

Major Project Report
On
Financial Appraisal of the Project Financed by
a Public Sector Bank

Submitted by:
Anushka Sharma
2K22/DMBA/022

Under the Guidance of
Dr. Saurabh Agrawal
Associate Professor



DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road Delhi 110042

CERTIFICATE

This to certify that **Ms. Anushka Sharma**, roll number- **2K22/DMBA/22**, a student at Delhi School of Management Delhi Technological University has worked on a research project title “**Financial Appraisal of the Project Financed by a Public Sector Bank**” in the partial fulfilment of the requirement for the award of the degree of Master in Business Administration program for the academic year 2022-2024.

Signature of Guide

Dr. Saurabh Aggarwal
Associate Professor
Delhi School of Management

DECLARATION

I, **Anushka Sharma**, hereby declare that the major research report titled “**Financial Appraisal of the Project Financed by a public sector bank**” carried out by me and submitted in the partial fulfilment for the award of the degree of Master of Business Administration of the Delhi School of Management, Delhi Technological University during the year 2023-2024. The matter embodied in this report has not been submitted to any other university or institute for the award of any other degree or diploma.

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Anushka Sharma

2K22/DMBA/22

MBA (Finance and Human Resource)

Delhi School of Management, Delhi Technological University

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Anushka Sharma

2K22/DMBA/22

EXECUTIVE SUMMARY

Every business needs money to continue its operations smoothly, and the bank is one of the sources through which this money is obtained. Before financing a project, the bank evaluates it to see if it complies with the bank's requirements. If it does, then the project is approved for financing.

The financial status of a company is one of the most important factors when giving credit facilities for any project. Banks use a variety of methods for financial analysis. However, neither uniformity in evaluation nor established standards for such evaluation exist. Depending on the kind and scale of the project, the role may vary from bank to bank and from project to project within a same bank. However, there are certain significant, shared characteristics of financial evaluation that will be covered in this paper.

Two key financial statements that must be presented with the loan application to the bank are the centre of the financial evaluation. The following financial statements:

1. Balance Sheet.
2. Manufacturing, Trading, and Profit & Loss a/c is also known as profit and loss a/c.

While the profit and loss a/c provide a summary of activities for the operating year, the balance sheet shows the financial status of a company at a certain moment in time (often the closing date of the operating year).

A balance sheet is typically constructed using the "business entity" concept, which treats the company as a distinct legal entity from its promoter with its own assets and obligations. Despite being an asset to the promoter, the capital contribution is a liability for the business. The balance sheet details the assets and liabilities of a company as of the closing date and must also show how these are allocated. Any company's entire assets will always be equal to its total liabilities.

Profit and loss a/c is the statement of working results for the concern's operations for the entire year and is a key sign of how the concern is running its business and its financial outcomes.

A crucial tool in the hands of bankers, financial evaluation serves as the cornerstone of each loan decision they make. Thus, it is crucial that the financial statements provided to the banks be believed. It is preferred that an audited balance sheet and profit and loss statement be provided, as they are typically seen as being more trustworthy.

As the banks are interested in determining the pattern in which the business is being handled from year to year, it is also vital to keep in mind that financial statements from a single year may not

be deemed adequate to develop any opinion on the financial status of a concern. To make year-to-year comparisons of the key financial indicators of a concern, the financial statements of the last three or more years are concurrently evaluated. Thus, 'trend analysis' is conducted after the financial analysis, which takes greater importance since banks may be more receptive to concerns with improving trends but comparably poor financial bases.

Financial analysis of the company who is taking the loan is done through ratio analysis to check various conditions and feasibility of the company.

For projects needing significant financial inputs, such as the building of power plants, pipelines, transportation networks, mining facilities, industrial facilities, and heavy manufacturing plants, project finance is a popular technique of financing employed in capital-intensive sectors.

The value of the net cash flows that come from the implementation of a proposed project are evaluated using a procedure called financial appraisal. Economic evaluations are different from financial appraisals in terms of the depth of their research, the variety of impacts they analyse, and the methods they employ. Investment choices are primarily seen from the standpoint of the company making the investment in a financial analysis. Therefore, it exclusively evaluates how an investment choice directly affects the organization's cash flow. Various techniques have been used to check the profitability of the project

- Payback Period
- Profitability Index
- Average rate of return
- Internal rate of return
- Net Present Value

The project's which has been taken in this research paper is being financed by SBI by checking or measuring the profitability and risk associated with the project and how these risks can be reduced.

Financial evaluation, which primarily results in the feasibility study with capital budgeting calculations and ratio analysis.

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CHAPTER 1- INTRODUCTION

1. Introduction

The financial viability of a project idea hinges on comparing its potential benefits against its anticipated costs, factoring in variables like project scale and the timeframe over which costs and benefits accrue. The aim is to ensure that the returns exceed the initial investment. Several methods are employed to gauge the net benefit or payback:

- Payback analysis focuses solely on cash flows derived from costs and benefits.
- Discounted cash flow considers the time value of future cash flows.
- Internal rate of return establishes fundamental return standards based on the temporal value of money.

