Financial Structure

Lenders will judge a project's ability to withstand the risks involved, especially critical ones, by looking primarily at its coverage and debt-service ratios. The coverage ratio is the net present value of the future after-tax cash flow over the life of the project, divided by the loan balance which is outstanding. The debt-service ratio is the annual cash flow available for debt service divided by the annual debt service. The ratios which a lender will require depend on specific project risks and those other guarantees it is able to obtain from the joint-venture companies.

Investors will be interested in the internal rate of return offered by the project. The acceptable rate will depend mainly on the project and on the risk-sharing arrangements among the joint-venture partners.

Completion guarantees are normally from the joint venturers. These are provided through performance bonds purchased by them and assigned to the lenders during the construction phase.

Lenders' requirements for the post-commissioning period include assignment of supply contracts, assignments for plant output, and insurance policies. The need to assess the project from the lender's point of view is discussed in greater detail in a separate section of this business guide.

Sources of Finance

There is no single formula for financing build-operate-transfer (BOT) projects. The strengths of the individual partners and the amount of equity that each provides can vary enormously from one project to another. It is possible to launch a BOT project with as little as 10 percent equity. But normally, equity should be at least 20 percent. It is rare for project-developer equity to exceed 25 percent of total capital costs.

BOT infrastructure projects can be financed in a number of ways: a public offering in the private sector, entirely privately, or through a combination of host government and private capital. With government financing, public agencies or authorities provide debt and sometimes grants. Funding by the host government, however, is increasingly scarce. Indeed, this is one of the main reasons, combined with the retreat from this market by the large commercial banks, why BOT might be considered as an approach for an infrastructure development in the first place. Private financing is much easier to raise when projects have strong cash flow combined with low risk.

The traditional sources of public and private financing for infrastructure projects include export credits, the medium-term syndicated loan market, international development financal institutions, national aid agencies, and domestic capital markets.