interest, dividends and operating expenses is derived from the project's revenues and assets
- The investors, in both debt and equity, require certain basic legal, regulatory and economic conditions throughout the life of the project.

Project Funding Alternatives 1/

- **Equity** : it represents ownership of the project. The sponsors usually hold a significant portion of the equity in the project (10%-30%)
- **Equity Bridge**: it also represents ownership of the project. However, the sponsors convert these into project loan from the lenders upon completion of the project. It has a priority over the normal equity in events of termination and compensation. Interest on these are lower than the normal equities.
- **Subordinated Loans**: the loans borrowed by the sponsors and converted into loans after completion and are considered as normal loans but are guaranteed by sponsors totally during the construction period,
- **Senior debt**: it may be short- or long-term and is secured by specific assets or sources of revenues.

Project Funding Alternatives /2

- **Lease financing** can vary in terms of structure and duration, although the Lessor always retains the rights to the leased assets. Tax issues and the strength of the collateral are usually the driving forces behind a lease strategy. A Lessor may be able to depreciate an asset for tax purposes, or the Lessee may be exempt from taxes and expects losses in the early stages of the project.
- Listed in order of seniority from the most risky, requiring the highest level of return, to the least risky, requiring the lowest returns.
- Under certain conditions, other vehicles (e.g. trust funds and guarantees) may be established to reduce the risk to certain investors.

Input to the Model 1/

- 1- Project duration, construction period and operation period
- 2- EPC price split into different main activities
- 3- Financing Plan:
 - a- Sponsors equity
 - b- Senior loan amount
 - c- Debt Service Coverage Ratio DSCR
 - d- Lending interest rate
 - e- Loan repayment period
 - f- Interest during construction
 - j- Cost and loan disbursement profiles

Input to the Model /2

4- Construction period

a- Project capacity, loads etc

b- General inflation and local

c- Fixed and variable operational expenditures

d- Renewals as percentage of Capex or fixed early
as calculated over the project life time

5- Taxes and tax rates

6- Discount rate during the project life time

Model Outputs

- 1- Cash flow
- 2- Equity to Debt Ratio
- 3- Average Debt Service Ratio
- 4- Sponsors' IRR
- 5- Tariff or charges
- 6- Sponsors dividends
- 7- Loan repayment and interest
- 8- Opex and taxes
- 9- NPV of dividends, loans and interest and Opex with taxes
- 10-IRR and average DSCR