Today, most financial assessment tools incorporate Excel functionalities, enabling nearly anyone to evaluate a business proposal financially without necessitating a formal project plan. This capability is particularly advantageous for project managers, allowing them to create both time- and money-based project models. Non-financial experts can then manipulate the model to examine the repercussions of alterations before engaging a third party for a comprehensive plan.

Payback analysis serves as the cornerstone of financial scrutiny, centering on the revenue generated from the initial investment. For instance, if a \$40 million investment yields \$5 million in revenue annually, the investment will be recouped in 8 years. However, this method may overlook financial realities if significant costs, such as disposal or decommissioning expenses, are excluded.

Discounting adjusts for the time value of cash flow by comparing the investment return against what the same sum of money would earn in a bank account over the same period. The internal rate of return (IRR) method determines the discount rate at which the net present value (NPV) becomes zero. While IRR can obviate the need to select a discount rate for a project, it may face challenges in volatile environments like financial crises where discount rates fluctuate rapidly.

Technical feasibility assessments ascertain whether the proposed equipment and machinery can meet the intended output within specified requirements. This evaluation considers factors such as land availability, raw material supply, access to vital inputs like water and power, maintenance facilities, compliance with environmental regulations, and the availability of skilled labour. International cooperation agreements must adhere to explicit norms and conditions.

1.1 Public Sector Banks

- Public Sector Banks (PSBs) have been an integral part of India's financial landscape for decades, contributing to the stability and growth of the economy. With a history spanning over many years, PSBs have played a pivotal role in shaping the nation's financial sector.
- Since their inception, PSBs have been committed to providing stability to the money market and supporting economic recovery. Back in the 1860s, during the early stages of India's economic revival, PSBs, in their various forms, served as key channels for channeling funds to support both local and international trade. They facilitated private credit for European and Indian merchants and played a crucial role in financing public projects across the three British India Presidencies.
- The adaptability of PSBs to changing economic conditions and global dynamics has been a cornerstone of their success. During challenging economic periods, PSBs adjusted their operational guidelines to prevent the closure of viable businesses and sustained their operations through ethical banking practices.
- To capitalize on opportunities arising from economic growth, PSBs expanded their presence by establishing branches, sub-branch offices, treasury pay offices, and outreach centers across the country. Their focus on providing prompt and customer-friendly services has been instrumental in delivering optimal financial services to a diverse customer base.
- The success of PSBs can be attributed to their competent management teams operating within a well-defined organizational framework. Their solid financial position, adherence to banking traditions, and commitment to high ethical standards have earned them a distinguished reputation in the financial sector.
- Despite receiving economic advice from various stakeholders, including government officials and industry experts, PSBs have maintained a broad perspective in their decision-making process. They have adopted modern management techniques emphasizing accountability and shareholder consideration to ensure sustainable growth and profitability.

- Asset liability management and prudent practices have been integral to PSBs' operations, ensuring the fulfillment of client commitments while safeguarding their interests. Their track record of success, respectable profit margins, and dividend payouts have contributed to customer satisfaction and trust in the banking system.
- As PSBs continue to navigate new challenges in the 21st century, they remain committed to upholding their rich traditions while embracing innovation and technology to meet the evolving needs of their customers and the economy.

PURPOSE STATEMENT:

With a steadfast commitment to advancing the public sector banking policy, our aim is to maintain leadership in driving growth and diversification within the banking sector. They are dedicated to upholding their position as a premier provider of financial services in India, renowned for their unwavering standards and significant national presence.

As a Public Sector Bank, their goal is to achieve excellence in efficiency, professionalism, and institutional values, while spearheading development banking initiatives nationwide. They strive to enhance shareholder value through consistent profitability per share.

They foster a culture of respect, collaboration, and continuous learning, creating a supportive work environment and offering ongoing educational opportunities for our employees to thrive and contribute to our shared success.

VALUES

- A. Providing exceptional customer service
- B. Offering profitable services
- C. Focusing on specific clientele
- D. Demonstrating unwavering loyalty to the bank in all interactions
- E. Encouraging team creativity and risk-taking in building relationships
- F. Upholding a commitment to continuous education and integrity
- G. Ensuring transparency and discipline in policies and systems

1.2 Background

The significance of Project Financing:

Project financing serves as the bridge between visionary ideas and financial feasibility. It facilitates the realization of large-scale infrastructure projects, ensuring the continuous operation of essential facilities such as power plants, and enables the transformation of landscapes. By establishing a dedicated entity solely for the project, project financing effectively isolates risks from the sponsor's financial matters, akin to summoning a superhero tasked with ensuring the project's success.

Public Sector Banks and Their Role:

Public Sector Banks, including stalwarts like the State Bank of India (SBI), play a pivotal role in project financing within India's financial landscape. SBI stands as a cornerstone institution, providing crucial funding for a wide array of projects ranging from highways to power grids. Its contributions extend beyond mere financial support; SBI fuels progress, sparks innovation, and ensures that the nation's infrastructure aligns with its ambitious development goals.

