

# Project Finance/PPP – Overview, Risk/Credit & Modelling

3 Days

## Day 1 Introduction to Project Finance/PPP

### 1. Overview of project finance and PPP

- Origins and rationale of project finance/PPP
- Definition of a project - the distinguishing features
- Rationale of project finance
- What kinds of projects are financed
- Trends in project finance and PPP

### 2. Ownership structures

- Considerations in Selecting a Structure
- Project Finance Structures
- Special Purpose Vehicle (“SPV”)
- Company
- General Partnerships
- Limited Partnerships
- Joint Ventures (“JVs”)

### 3. Background to PPP

- History and development
- Current position, future trends and developments
- Rationale and objectives of PPP
- Benefits and drawbacks of using PPP

### *Case Study: Singapore’s use of PPP*

### 4. The three basic structures in PPP/PFI projects

- Concession and franchises
- Sale/flotation of a minority/majority stake
- Joint ventures

### 5. Specific structures in PPP/PFI projects

- BOT (Build Operate Transfer)
- BOOT (Build Own Operate Transfer)
- DFBO (Design Build Finance Operate)
- DCMF (Design Construct Manage and Finance)
- BLT (Build Lease Transfer)
- BOO (Build Own Operate)
- Leasing

### *Case Studies: Examples of PPP projects worldwide*

### 6. Key Issues in PPP/PFI

- Achieving design quality
- Appointing and managing advisers
- Appointing and working with preferred bidders

- Public sector comparators (use, selection, construction and application)
- Managing long-term delivery of PPP

#### **7. Assessing the promoters**

- Construction/development risk
- Feedstock and reserves
- Production and operating
- Offtake
- Significance of guaranteed Offtake in PPP
- Transport and communications
- Political and regulatory
- Environmental
- Global capacity
- Legal and contractual
- Currency and interest exposures and volatilities
- Evaluation of qualitative risks in various projects

#### ***Case Studies: Asian project finance PPP deals***

#### **8. Knowing the players and their respective interests**

- Sponsors
- The Project company
- The Borrowing entity
- Financial advisers
- Technical experts & consultants
- Contractors
- Suppliers
- Offtakers
- Host Government
- Project managers
- Debt financiers
- Equity providers
- Rating agencies
- Insurers

#### **9. Stage 1: The Feasibility Study**

- Credit risk rather than equity risk
- Financial projections
- Assurance on supplies, building materials and energy
- Market for products/services of the project
- Infrastructure
- Management
- Proven Technology
- Risks
- Commitment of Sponsors and other parties
- Stage 2: Planning
- Stage 3: Arranging and Structuring the Finance
- The Offering Memorandum
- Summary of Proposed Financing applicable terms
- Details of the Project company
- Products and markets
- Marketing and distribution
- Details of any major competitors

- Manufacturing and production facilities
- Management
- Business Risks
- Plans and forecasts
- Stage 4: Monitoring the Financing

## Day 2 Risk and Credit Analysis

### 10. Different strategies for identifying and assessing risk

- Classification of Risks
- Credit risks
- Construction and Technical risks
- Production, market and operating risks
- Financial risk
- Political and regulatory risks
- Legal risks
- Environmental risk
- Country risks
- Due Diligence process
- How to identify critical components of the projects
- How to assess risk
- Alternative approaches for treatment of risk in the PPP appraisal process

#### *Case Study: Analysing political risk*

### 11. Documentation issues

- Management contracts
- Shareholder agreements
- Pricing and volume parameters
- Punitive damages clauses
- Termination
- Force majeure
- Deficiency guarantees
- Assignments
- Contractual exclusions
- Documenting complex structures
- Government contact documentation in PPP

#### *Case Studies: Project Finance contracts examined*

### 12. Sources of funding for projects

- Organisational Sources
- International and Regional development agencies
- Government Export financing agencies
- Host governments
- Commercial banks
- Leasing companies
- Vendor, Contractor and supplier finance
- Sponsor Loans
- Types of Equity and Debt (including IRR/MIRR calculation)
- Equity
- Senior Debt

- Subordinated Debt
- Financing under Islamic Law
- Methods of Obtaining Finance
- Structure of Capital Markets
- International Issues
- Rule 144A Offerings in the US
  - Bond Issues
  - Unincorporated joint ventures
  - Escrow accounts
  - Trusts
  - Concession agreements
  - ECA support
  - Financial engineering

