



PROJECT FINANCE and TERM LOAN ASSESSMENT

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During the day.....

- Project Financing/Appraisal
- Products of Corporate financing
- Question and answer session



Types of Project

- Green field vs Brown field
- Expansion, Modernisation, Diversification
- Infra vs Non-infra
- Recourse vs Non-recourse



PROJECT FINANCE

- A funding structure that relies on future cash flow from a specific development as the primary source of repayment, with that development's assets, rights and interest legally held as collateral security.
- Contrast to conventional corporate lending which looks to the balance sheet and total business and financial resources of a borrower as the source of repayment.



Pre-requisite if Project Appraisal

- Working Knowledge of Industry
 - *Industry Dynamics and economics*
 - *Requirement and source of inputs*
 - *Manufacturing process*
 - *Business Environment*
 - *Manufacturing / Operating Cycle*



Pre-requisite if Project Appraisal

- Government Policy Guidelines and updates
- Institutional Norms
- Accounting Concepts and Policies
- Working Knowledge of Spreadsheets and Word Processing Applications
- Effective Communication
- Ability to identify critical elements from general ones, mitigate obvious risks so as to improve viability



APPRAISAL – why?

- Project returns are spread over time
- Each variable effecting NPV is subject to high level of uncertainty.
- Information and data needed for more accurate forecasts are costly to acquire.
- Need to reduce the likelihood to undertake a “BAD” project while not failing to accept a “GOOD” project.
- Ultimately leads to Risk Assessment and “credit delivery” decision.



“Viability” is in the eyes of the beholder

- Appraisal from whose point of view?
- What are the “viability parameters” that needs to be achieved?
- In the range of possibilities:
 - Best Case scenario
 - Worst Case scenario
 - Most likely scenario



APPRAISAL – WHY ?

- Extend assistance to “viable” [“bankable”] projects
- Viability means -
 - Ability to service debt
 - Ability to service equity
 - Co. should earn for itself
- Allocate scarce resources
 - Optimally



STEPS IN APPRAISAL PROCESS

- Receipt of enquiry/application
- Initial screening-accept/reject
- If accepted,conduct detailed appraisal for credit decision
- Issue letter of intent (LoI) [“The Offer”]



PROJECT APPRAISAL

- Broad areas of appraisal
 - Promoters & management
 - Market analysis
 - Technical analysis
 - Financial analysis
 - Risk assessment and contracting ["covenant"]



PROMOTER ASSESSMENT

- Most subjective aspect
- Types of promoters
 - Existing companies
 - First generation
 - Government/PSUs
 - Foreign promoters
- Promoters vs Management



PROMOTER ASSESSMENT

- Existing companies
 - Track record of performance
 - Analysis of B/S and P& L A/c
 - Dealings with FI's/banks
 - Ability to bring in required funds



PROMOTER ASSESSMENT

- First generation
 - Individual promoters (limited tools)
 - IT/Wealth Tax returns
 - Bankers' report
 - Qualifications/past experience
 - Technical partner



MANAGEMENT ASPECTS

- Quality of the Board
- Promoter Directors vs. Independent Directors
- Project execution team
- Management structure during operation
- Chief executive
- Other functional heads



MARKET ASSESSMENT

- Nature of the product
 - Applications
 - Competing products
- Industry structure
- Existing & projected unsatisfied demand
- Supply scenario & competitors
- Product obsolescence
- Selling arrangements



TECHNICAL ASPECTS

- Various areas covered are
 - Locational aspects
 - Process
 - Technical arrangements
 - Raw materials
 - Utilities
 - Environmental factors
 - Manpower
 - Implementation schedule



LOCATION

- Location
 - Proximity to markets [e.g perishable products]
 - Proximity to raw material supplies [resource based, imported raw material]
 - Availability of labour [quality, quantity, cost, relations]
 - Availability of utilities
 - Effluent disposal
 - Other infrastructure [power, transportation, water etc]
 - Governmental Policies [restrictions and sops]



LOCATION -SITE

- Requirement of land area to be assessed based on
 - Plant layout
 - Expansion needs
- Soil test report
- Load bearing capacity
- Extent of development/leveling
- Obtaining utility connections [costs]
[transmission lines, railway sidings, feeder road, water, effluent disposal]