Significance of Financial Evaluation:

Conducting thorough financial appraisal is essential for evaluating the feasibility, sustainability, and associated risks of projects financed by institutions like SBI. This process is akin to donning a detective hat and meticulously examining every facet of the project with precision. It involves comprehensive forecasting, risk assessment, and resilience evaluation to ascertain not only the project's profitability but also its capability to fulfill commitments and withstand unforeseen challenges.

Challenges and Opportunities:

Project funding entails understanding complex structures, being prepared for significant financial investments, and comprehending the risks inherent in long-term projects. Regulatory hurdles, environmental considerations, delays, and unforeseen costs present challenges that can impact project viability. However, within these challenges lie opportunities for creativity, teamwork, and growth. Leveraging the expertise and financial capabilities of institutions like SBI, we can navigate these challenges and seize opportunities for innovation and collaboration. Together, we can chart a course towards success, shaping a future characterized by progress and prosperity.

1.3 Problem Statement

While project financing is instrumental in driving development, there exists a discernible gap in understanding how effectively Public Sector Banks (PSBs) evaluate projects. This lack of insight hampers the efficient allocation of resources, effective risk management, and optimization of returns. Hence, there is an imperative to comprehensively analyze the project financing approaches of PSBs to identify the factors influencing project outcomes. By refining financial assessment practices, we can enhance results not only for PSBs but also for all stakeholders involved in the projects.

1.4 Research Objectives

Project financial assessment

Associated Goals

1. To Get to know about projects funded by PSB.
2. To understand the project financing rules of PSB.
3. To learn about the risks involved in project finance.
4. To assess projects using tools.
5. To familiarize yourself with the bank's protocols, for handling customer loan repayment defaults

1.5 Scope of Study

- 1. Geographic Focus:** The research primarily concentrates on initiatives funded by Public Sector Banks (PSBs) in various regions of India.
- 2. Industry Focus:** Encompassing a diverse range of sectors such as infrastructure (roads, bridges, airports), energy (power plants, renewable energy), manufacturing, real estate, and other industries supported by PSBs.
- 3. Timeframe:** The analysis will span over a period of five to ten years to comprehensively evaluate financial assessment methods and project performance trends.

4. Financial Appraisal Techniques: The research will delve into methodologies employed by PSBs such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Sensitivity Analysis to effectively assess project feasibility and risk.

5. Metrics and Indicators: Evaluation will encompass measures such as profitability (ROE, ROA), liquidity (current ratio, quick ratio), leverage (debt to equity ratio), and efficiency (asset turnover, inventory turnover). Additionally, non-financial aspects such as environmental impact adherence and socio-economic factors will be scrutinized.

6. Stakeholder Perspectives: Opinions from various stakeholders including PSB representatives, project sponsors, investors, regulatory bodies, and local communities will be gathered through interviews or surveys. These insights will provide a comprehensive understanding of stakeholder views on financial assessment practices and project outcomes.

CHAPTER 2- LITERATURE REVIEW

Finance for Projects

“The Euro Tunnel and Euro Disneyland serve as prominent examples of successful corporate ventures that have thrived due to the innovative funding model known as project finance. Throughout history, various large-scale natural resource projects such as pipelines, refineries, electric-generating facilities, and hydropower projects have also embraced project financing, leveraging a meticulously planned combination of financing mechanisms.

The demand for project financing is steadily increasing, particularly as an alternative to conventional funding approaches for significant infrastructure projects on a global scale. This method proves especially effective for financing the development and execution of specific projects. Unlike traditional financing methods, project finance places greater emphasis on the projected profits generated by the project itself rather than solely relying on the overall creditworthiness of the project sponsor.

A significant advantage of project financing lies in the fact that lenders primarily evaluate the cash flows and earnings generated by the project as the primary sources for loan repayment and equity servicing. Furthermore, the assets of the project act as collateral within a well-defined risk framework, providing an added layer of security.”

According to “Yescombe, E. R. (2002)”

PROJECT FINANCING PROCESS

Potential Analysis

In the process of project financing, one of the initial steps usually involves hiring a technical consultant. This expert is responsible for conducting a feasibility study to determine the project's viability for successful financing. Following this, potential lenders frequently deploy their team of independent analysts to conduct an unbiased feasibility assessment before making funding decisions for the project.

According to “Morris, P. W., & Morris, P. W”

Lawful Format

Project sponsors utilize various legal structures to protect their interests in a project, with the choice of structure influenced by factors such as required equity investment, management considerations, tax benefits, and the distribution of tax advantages to investors.

The three primary project ownership structures are as follows:

1. Companies:

This represents the simplest ownership arrangement for a project. A special purpose company can be established either in the jurisdiction where the project is situated or in another jurisdiction, while still operating within the project's jurisdiction.

2. Limited Partnerships:

Investors have the option to establish a general partnership, wherein the partnership is recognized as a distinct legal entity in most jurisdictions. It can oversee, manage, and negotiate financial arrangements for the project under its own name. Partners determine their personal tax liability based on their share of the partnership's financial outcomes. Limited partnerships are often preferred when significant tax benefits are associated with the project. To mitigate risks, sponsors may establish wholly-owned, special-purpose subsidiaries to serve as general partners in partnerships, given the joint and several liability of general partners for all partnership obligations.