*Case Study: Debt and Equity in Asian project finance/PPP*

**13. Structuring issues for banks and sponsors**

- How to get the structure right?
- How to keep it in good shape?
- Tailoring financial structures to reflect project cash flows
- Leveraged leases
  - Trusts
- Un-incorporated joint ventures

**14. Adding value through other financial products**

- Appropriate products
- Use of hedging
- Application of derivatives
- Determining the level of recourse
- Export credit agencies
- Buyer credits
- Lines of credit
- Political risk insurance cover

**15. Major Risks of Projects (analysis and mitigation)**

- Classification and identification of risks
- Commodity price risk versus volume risk
- Technology risk (breakdown and obsolescence)
- Input supply and availability risk
- Foreign currency and political risk
- Construction cost
- Contract breakage risk

**16. Theory and Analysis of Long-term Contracts**

- Economic rational for long-term contracts
- Incentive to break contracts
- Relation between cost and revenue contracts
- Example of flexible supply contracts
- Effects of variable supply contracts on cash flow

**17. Dealing with risk effectively**

- Methods of mitigating risk
- Turnkey construction contracts

- Enforcement of liquidated damages clauses
- Bonding
- Retentions
- Progress certification
- Supply contracts
- Offtake contracts
- Investment licences and concession agreements
- Financial phasing
- Incentive-linked contracts
- ECA insurances
- Tax issues
- Accounting issues
- Managing the risks when not insurable
- Various permutations for recourse

#### **18. Credit enhancement and security**

- Guarantees
- Types of Guarantors
- Types of Guarantees
- Difficulties with International guarantees
- Coverage of Guarantees
- Guarantees and bonds under construction contracts
- Sales /Purchase Agreements
- Insurance
- Political Risk Insurance
- Other Forms of Credit Enhancement
- Letters of Credit
- Comfort Letters
- Collateral
- The role of monoline insurance and wraps
- Guarantees and other forms of credit enhancement

#### **19. Rating Agency Approach**

- Comparison with corporate rating analysis
- Rating agency assessment criteria
- Historical recovery
- Credit spreads
- Rating agency models in use
- Strengths and weaknesses of rating agency models
- Recovery rate methodologies

*Case Studies: Rating Agency PPP project finance reviews*

### **Day 3 PPP Project Finance Modelling**

#### **20. Constructing the cashflows**

- What to include or omit - distinction between cashflows
- Free cash flows
- Cash flows after allowing for financing costs
- Discount rates and WACC formulation
- Use of company-wide measures in project financing decisions
- Industry benchmarks and performance measures

- Assessing cash flow volatilities and sensitivities
- Simulation testing of cash flow variables
- Determining scope of permissible volatility vis-à-vis selected financing structure
- Isolating and structuring around residual volatilities
- Contractual arrangements
- Alteration of cost structure
- Alteration of funding components
- Review of project elements
- Standby liquidity support (or recourse) for the project

***Exercise: Delegates will construct and manipulate an initial project finance cashflow spreadsheet***

**21. Accurately evaluating PPP project cash flows: debt, mezzanine and equity**

- Cash coverages
- Position in a hypothetical restructuring
- Ability to pass project control without operational disruption
- The pricing of risk
- Isolating residual cashflows and determining flexibility required
- Liquidity of mezzanine instruments
- Profit participating formats
- Discounting cashflows
- Dealing with investment cash flows and operational cash flows
- The appropriate discount rate
- The applicable time horizon

**23. Building a BOT (Build Operate Transfer) PPP project finance model. Based on a real example, provided by an equity investor in a project finance transaction, delegates will construct and use a model for the transaction. The exercise will include:**

- Project Review
- Analysing the inputs
- Dealing with input priorities
- Data plausibility
- Cashflow Projections
- Loan assessment
- IRR NPV and other valuation analysis

**24. Project contracts**

- Host Country Agreements
- Memorandum of Understanding
- Concession Agreements
- Implementation Agreement
- Construction Contracts
- Input Contracts
- Operation and Maintenance agreements (“O&M contracts”)
- Off-take Contracts
- Take-or-Pay contracts
- Take-and-Pay contracts
- Long-term Sales Agreements
- Spot Sales Contracts
- Credit/Loan Agreements
- Representations and warranties
- Covenants

## 25. Project documentation

- Underlying Documents
- Finance documents
- Security documents
- Supporting Documentation
- Experts' Reports and Legal Opinions