

PROJECT FINANCE – PRACTICAL ANALYSIS

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Need For Finance

- Finance is life blood of any business organization.
- Organizations require finance to meet basic objectives.
- To set up, modernize, expand business activity i.e to acquire fixed assets for facilitating productive endeavor
- To meet the day-to-day working capital requirements i.e operating cycle
- To meet the former, long term finance is required and the latter, short term finance due to their inherent difference in life of assets.
- A portion of current assets is to be met through long term sources for having long term stability, liquidity etc in the event of exigencies.

What is Project Finance?

- Project finance is a long-term financing of any business venture including infrastructure and industrial projects based upon the projected cash flows of the project rather than appraising the financial statements of its stake holders/ sponsors.
- Project Finance is a process of evaluating and selecting long term investments that are consistent with the goal of shareholders (owners) wealth maximization.
- Project means any commercial or business venture.

Project Background

- A project can be defined as ‘A scheme of things to be done during a specified period in future for deriving expected benefits under certain assumed conditions’.
- A project may be in the nature of setting up a new industrial unit, modernization, expansion, diversification and promotion of R&D.

Because of complexity and uniqueness involved, a capital project needs to be launched by:

- Analyzing past environment
- Studying existing environment
- Forecasting future environment

Project Background

- A project financing structure involves a number of equity investors, known as sponsors, as well as a syndicate of banks that provide loans to the operation.
- The purpose of term assistance is to meet a part of the capital expenditure of a project.
- To set up a project, certain capital expenditure needs to be incurred in acquiring assets such as L&B, P&M and other infrastructural facilities like roads, water supply, railway sidings, etc., in addition to the Preliminary / Pre-Operative Expenses and margin on WC Limits.
- Where promoters of a project are unable to meet the entire capital expenditure out of their own resources, Term Loans are sanctioned to supplement the promoters' contribution.

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PART - I

PREPARATION OF PROJECT REPORT

IMPORTANT ASPECTS

- It is an important document for seeking any type of financial assistance from financial institutions. Proper presentation and detailed analysis necessary.
- Imp. points that are necessarily to be incorporated in the project report:
 - a) Nature of Projects.
 - b) General Information.
 - c) Information about Promoters.
 - d) Technical details of the project.
 - e) Marketing & Selling arrangement.
 - f) Financial Feasibility.
 - g) Economic Benefits.

a) Nature of project

- New / Green Field Project
- Expansion /Modernisation of existing facilities at the same or different location
- Forward / Backward Integration
- Cost Reduction Project
- Diversification
- Debt Restructuring Schemes

b) General Information:

- First part of any project and gives general information about the project like:
 - Name and complete postal address of registered office and location of the factory.
 - Constitution: Proprietary or Partnership or Company.
 - Nature of activity i.e. the type of products to be manufactured and its uses.
 - Status: Whether small scale sector / medium / large / mega. Details of registration.
 - Nature and amount of financial assistance required i.e. Term loan, working capital, non fund based limits.

c) About the Promoters:

- One of the most important part of the project report.
- Hence drafting of this part requires special attention and care.
- Complete family background along with individual bio-data.
- Past experience.
- Associate concerns & its performance.
- (Name/ nature/ turnover last 3 yrs, name of the banker & nature of facilities enjoyed.)

d) Technical details:

- **Capacity:** Available working days/shifts.
- **Manufacturing process:** covers the entire use of Machines proposed to be acq.
- **Location:** Feasible / irreversible one time decision
- **Raw materials:** Availability/ Indigenous / Imported.
- **Power requirement:** work out maximum demand
- **Man power requirement:** Tech. staff/ supervisors/ skilled/ unskilled/ semi-skilled.
- **In case of multi products unit :** Product mix has to be ascertained.

e) Market Feasibility:

- Marketing aspect of the project:
 - Whether the promoters can sell their goods in the market.
 - Competition / Similar players in the line.
 - Nature of product: Industrial / Consumer.
 - Distribution system: Directly or through agency.
 - Pricing: Competitive.
 - (For large projects- demand supply gap)
 - (For ancillary- Confirmation from Parent Co.)

f) Financial Feasibility:

- Determination of Cost of the Project
- Finalization of Sources of finance
- Profitability estimates.
- Cash Flow Statement
- Projected Balance sheet

i) Determination of the Cost of the Project

- Land
- Site Development
- Civil Construction / Bldg.
- Plant & Machinery
- Electric installation
- Other manufacturing assets like dies, moulds, cranes, etc
- Laboratory Equipments.
- Technical know-how fees,
- Preliminary expenses
- Preoperative expenses
- Contingencies
- Margin of working capital
- Other assets like furniture, equipments, etc

ii) Finalization of Source of Finance

The Source of Financing broadly includes:

- Own Funds :
 - Retained Earnings
 - Promoter's Contribution

- Borrowings:
 - Internal Sources
 - External Sources

ii) Finalization of Source of Finance

- Public Issue:
 - Shares
 - Other Securities
- Government Agencies :
 - Subsidy
 - Other Assistance
- Deffered Payment Scheme

LONG TERM SOURCES

OWNED CAPITAL

BORROWED CAPITAL

Share Capital

Retained Earnings

Debentures

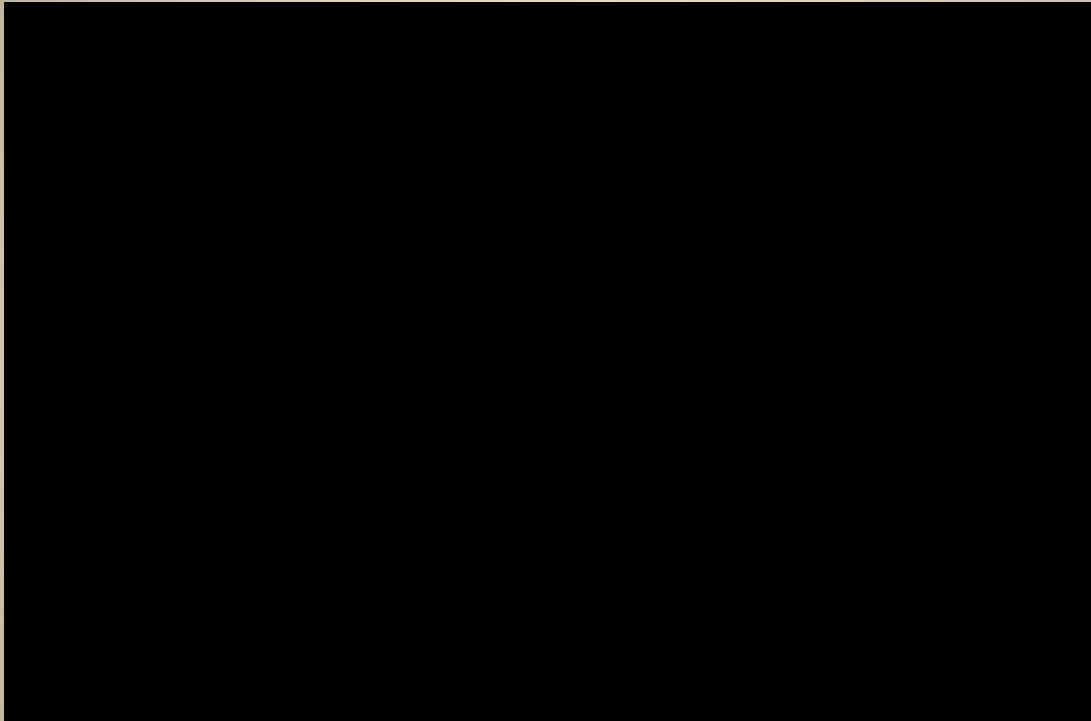
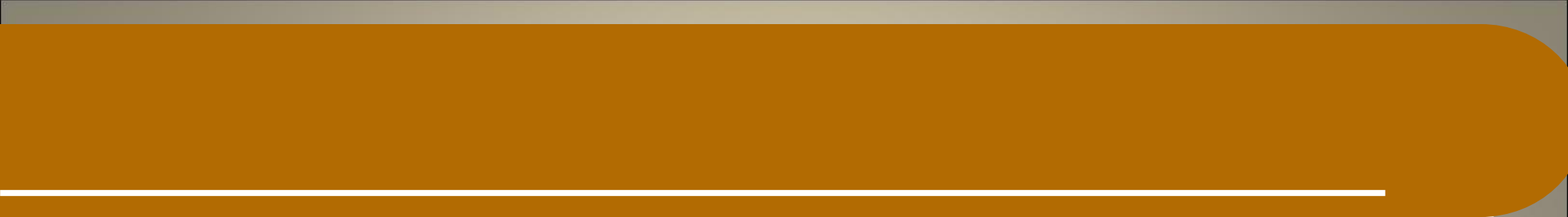
Term Loans, DPGs