3. Limited Liability Companies (LLCs):

In a partnership, limited partners have fewer ownership and control responsibilities compared to general partners. Limited partners are liable only for their proportionate share of the partnership's obligations and liabilities. When backers lack sufficient funds and the project necessitates substantial external ownership, a limited partnership can serve as an effective financing mechanism for the project.

According to “Yescombe, E. R. (2002)”

REASONS FOR PROJECT FAILURE

To comprehend the apprehensions of project lenders effectively, it is essential to review and consider typical reasons for project failure, such as:

- Delays in project completion, resulting in elevated construction finance costs, postponed income flow, and increased capital expenses.
- Contractor insolvency.
- Government interference.
- Escalation in raw material costs or scarcity.
- Technological obsolescence of facilities and reduced plant capacity.

According to “Tan, W. (2007) Routledge.”

CONTRACT RISKS

Project financing involves obtaining a loan to support a venture, such, as infrastructure projects like mines, toll roads, railways, pipelines, power plants, ships, hospitals or correctional facilities. The repayment of the loan is facilitated through the revenue generated by the project. In contrast to financing approaches project finance heavily relies on the assets and income streams of the project to secure and repay the loan. Under this framework lenders usually have no access to assets belonging to the borrower or project sponsors that're unrelated, to the specific project.

Risk management plays a role, in project finance as lenders use strategies to reduce risks associated with projects. Effective risk management is essential for the success of project finance.

When a project is funded without recourse or with remedies lenders face risks. If a key aspect of the project fails lenders may suffer losses since loan repayment depends on the project's performance. Moreover, assets specific, to the project may have limited value beyond the project itself even if they could be sold in the market. Therefore, financiers and their advisors implement measures to minimize or eliminate project risks, which often result in increased costs and longer processing times for this financing method.

According to “Morris, P. W., & Morris, P. W”

“PROCESS FOR MINIMISING RISK

For financiers, it's all about ensuring the project's financial well-being by steering clear of potential setbacks. They're particularly concerned about things like:

1. Delays, going over budget, or the project not getting finished.
2. Falling short of the expected performance levels.
3. Not making enough money to pay off debts.
4. Wrapping up the project too soon, throwing financial plans off course.”

According to “Morris, P. W., & Morris, P. W”

“To tackle these risks, we follow four crucial steps:

1. We start by digging into all possible risks as we kick off the project, ensuring we've got a clear picture.
2. Then, we share out these risks among everyone involved, making sure everyone knows their part.
3. After that, we put in place plans to handle these risks smoothly, setting up protocols for effective management.
4. And if we find some risks are just part of the deal, lenders might tweak the loan's interest rate to accommodate them.”

According to “Morris, P. W., & Morris, P. W”

Threat of Finish:

“When assigning risks to each project, careful consideration must be given to the allocation of completion risk, which is the most significant concern for financiers. Labor disputes, technical complexities, and construction challenges heighten the risk of delays, cost overruns, or project abandonment. These delays or cost escalations can result in postponed loan repayments and may jeopardize contracts for the sale of the project's output and the procurement of raw materials.

To mitigate completion risk before funding, common methods include:

- (a) Obtaining completion guarantees, where sponsors commit to covering all expenses and liquidated damages if project completion exceeds the deadline.

- (b) Requiring sponsors to inject equity into the project to ensure their substantial financial involvement in its success.
- (c) Insisting on the project being executed by reputable and financially stable contractors under fixed-price, fixed-time turnkey contracts.
- (d) Seeking evaluations of the project's planning and execution from impartial experts.

During the loan tenure, strategies for managing completion risk involve disbursing additional funds in the pre-completion phase contingent upon certifications from independent experts verifying that construction progresses as planned.”

According to “Yescombe, E. R. (2002)”

Operational Risk

These significant risks can really disrupt the projects situation either by increasing expenses or causing challenges, in meeting anticipated standards. It often stems from factors such as the team’s expertise and resourcefulness the smoothness of operations or any talent shortages. To pre-empt these challenges from the start we ensure that a reliable and financially secure team leads the way, supported by performance guarantees. Throughout the duration of the loan we closely monitor operations through record keeping. Additionally, we handle our finances prudently by allocating earnings to an account, for authorized expenditures.

According to “Yescombe, E. R. (2002)”

Market Risk

Paying back the loan depends on our ability to sell what we make for cash. Market risk pops up when we're unsure if there's a market for our products at a price that covers the loan.

One savvy move to handle this risk before getting financing is to strike a solid deal with a trustworthy buyer. This gives us confidence that there's a market and a price that'll help us pay off the loan when the time comes. At the heart of these risks are the folks who are actually taking out the loans or backing the project. Their knack for navigating the project's twists and turns – from getting it off the ground to keeping it running smoothly – is crucial. A major worry is whether they can really deliver on their promises to see the project through. To ease these concerns and ensure they can pitch in if things get tough, lenders need to trust in their abilities, their track record in similar ventures, and their financial stability.