PROCESS

- **Has relationship to capacity, inputs and product-mix**
- **Latest and proven**
- **Cost effective – both from initial investment and production cost**
- **Alternate processes**
- **Advantages w.r.to**
 - **Cost**
 - **Consumption of inputs**
 - **Ease of operation/Upgradeable**
 - **Pollution aspects**



PROCESS

- New process or processes used first time in the country
- Background of the process know-how supplier
 - Financial status
 - Technical capability
 - Reference plants
- Ad hoc committee of advisers



TECHNICAL ARRANGEMENTS

- **Technical collaboration**
- **Licensors of know-how/basic engineering**
- **Patents**
- **Plant & machinery**
- **Guarantees/warrantees – Collaborator/ P&M supplier / Detailed engg contractor**
- **Approach to “force majeure” conditions**
- **Assignment in case of ownership**
- **Termination**



TECHNICAL ARRANGEMENTS

- Technical know-how agreement
 - Supply/vetting of basic engineering
 - Guarantees
 - Liquidated damages for non-performance
 - Training of personnel
 - Royalty
 - Indemnity



TECHNICAL ARRANGEMENTS

- **Size of plant**
 - **Minimum economic size which varies with change in technology, products, pricing, demand etc.**
- **Plant & Machinery**
 - **Suitability & adequacy [transporting, trained personnel availability]**
 - **Reasonableness of cost**
 - **Reputation of suppliers**
 - **Line balancing**
 - **Spare parts**



RAW MATERIALS

- Raw materials & quantity
- Sustained availability
 - Imported /indigenous
 - Major suppliers
- Prices of raw material
 - Price volatility
 - Past trends
 - Duties
- Arrangements for supply.



UTILITIES

- Power supply
- Water
- Labour
 - Requirement/availability
 - Arrangements
- Measures to augment supplies/fall back [power?]



EFFLUENT DISPOSAL

- Liquid, gaseous & solid effluents
- Pollutant load needs to be assessed
- Depending on the volume and quality of the effluent suitable treatment measures are designed.
- Environmental impact assessment study
- Clearances from statutory authorities



IMPLEMENTATION SCHEDULE

- List down all activities from “planning” to “COD”
- Time required for each step
- Scheduling of activities - PERT/CPM
- Resource required [impact of more or less resource]
- Schedule of machinery supply
- Experience of similar plants



IMPLEMENTATION SCHEDULE

- Consequences of delay
 - Increase in project cost
 - Funding overrun
 - Effect on viability
 - Loss of market
 - Confidence level of FIs



PROJECT COST ESTIMATION

- Major heads are
 - Land and site development
 - Buildings/civil works
 - Plant & machinery
 - Imported
 - Indigenous
 - Tech. Know-how fees



PROJECT COST ESTIMATION

- Expense on foreign technicians & training
- Misc.fixed assets
- Prel. & Pre-op expenses
- Contingency
- Margin money for working capital



Margin Money for Working Capital

Current Assets

- Raw Materials (Imp. - 3 mths/Ind -1 mth)
- Work-in-process(1 process cycle time)
- Finished goods (1 wk to 1 mth)
- Receivables/ Debtors (30 days to 90 days)
- Other expenses (1 month)

Current Liabilities

- Creditors (1 month's RM & consumables)



MEANS OF FINANCE

- Basic criteria
 - Promoters' contribution
 - Core promoters' share
 - Debt-equity ratio
- Normal DER – 1.5:1 (max.)
- Flexible for larger projects, infrastructure



MEANS OF FINANCE

- General considerations
 - Capital intensity
 - Risk perception
 - Serviceability – debt/equity



MEANS OF FINANCE

- Equity
 - Share capital
 - Convertible part of PCD
(if converted in 18 months)
 - Pref. Share Capital (> 3 yrs)
 - Internal accruals



MEANS OF FINANCE

- Quasi – equity
 - Subsidy
 - Subordinated loans from promoters
 - Incentive loans



MEANS OF FINANCE

- Debt
 - Rupee term loans
 - FC loans
 - Pref. Capital (< 3 yrs.)
 - Debentures
 - ECB
 - Suppliers' credit



