

# **Infrastructure Projects The Risk Issues in Financial Closure**

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**Consulting & Training**



**Experience: 47 Years**

**8 industrial + 39 in Risk Management, Insurance & Reinsurance  
Pioneer in introducing "Risk, Insurance & Reinsurance  
Management of Privately Funded Infrastructure Projects" as a  
Broking Service in the Indian Sub-continent**

**Specializations:**

**Risk, Insurance & Reinsurance Solutions for Large Projects,  
Property, & Liability Risks. Insurance Training & Education.**

**Prior Corporate Appointments :**

**GIC / TAC, J.B. Boda, HSB Engg. UK, BMS Intl. UK, Howden.**

**Author / Co- Author:**

**Reinsurance, Risk Management, Engineering , Fire Coverages,  
Fire CL, Fire Claims, Liability, General Insurance Principles,  
Practice, Regulations, Underwriting...**



## Securing Project Finance The Fundamental Issues:

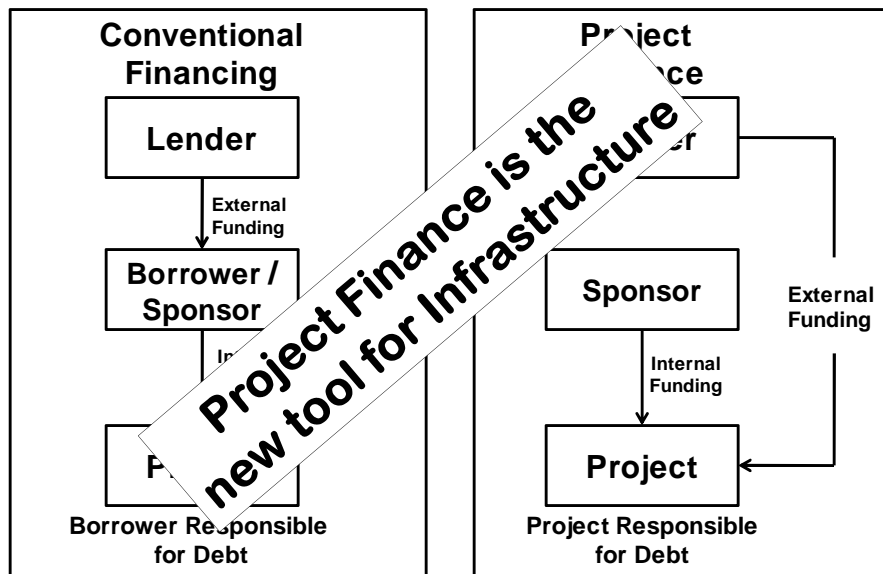
### 1. What is the Project?

- Planning,
- Realisation &
- Operation of  
Large Engineering Works.

### 2. How is the Project Financed?



## Conventional Financing Vs. Project Finance



**The US Financial Standard FAS 47 Defines Project Finance:**

“The financing of major capital projects in which the lender looks principally

- to the cash flows and earnings of the project as the source of funds for repayment of loan and
- to the assets of the project as collateral for the loan.

The general credit of the project entity is usually not a significant factor, either the entity is a corporation without other assets or because the financing is without direct recourse to the owners of the entity.”

**This is Non Recourse Financing**



**Infrastructure Projects**

- Power Generation, Transmission, Distribution, etc.
- Resources / Mining,
- Oil & Gas + Pipelines,
- Telecom / IT / Industrial Parks,
- SEZ & EPZ,
- Rail/Road & Airports,
- Ports
- Airports
- Water Management,
- Health / Hospitals,
- Education,
- Space & UARS etc.