According to “Yescombe, E. R. (2002)”

Technical Risk

Technical Risk; This type of risk involves the details that could cause issues, such, as unexpected hurdles during the setup and operation of the project's equipment and devices. Investors typically prefer to stick with proven technologies than venturing into territory. It's wise to seek advice from tech experts before committing to funding as it helps us prevent difficulties. To address these challenges during the loan period we allocate funds for maintenance. We allocate a portion of the profits to ensure that there are funds, for future maintenance needs.

According to “Yescombe, E. R. (2002)”

TOOLS FOR PROJECT EVALUATION

Capital budgeting is pivotal for businesses aiming to enhance owner wealth through efficient resource allocation to profitable projects. Both traditional and non-traditional evaluation tools are utilized in finance and financial management for project assessment. Traditional methods like the Payback Period, Net Present Value (NPV), and Internal Rate of Return (IRR) offer insights into project profitability and attractiveness. Non-traditional approaches such as the Modified Internal Rate of Return (MIRR) and Profitability Index provide alternative perspectives on project viability. Time-adjusted techniques, including discounted cash flow analysis, enhance accuracy by considering the timing of cash flows. Overall, employing a diverse set of evaluation tools is crucial for making informed investment decisions and maximizing shareholder wealth.

According to “Samithambe Senthilnathan, E.R. (2020)”

Net Present Value (NPV) Approach

Evaluating innovation project economics is crucial for resource allocation and strategic decisions. This review focuses on the Net Present Value (NPV) approach and its alternatives. NPV, though widely used, faces limitations like sensitivity to assumptions. Researchers propose methods like scenario analysis to address these. Alternatives like Internal Rate of Return (IRR) offer complementary insights. Effective use of these techniques guides decision-making and resource allocation for innovation projects, facilitating sustainable growth.

According to “OndĚej Źiřlavsky,E.R.(2014)”

Internal Rate of return (IRR)

The Internal Rate of Return (IRR) has been widely used for investment decisions, but it suffers from serious flaws, including multiple IRRs, incompatibility with NPV, and issues with variable costs of capital. Economists and management scientists have endeavored to address these shortcomings. This article proposes a novel solution by introducing the concept of the average internal rate of return, derived from the arithmetic mean of one-period return rates implicit in a project. This measure resolves complexities associated with traditional IRR calculations, eliminates complex-valued numbers, and aligns project rankings with market-based principles. The traditional IRR is encapsulated as a special case within this new framework.

According to “Carlo Alberto Magni, E.R.(2010)

Public Sector Banks and their use of ratios

The role of public sector banks is pivotal in the financial system, with various committees and reforms shaping their operations over time. Reports like those from the Narasimham Committee and others have driven transformative changes, enhancing governance and operational efficiency. Assessing bank performance is crucial, often through comparative analysis between public and private sector banks. These studies focus on key indicators like liquidity, profitability, and asset quality to gauge effectiveness. Non-performing asset management is critical, with private banks often outperforming public ones in this regard. Empirical studies rely on secondary data to analyze trends and inform policy decisions. In summary, rigorous analysis provides insights into bank stability and guides efforts for a resilient and competitive banking sector.

According to “Piyush Gupta, E.R. (2015)”

CHAPTER-3

RESEARCH METHODOLOGY

3.1 Purpose of the Study

In the world of finance, the project finance model is quite unique. It sets up a special legal entity just for the project, supported by loans that don't put too much risk on the lender – a feature you don't often see in other financing approaches. Despite tough times like the Asian financial crisis, project finance has been gaining ground lately, especially in public-private partnership projects, especially in developing nations.

Project finance brings some special perks to the table for project managers that other funding methods don't offer. This study aims to dig into how different factors impact the way we handle risks in projects and how the way we fund projects affects these processes.

3.2 Data Collection and Instrument

This report is mainly concentrated on using data to enhance the research efforts by making use of existing information. This approach allowed me to examine a range of data that already existed thereby improving the thoroughness and impact of our inquiry. Various methods were used, incorporating;

1. Engaging in interviews with both customers and bank advisors to gain valuable insights.
2. Scrutinizing project reports to glean further understanding and insights into our subject matter.
3. Utilizing various project evaluation techniques such as:
 - Determining the Internal Rate of Return (IRR)
 - Assessing the Net Present Value (NPV)
 - Exploring the Profitability Index (PI)
 - Conducting comprehensive ratio analysis for a holistic perspective.

I plan to use these approaches to gather data that will allow me to make conclusions and gain valuable insights, for this report.

CHAPTER 4: DATA ANALYSIS

Project Particulars:

Project Cost		Rs 221.41 lakhs
Employment potential		30 employees
Debt Service coverage ratio		2.08
Date of the incorporation:		12 th Feb 2023

Cost of the Project:

Cost of the project	Amount(Lakhs)
Building	25
land	22
Machinery	83.38
Electrification	6.5
Electricity Deposit	5
Preliminary Expenses	
Technical know how	5.00
Personnel training	2.00
Patterns	5.00
Net Working Captial	67.53
Total	221.41

Table 1

Sources of Finance:

Means of finances	Amount in Lakhs
Term loan	102.5
Working Capital loan	50
Own Contribution	51.38
Margin Money for working Capital	17.53
Total	221.41

Table 2

Analyzing finances

To assess a project's health, it is crucial to review its funding origins to guarantee seamless operations throughout its duration.