Public Deposits

Equity

Preference

RELAX A BIT



iii) Profitability Estimates

- Based on the technical parameters like capacity, raw materials requirement, power requirement, man power requirement and other item of expenditure like maintenance, consumption of stores, depreciation, adm. and selling Exps.
- Interest on term loan and working capital loan, profitability estimates at different capacity utilization.

iv) Cash Flow Statement

- Helps in ascertaining whether sufficient funds shall be available at different point of time to service the debts.
- Care has to be taken ensure that there is always long term surplus to meet short term requirements and not vice versa.

v) Projected Balance Sheet:

- Helps in understanding the various financial parameters like D/E Ratio, Current Ratio and the composition of various assets & liabilities.

g) Economic Benefits:

- Whether helpful for development of ancillary units.
- Local manpower engaged.
- Foreign Exchange.
- Eco-Friendly.

In addition - the Financial Viability

- **Debt Service Coverage Ratio:**
$$\frac{\text{PAT} + \text{DEPRN} + \text{INTT ON T/L}}{\text{INTT. ON T/L} + \text{INSTT.}}$$
- **Break Even Point**
- **Credit rating** - Marks awarded on different financial parameters.
- Higher comfort level in terms of Debt Equity Ratio, DSCR, Profitability Ratio, Collateral Security are rated high & offered lower rate of interest.

Role of CA's

- Before Commencement of project.
 - Assist in project identification.
 - Carrying out Technical, Commercial & Financial Feasibility Study.
 - Preparation of Detailed Project Report (“DPR”)
 - Assisting in selecting optimal capital requirement / structure.
 - Arranging for finance & negotiations with the financiers.
 - Equity funding
 - Debt Funding
 - Negotiations with the vendors / contractors for the project.
(Beneficiary: Borrower)

Role of CA's

- Before Commencement of project.
 - Independent appraisal of the project.
 - Vetting of DPR's
 - Carrying out TEV Studies of business ventures
 - Certification about net worth of the borrowers

(Beneficiary: Lender)

PART - II

DETAILS TO BE FURNISHED
WHILE SUBMITTING
APPLICATION FOR FINANCIAL
ASSISTANCE:

Along with the Project Report the following particulars to be submitted:

- Attested Photographs.
- Detailed Bio-data of Promoters / Directors.
- List of Associate companies.
- In case of existing company Audited Fin. Statements for last 3 years.
- Assets / Liabilities statements duly signed.
- If NRI, necessary permission from RBI.
- Copy of SSI Registration/
- Industrial License as applicable.
- Copy of various permissions, approvals & licenses from Govt., Local authorities as required.
- MPCB clearance for Red & Orange category industries.

Along with the Project Report the following particulars to be submitted:

- Copy of Sale Deed / Lease Deed.
- If unit is located at MIDC / CIDCO or Govt. Ind. Estate, a copy of the allotment letter.
- Copy of the approved building plans.
- Copy of layout plans.
- Detailed estimates of the buildings to be constructed.
- Flowchart showing sequence for mfg. process.
- Quotations for the machinery proposed to be purchased.
- List of P & M.
- Raw material –Source, Tie up letters.

Checklist...

- Market survey reports.
- Market tie-up letters.
- Details of infrastructure availability. Viz.
 - Power
 - Water
 - Efficient Treatment
 - Approach Roads.
 - Labour Availability.
 - Fuel Availability.

Checklist...

- Copies of I. Tax Returns & Personal Fin. Statements of Prop/ Partners / Directors for last 3 yrs.
- Arrangement made for W/c finance & its detail assessment.
- Detail of collateral security.
- Selling price evidence from customers.
- Copy of Collaboration / Tech. Know How/ Turnkey Agreement.

Checklist...

- If Partnership Firm:
 - Copy of P/Deed.
 - Reg. Certificate from Reg. of Firms.
- If Pvt. Ltd. Company;
 - Memorandum of Association.
 - Articles of Association.
 - Company Incorporation Certificate from ROC
 - Certificate of Commencement (in case of Public Co.) from ROC.

Checklist...

- If Co-op Society:
 - Bye laws of the Society
- Associate Concern Details:
 - Brief history / details of the concerns.
 - Bankers name & address.
 - Audited B/sheet & P& L A/c for last 3 years.
 - Details of Fin. Assistance availed if any.