**Globally, Infrastructure Projects Privately Financed On Non-Recourse Basis**

# Addressing The Risk Issues

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## Project Phases

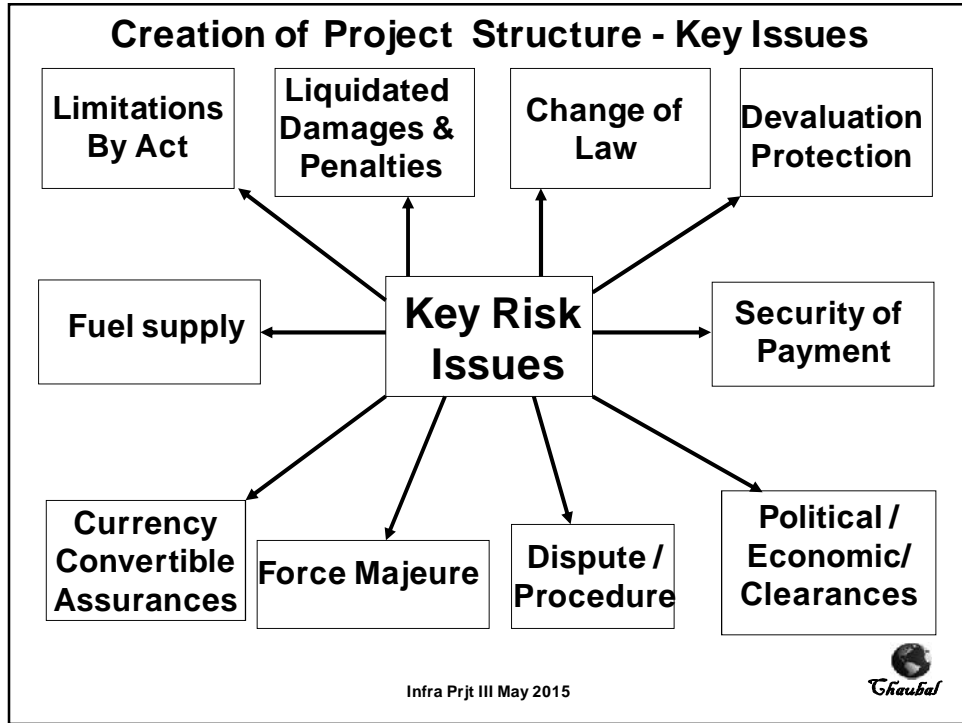
Pre Financial Close

Construction

Operation

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### Spectrum of Project Risks – Some Examples

Feasibility Stage	Design Stage	Site Specific
<ul style="list-style-type: none"> <li>• Choice of site,</li> <li>• Adequacy of soil investigation,</li> <li>• Adequacy of surveys,</li> <li>• Adequacy of Financial calculations</li> </ul>	<ul style="list-style-type: none"> <li>• Choice of design,</li> <li>• Negligence ,</li> <li>• Codes &amp; tech. Spec ,</li> <li>• Untested/unproven techniques,</li> <li>• Safety precautions,</li> <li>• Choice of contractors,</li> </ul>	<ul style="list-style-type: none"> <li>• Topography,</li> <li>• Geology ,</li> <li>• Meteorology</li> <li>• Underground obstructions,</li> <li>• Acceptability by locals</li> </ul>

Technical	Human
<ul style="list-style-type: none"> <li>• New design / methods,</li> <li>• Use of hazardous substances,</li> <li>• Inadequate site mgt,</li> <li>• Mech / elec breakdowns,</li> <li>• Explosion &amp; fire,</li> <li>• Vibration &amp; oscillation,</li> <li>• Special construction m/c.</li> </ul>	<ul style="list-style-type: none"> <li>• Negligence,</li> <li>• Fraud &amp; infidelity,</li> <li>• RSMD, Theft &amp; burglary,</li> <li>• Non-compliance with specis,</li> <li>• Inadequate site supervision,</li> <li>• Lack of co-ordination,</li> <li>• Inefficiency &amp; delays.</li> </ul>

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## Risks that can not be transferred to Commercial Insurance markets:

Non Project Risks	Project Risks
<ul style="list-style-type: none"> <li>• Exchange Rate Fluctuation,</li> <li>• Interest Rate Fluctuation,</li> <li>• Inflation,</li> <li>• Political instability,</li> <li>• Changes in Govt. Regulation.</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of Tender to competitor,</li> <li>• Failure to obtain Permits,</li> <li>• Incorrect pricing of goods / matls,</li> <li>• Lack of demand or</li> <li>• Inadequacy in financial projection</li> </ul>

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## Risk Allocation & Transfer:

Ability of the promoter to attract Private Capital, to a large extent, depends on his ability to demonstrate that the project risks have been

- a. Identified,
  - b. Analysed and
  - c. Efficiently allocated or transferred
- Allocation to different project partners through Contract Clauses,

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### **The Sponsor's Issues:**

- **Most of the Risk & Insurance Issues need to be addressed for achieving Financial Close i.e before Insurer has a real Role in Project Insurance,**
- **This may even take more than two years,**
- **Project may not even start or get Shelved,**
- **Role of Independent Consultants / Brokers.**

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# THANK YOU



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