4.1 Financial Ratios

Two key aspects, in this evaluation include the projects funding setup and its ability to promptly meet term commitments.

1. **Liquidity ratios:** They are also referred to as solvency ratios. Liquidity Ratios play a crucial role in the financial evaluation of a project. They assess the project's capability to manage immediate financial obligations as they arise. While profitability is important, maintaining sufficient liquidity is equally vital for the project's sustainability.

Key liquidity ratios such as the current ratio and quick ratio provide insights into the project's short-term financial stability. Balancing profitability with liquidity ensures prudent financial management and enhances the project's chances of success.

Current Ratio: "The current ratio denotes the ratio of total current assets to total current liabilities." It's calculated using:

$$(a) \quad \text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Particulars	2018	2019	2020	2021	2022
Current assets	91.47	101.7	112.8	129	145.3
Current liabilities	144.3	127.7	121.6	96.1	80.09
Current ratio	0.634	0.767	0.927	1.34	1.813

Table 3 Current Ratio

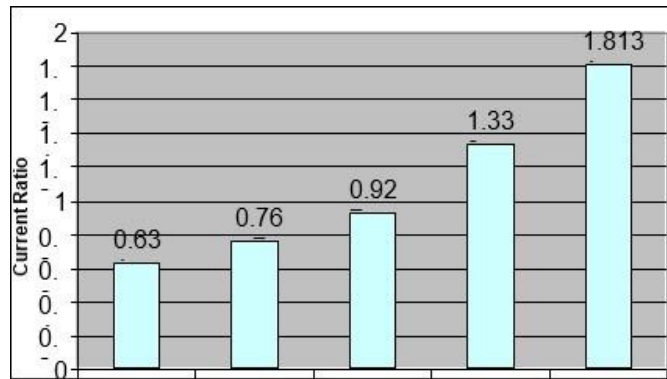


Figure 2 Bar Graph of Current Ratio

The process entails evaluating assets expected to be converted into cash to meet short-term obligations. A desirable current ratio is 2:1. Despite a less than perfect current ratio, the company seems capable of fulfilling current obligations, as indicated in the provided chart. The upward trend in the current ratio signifies the company's capacity to cover short-term liabilities, maintaining liquidity even after clearing all current debts.

(b) Acid test or quick ratio: “This liquidity indicator is created by dividing current liabilities by current assets, less inventories and prepayments. The fast ratio removes inventories from current assets since they are not entirely liquid (i.e., they cannot be swiftly turned into cash). Only assets that can easily be turned into cash are included in the fast ratio, making it a more accurate measure of liquidity. It is sometimes referred to as the "quick ratio" since it evaluates how fast a company can turn its assets into cash to pay its current obligations”.

Particulars	2018	2019	2020	2021	2022
Quick assets	60.47	67.65	75.28	87.47	99.9
Current liabilities	144.3	127.66	121.6	96.05	80.09
Quick ratio	0.534	0.53	0.62	0.911	1.247

Table 4 Quick Ratio

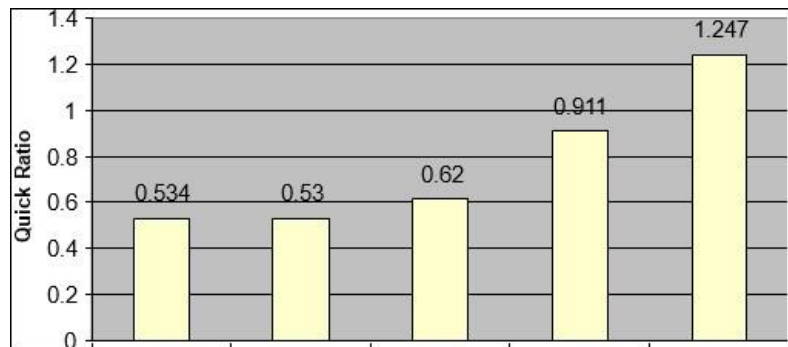


Figure 3 Bar Graph of Quick Ratio

Interpretation: The acid test ratio serves as a reliable metric for assessing a company's capacity to meet short-term liabilities, often regarded as the premier gauge of liquidity. A ratio of 1:1 is typically considered adequate for covering all current obligations. The upward trajectory in the acid test ratio for the specified business suggests its ability to fulfil immediate short-term requirements.

2) Capital Structure Ratio: Long term lenders and creditors assess a company's well-being, by looking at its ability to meet term financial obligations, such as repaying principal and interest on time and paying off the principal amount when due. The use of leverage and capital structure ratios helps in evaluating a company's term stability.

