# Distinguishing financial features of infrastructure projects

- Huge negotiation costs
- Long gestation
- Massive investment
- Restraint on charging economic user fees or unwillingness of users to pay the same
- Motive: spillover benefits over a long period
- Promoters/sponsors: Usually Central/State Governments/civic bodies/public corporations

# Risks associated with infrastructure projects

- Cost and time overruns
- Legal Risks
- Overestimation of demand
- Political/Regulatory risks
- Financial risk
- Environmental/ecological concerns

# Infrastructure and private sector participation

- Ballooning fiscal deficits and other priorities are creating hurdles for governments in fulfilling their traditional responsibility of providing infrastructure. Meanwhile the demands for infrastructure, be it power, telecom, water supply, sanitation, transportation or roads, in a growing economy go on rising…
- Resources from multilateral agencies and other aid agencies are limited
- Past debt crises and capital adequacy requirements are constricting bank lending to infrastructure
- The performance of the public sector in implementing and operating infrastructure projects has been generally unsatisfactory
- Loss-ridden and poorly operated state-owned utilities frequently attract public criticism and are unable to raise tariffs due to poor service delivery
- Private sector participation has become essential to provide the necessary financing and project management expertise in infrastructure development.

# Risk mitigating measures

- Alternative modes of private-sponsor participation

| **Private sector participation** | | | Government involvement |
|---|---|---|---|
| BOO | **BOT** | BOLT | **Wholly government controlled** |

The case for private investment:

1. Augments the resource pool.
2. Use of state-of-the-art technology.
3. Time-bound implementation and efficient management.

# Build-Operate-Transfer (BOT)

- This approach can mitigate many of the risks associated with infrastructure projects to a level acceptable to private parties
- It assumes that profits generated by the project are commensurate with the risks. Such matching is vital to attracting private sector investors in infrastructure projects
- Projects suitable for using the BOT arrangement generally have the following characteristics:
  1. Regular and reliable cash flows
  2. A long economic life
  3. Strong government support

# Factors contributing to successful BOT infrastructure projects…1

- Government support.
- Reasonable division of risks.
- Minimum credit standards.
- Competition in BOT.
- Satisfactory returns.
- Reputed project sponsor.
- Suitable project size.
- Fair deal.
- Careful drafting of documents.
- Tariff fixation.

# Factors contributing to successful BOT infrastructure projects…2

- **Government support**: A favourable legal and institutional framework, performance guarantee of the public utility's obligations.
- **Division of risks**: Project completion risks, market risks, foreign exchange risks, operational risks and force majeure risks, including adverse political actions.
- **Minimum credit standards**: An initial credit enhancement from the government or other sources may be required to attract investment
- **Competition in BOT**: For better quality and lower costs
- **Satisfactory returns**: There is competition for international capital. Early projects may have to offer higher returns while later ones with an established track record could benefit from lower rates
- **Reputed project sponsor**: An experienced and strong project sponsor makes project formulation and design, negotiations and implementations much easier.
- **Suitable project size**: Owing to technical, legal and financial problems, small BOTs are not considered to be economically viable
- **Fair deal**: A BOT deal should be politically acceptable and fair to all parties, so as to avoid future problems.
- **Careful drafting of documents**: Contracts and agreements need to be clearly drafted, in one language, to avoid legal complexities and costs
- **Tariff setting**: It should be acceptable to private investors, flexible to accommodate debt service requirements and compare favourably with avoided cost in the public sector

# Why are traditional financing arrangements inadequate?

- Scale of investment and limited capacity of the domestic capital market
- Likely mismatch between the project's cash flow pattern and a conventional term loan with its maturity constraints
- Equity? The wait is too long and therefore the risk is high
- Pension funds, being long-term investors are an ideal answer; but, they are risk-averse
- **SOLUTION: Structured Financing Options (another risk-mitigating measure!)**

# Structured Financing Options

- Non-recourse project specific financing
- Zero-coupon or Deep Discount Bonds
- Infrastructure Equity Fund
- Two-stage financing
- Pension funds (with Bond Insurance)
- Supplier's credit
- Viability Gap Funding

# Credit enhancement techniques to obtain better ratings

- Cash/Reserve Account (Escrow)
- Senior debt
- Financial Guaranty (Bond Insurance)
- Government budgetary support
- Over-collateralization through cash and other liquid assets or bank guarantees

# Financial Guaranty

- An unconditional guarantee to pay interest and principal to bond holders as scheduled

Applications:

- To introduce new borrowers
- To facilitate the sale of longer-maturity instruments
- To reduce the cost of funds
- To access international markets

# Financial Guaranty

| | Without guaranty | With guaranty |
|---|---|---|
| Credit Rating | A | AAA |
| Maturity (years) | 5 | 5 |
| Issue size | $500 million | $500 million |
| Interest rate | 17.50% | 16.75% |
| Present Value (PV) of savings @ 18% | | $11.73 million |
| Less: PV of insurance @0.5% of debt service | | $(7.82) million |
| Net Savings | | $3.91 million |