MEANS OF FINANCE

- Security package
 - First charge on fixed assets
 - Second charge on movables
 - Personal guarantees
 - Corporate guarantees
 - Pledge of shares
 - Govt. Guarantee/escrow
 - Assignment of contracts



FINANCIAL VIABILITY

- Estimates of profitability, cash-flow and balance sheet
- Assumptions underlying profitability projections
- Critical assumptions
 - Installed capacity
 - Capacity utilisation
 - Product mix
 - Sales realisation
 - Consumption of inputs & prices



FINANCIAL VIABILITY

- Compare profitability with that of existing firms in similar line, particularly the PBIDT margin.
- Computation of IRR
 - Rate of discount which equates the pv of capex in the project to pv of net cash flow over the life of the project.
 - Is compared with cost of capital



FINANCIAL VIABILITY

- Whether sufficient cash flow to service debt.
- Debt-service coverage ratio
 - $(\text{Gross cash accr.} + \text{Int. on term debt}) / (\text{repayment of debt} + \text{int. on term loan})$
 - Computed yearly as well as average over the repayment period
 - Av. DSCR to be > 1.5
 - Yearly DSCR > 1.3
- Other ratios- BEP, CBEP



FINANCIAL VIABILITY

- Sensitivity analysis
 - Effect of adverse variance of critical elements on viability is examined
- Typical tests are
 - Reducing sales vol./Price
 - Increasing cost of inputs
 - Increase in project cost
 - Effect of FE fluctuation
 - Reduction in capacity utilisation.



ECONOMIC APPRAISAL

- Social cost benefit assessment
- Qualitative & Quantitative
- Qualitative
- Social costs –
 - = Environmental pollution
 - = Ecological imbalances
 - = Forest degradation
 - = Accidents
 - = Threat to animal life



Economic appraisal

- Social benefits
 - = Improved facilities like roads, irrigation, sanitation etc.
 - = Improved transport facilities
 - = More job opportunities
 - = General economic improvement
 - = Better living standards



Economic appraisal

- Actual cost & benefits not true representation of economic cost
- Two aspects of economic viability - benefits accruing to the economy and international competitiveness



Security for the assistance

- **SECURITY PACKAGE**
 - **FIRST CHARGE ON FIXED ASSETS**
 - **SECOND CHARGE ON MOVABLES**
 - **PERSONAL GUARANTEES**
 - **CORPORATE GUARANTEES**
 - **PLEDGE OF SHARES**
 - **GOVT. GUARANTEE/ESCROW**

- **SECURITY MARGIN**
 $[1-(\text{SECURED DEBT}/\text{F.A})] \times 100$
- **FIXED ASSETS COVERAGE**
(FA/DEBT)



Financial Terms

- Rate of interest- Fixed, semi variable or variable
- Reset clause
- ROI on FC loans- LIBOR- Hedging cost
- Upfront fee/ Syndication fee/ Appraisal fee
- LC/BG charges
- Availability period



Financial terms

- Repayment schedule- Moratorium
- Additional interest/ Penal interest/ LDs
- Prepayment clause
- Security creation stipulation
- Financial covenants- Triggers
- Lenders' Agent/ Security Trustee/ TRA Agent/LIE/ LLC/ LIA

PRUDENTIAL NORMS



- Individual exposure limits

- 15% of total capital funds of the Bank
 - + 5% (for infrastructure projects)
 - + 5 % (with the approval of the Board)

- Group Exposure

- 40% of total capital funds of the Bank
 - + 5% (for infrastructure projects)
 - + 5 % (with the approval of the Board)



Exposure Norms (Decided by respective Bank)

- **Company**

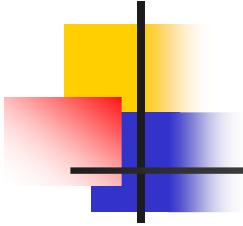
- Rs.3000 crore + Rs.1000 crore for infrastructure funding

- **Group**

- Rs.8000 crore + Rs.2000 crore for infrastructure funding

- **Exposure to industry Sector**

- 10% to 15% of total customer Exposure



THANK YOU