- **Debt to equity ratio:** This ratio provides a snapshot of how debt a company owes in comparison to the ownership held by shareholders. It allows us to grasp the equilibrium between a company's debts, to creditors and its shareholders holdings. Calculating the Debt to Equity Ratio involves:

$$\text{Debt to Equity} = \frac{\text{Long term Borrowings}}{\text{Share holder equity}}$$

Particulars	2018	2019	2020	2021	2022
Debt	82	61.5	41	20.1	0
Equity	56.4	54.1	56.9	68.9	84.5
Debt equity ratio	1.45	1.14	0.72	0.29	0

Table 5 Debt-Equity Ratio

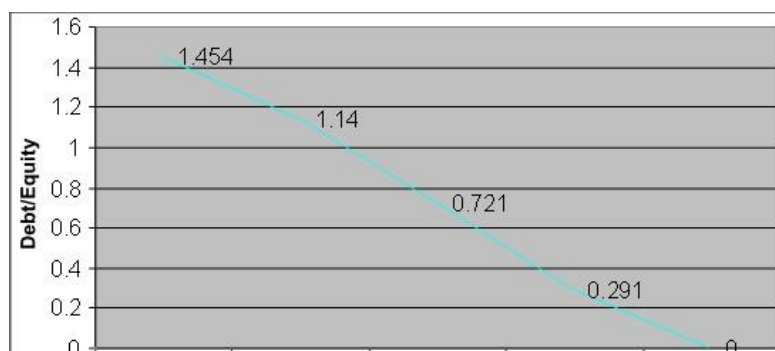


Figure 4 Line Chart of Debt/Equity

Interpretation: When delving into a company’s financials a key tool we often rely on is the debt, to equity ratio. It functions as an indicator revealing the proportion of the company’s funding sourced from loans versus what the owners have put in. A high ratio indicates reliance on borrowed funds while a low ratio suggests ownership investment.

This metric holds importance for creditors as it assists them in assessing the security of their investments. Observing the debt, to equity ratio plummeting to zero by 2022 serves as an indication that the owners have made investments in the business.

3) Sales-related profitability ratios: A company is in good shape if it's making at least 1 rupee in profit for every rupee of sales. But if sales aren't hitting the mark, it can make it tricky to cover the bills and give back to the shareholders. Net margin, also referred to as net profit margin: This ratio measures the relationship between a company's net income and sales. The formula for calculating this ratio varies based on the definition of net profit used:

$$\text{Net Profit Margin} = \frac{\text{Earnings after tax}}{\text{Net sales}}$$

Particulars	2018	2019	2020	2021	2022
Earnings after tax	10.68	17.82	27.05	35.56	43.75
Net sales	265.49	292.04	321.24	353.36	388.7
Net profit margin	4.02%	6.10%	8.42%	10.06%	11.25%

Table 6 Net Profit Margin

Interpretation: The net profit margin serves as a crucial indicator of a company's management effectiveness. It encompasses various financial aspects, including revenue, operational costs, borrowing expenses, and shareholder returns. A robust net profit margin

reflects the company's ability to generate strong returns and navigate economic fluctuations effectively. Conversely, a decline in the margin indicates potential challenges to profitability.

Observing an upward trend in our business's net profit margin is encouraging. It signifies increasing demand for our products and an overall enhancement in our financial well-being.

4) Investment-related profitability ratios: Return on Investments (ROI) is like a report card for how well management is making use of resources to bring in profits. It's based on three main ideas: assets, capital employed, and shareholders' equity. Each concept corresponds to a specific type of ROI:

- **Return on Assets (ROA):** This ratio, also known as the profitability ratio, measures the relationship between net earnings and assets.

Calculation of ROA :
$$ROA = \frac{\text{Profit After Tax}}{\text{Average Total Assets}}$$

Particulars	2018	2019	2020	2021	2022
Earnings after tax	10.68	17.82	27.05	35.56	43.75
Average total assets	208.4	199.5	195.9	200.54	208.34
ROA	5.13%	8.93%	13.81%	17.73%	20.99%

Table 7 Return on Assets

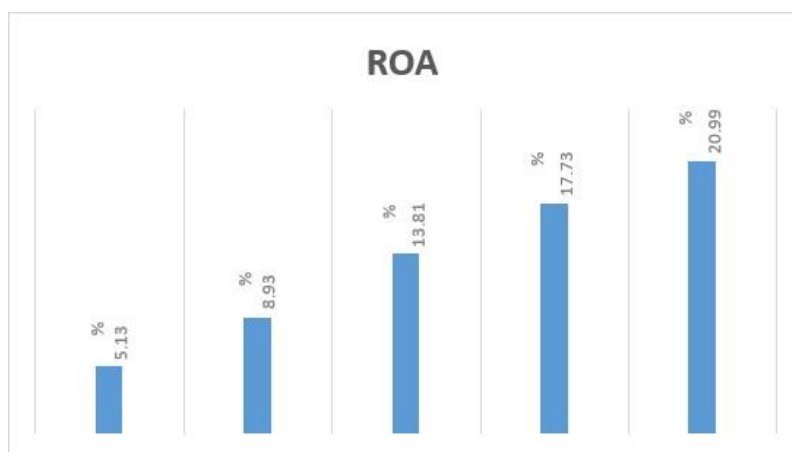


Figure 5 Bar Graph of ROA

Interpretation: The positive Return on Invested Assets (ROA) indicates efficient resource utilization by the company.