PART III

PROJECT APPRAISAL

Project Appraisal

- Project appraisal means the assessment of the viability of proposed long-term investments in terms of shareholder wealth & can be divided into 5 parts
 - Managerial Appraisal
 - Technical Appraisal
 - Market Feasibility
 - Economic Appraisal
 - Financial Viability

1. Managerial Appraisal

No Yardstick to Measure.

Some factors considered like:-

- i) Past track record.
- ii) Business experience (specially in the proposed activity)
- iii) Performance of the associate concern.
- iv) Bankers Report.
- v) Financial Resources.
- vi) Existing organizational setup & degree of professionalism.

2. Technical Appraisal

COVERS THE FOLLOWING ASPECTS

- i) Capacity
- ii) Product Mix
- iii) Manufacturing Process
- iv) Technical Know-how
- v) Raw Material
- vi) Requirement & Sources
- vii) Location & Site
- viii) Building
- ix) Plant & Machinery
- x) Manpower Requirement
- xi) Power Requirement
- xii) Other utilities
- xiii) Effluent Disposal Transport

3. Market Feasibility

- Products & its use
- Demand projection & extent of competition
- Adequacy of marketing infrastructure- Distribution network
- Demand-supply gap (specially in large projects)
- Whether ancillary unit or not
- Industrial products or consumer products
- Nature & status of the user industries

4. Economic Appraisal

-Specially for medium & large projects.

- Foreign exchange income & outgo
- Employment of local people
- Contribution to exchequer in terms of payment of duties & taxes
- Exploitation of local resources
- Development of ancillary units
- Impact on environment.

5. Financial Viability

- Determination of project cost.
- Scheme of finance.
- Appraisal of financial projections

Appraisal Of Financial Projections

Net sales (Sales – Excise Duty / VAT)

(-) Cost of Production

= GROSS PROFIT (i-ii)

(-) Administrative Expenses , selling expenses

(-) Interest (on Term Loan, Working Capital / other loans)

= PROFIT BEFORE TAX (iii-(iv + v+ vi))

(-) Provision for income tax including MAT

= NET PROFIT AFTER TAX

Add Back:- Depreciation

= NET CASH ACCRUALS

(÷) Repayment of Term loans

= DSCR

Margin Concepts

- **In case of Bank Term Loans:**
 - Land & Building: 30%
 - Plant & Machinery: 25%
 - 2nd Hand Machinery: 40%
 - Generally Banks there is apprehension about financing purchase cost of land.
 - Reimbursement of cost incurred, higher margins may be stipulated.
 - Generally cost incurred upto one year before are eligible for Bank finance

Financing the Proposition

- Financial Leverage
- Return On Investment
- Profitability Ratio
- Break Even Analysis
- Cash Flow Analysis
- D.S.C.R
- Pay Back Period
- Net Present Value
- Current Ratio

- Financial Leverage

- The divergent interests of debt and equity are brought into alignment by the concept of Debt / Equity gearing which determines the level of debt that can be supported by a given quantum of equity.
- For this purpose, Debt means Funded Debt including all term liabilities and equity will include Share Capital and retained earnings, if available.
- The standard Debt Equity Ratio can be considered as 2 : 1

- Return on Investment (ROI)

- The amount invested in a project can be recouped through annual cash flows, over a period of time.
- In arriving at a financial plan for the project, a promoter will examine the attractiveness of the project, vis-à-vis alternative sources of investment.
- The process which assists the management in such a task is collectively known as 'Capital Investment Evaluation'.

- Return on Investment (ROI)

- ROI = Operating Profit/ Capital Employed.
 - Operating Profit = Profit after Tax but before interest.
 - Capital employed = Capital + Loan
- ROI ratio is used to measure the firm's efficiency
- Bank rate can be minimum expected ROI

- Profitability Ratio

- i) Raw material to Sales – Imported : Indigenous
- ii) Power to Sales
- iii) Labour to Sales
- iv) Gross profit to Sales
- v) Net Profit to Sales
- vi) Sensitivity Analysis (Very Important)

- Break Even Analysis

- $BEP = \text{Fixed Expenses} / (\text{Sales} - \text{Variable Exp})$
 - Analyzing fixed & variable expenses is very important.
 - Calculate at what capacity utilization, the unit achieve BEP.
 - Whether unit can perform above BEP
- Higher the BEP as % of Capacity : Higher the risk
 - Suggestion to convert fixed expenses in to variable expenses.

- Cash Flow Analysis

- Shows the movement of funds at different points of time indicating:
 - i) Sources of funds (Long / Short Term)
 - ii) Utilization of funds (Long / Short Term)
 - iii) Net surplus (i-ii)

(+) Opening Balance

= Closing Balance

Ascertain whether long term sources are used for long term uses.

-D.S.C.R

- Debt Service Coverage Ratio =

$$\frac{\text{PAT} + \text{DEP.} + \text{Int. On Term Loan}}{\text{Int. On Term Loan} + \text{Installment Of T.L.}}$$

Normally Accepted - 2

Risky - < 1.5

More Comfortable - > 2

- Pay Back Period

- A statement to measure the time within which the initial investment in the project is recovered.
- Lower the payback period, higher the safety.
- It does not consider the time value of money at different period. This drawback can be met by discounting the future cash flow.

- Net Present Value

NPV = Discounted Cash Inflows – Cash Outflows

- Consider the time value of money
- Useful for comparing the project giving different inflow at different times
- Future cash flow are discounted at the cost of capital (Opportunity Cost)

- NPV Illustration:-

	<u>Project X</u>		<u>Project Y</u>		<u>Project Z</u>	
<u>Investment Outlay</u>	1,00,000/-		1,00,000/-		1,00,000/-	
<u>Opportunity Cost</u>	10%		10%		10%	
<u>Cash Inflow</u>	<u>Gross</u>	<u>NPV</u>	<u>Gross</u>	<u>NPV</u>	<u>Gross</u>	<u>NPV</u>
Year 1 (0.909)	40000/-	36360/-	20000/-	18182/-	10000/-	9090/-
Year 2 (0.826)	40000/-	33040/-	30000/-	24780/-	20000/-	16520/-
Year 3 (0.751)	30000/-	22530/-	40000/-	30040/-	30000/-	22530/-
Year 4 (0.683)	20000/-	13660/-	40000/-	27320/-	70000/-	47810/-
<u>Total:</u>	<u>130000/-</u>	<u>105590/-</u>	<u>130000/-</u>	<u>100322/-</u>	<u>130000/-</u>	<u>95950/-</u>
NPV		+5590/-		+ 322/-		- 4050/-

-Decision Rule: **Accept the project if NPV is positive.**

- Current Ratio

- It is very useful for assessment of working capital loan
- Normally accepted ratio is 1.33
- It is calculated by dividing the current assets by current liabilities.
- Liability due within a period of one year is treated as current liability.

Role of CA's

- During the implementation of the project

Periodic reports / certifications:

- Work Progress.
- Cost Incurred.
- Sources of Finance used in the Project.
- Act as Lender Independent Engineer.

(Beneficiaries: Borrowers / Lenders)

SWOT Analysis

- **Strength**
- **Weakness**
- **Opportunity**
- **Threat**

Case Study on SWOT Analysis

Patanjali Ayurveda

- **Strengths of Patanjali Ayurveda Limited**
 - **Association with Baba Ramdev**
 - **Strong Sense of Patriotism**
 - **Ayurveda and Herbal Brand**
 - **Penetration Pricing**
 - **E-commerce**
 - **Keeping up with the latest trends**

Case Study on SWOT Analysis

Patanjali Ayurveda

- **Weaknesses of Patanjali Ayurveda Limited**
 - **Over dependence on Baba Ramdev**
 - **Low Number of Manufacturing Plants**
 - **Penetration Pricing Strategy is not viable in the long-term**
 - **Low Distributor Margins**

Case Study on SWOT Analysis

Patanjali Ayurveda

- **Opportunities for Patanjali Ayurveda Limited**
 - **Growth in Demand for Organic Products**
 - **Expansion into the rural market**
 - **Global Expansion**
 - **Strategic Tie-ups**
 - **Diversification**

Case Study on SWOT Analysis

Patanjali Ayurveda

- **Threats for Patanjali Ayurveda Limited**
 - **Competitive Environment of the Indian Market**
 - **Impact of a possible poor reap**
 - **Possibility of a Price War**

Other Practical Aspects

- Credit Rating by Institutions/Banks
- Impact of tax incentives declared by Government.
- Availment of various Government Incentives.

Thank You



आप सब की दोस्ती सात सुरु का साज़ है,
और आप जैसे दोस्तो पर हमे नाज़ है,
चाहे कुछ भी हो जाये ज़िन्दगी में,
दोस्ती कल भी वैसी रहेंगी जैसी आज है!!

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