- **Return on Capital Employed (ROCE):** It acts as a lens through which we scrutinize profits in relation to the total capital invested. Capital employed encompasses the entirety of funds contributed by both company owners and lenders for the long-term. In essence, it prompts the question: "How effectively are we utilizing our available capital to generate additional returns?" ROCE serves as a measure to gauge our efficiency in leveraging the capital tied up in the business for optimal profitability.

The formula for calculating ROCE is:
$$\text{ROCE} = \frac{\text{EBIT}}{\text{Average Capital Employed}}$$

Particulars	2018	2019	2020	2021	2022
EBIT	34.82	42.24	52.66	62.04	70.99
Total capital employed	203.39	199.54	195.9	200.54	208.34
ROCE	17.20%	21.16%	28.92%	30.90%	34.07%

Table 8 Return on Capital Employed

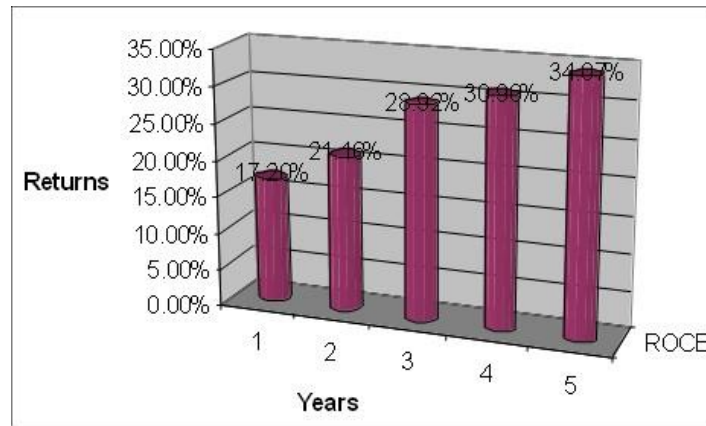


Figure 6 3D Bar Graph of ROCE

Interpretation: The capital utilization ratio provides information about how profitable our long-term funding sources are. A higher ROCE ratio, as observed in the table compared to previous years, shows improved efficiency in utilizing company’s capital. The increasing trend is a sign, for the company showing that we are getting better at using our resources effectively.

4.2 Capital Investment Evaluation Methods:

When considering project selection, it's imperative to rely on thorough financial assessment rather than intuition alone. The success of a project hinges significantly on the criteria employed from the outset.

Discounted Cash Flow (DCF) methods stand as a prevalent choice for project evaluation, widely utilized in both public and commercial sectors. Among these methods, the Internal Rate of Return (IRR) typically holds prominence. However, given the frequent disparities between projected and actual returns based on IRR, it becomes essential to explore alternative evaluation criteria to accommodate unique circumstances.

DCF methods enjoy global favour for their efficacy in project evaluation, offering a comprehensive approach to assess the financial viability of projects.

- 1) Payback Period (PBP) Method:** This method considers a project acceptable if it has a minimal payback period. The payback period represents the shortest time required to recover the initial investment, serving as a quick tool for decision-making and risk reduction for small investments. However, the economic concepts

underlying the PBP approach are less reliable than those in methods like Net Present Value (NPV). The primary drawback of the PBP method is its insensitivity to timing changes within the payback period and its disregard for cash flows beyond that period. Additionally, it lacks a natural benchmark for evaluating other initiatives. These limitations persist in the discounted payback period approach, although it provides a more precise timeframe for recovering the initial cost and can be effectively combined with the standard PBP method.

$$\text{Pay Back Period} = \frac{\text{Total Cash Outflow}}{\text{Annual Cash Inflow}}$$

Year	Cash Flows (in lakhs)	Cumulative cash flows
1	35.66	35.66
2	36.92	72.58
3	41.72	114.3
4	46.86	161.16
5	52.5	213.66

Table 9 Pay Back Period

The recovery of the investment is in the 3rd year and 0.64 month.

Interpretation: The investment recovers within the third year and 0.64 months. The payback period, rather than evaluating investment returns, measures the duration to recover the initial investment. With the payback period shorter than the project's completion time, the project can advance. This suggests the company can meet its obligations with earnings, confirming the project's feasibility.

- 2) **Net Present Value:** To determine the present value of a project's cash flows, one uses the required rate of return to cover the cost of capital as a discount rate. The result is the net present value of the undertaking. "If a project's capital cost is less than or equal to the net present value of its cash flows throughout its expected lifetime, then it is economically viable". When choosing between several projects that are mutually incompatible and there are no financial restrictions, this strategy is quite helpful. The biggest rewards will come from choosing the projects with the largest positive NPV. However, this technique just serves to assess a project's acceptability; it does not suggest which project would be the best given the available funds. Since the 'scale' of investment is not taken into consideration when calculating NPV, it is difficult to rate several suitable projects.

Year	Cash Flows(lakhs)	PV factor @10%	Total present value
1	35.66	0.909	32.414
2	36.92	0.826	30.495
3	41.72	0.751	31.29
4	46.86	0.683	32.005
5	52.5	0.621	32.603
Total PV		-	158.807
Less- Initial outlay			152.5
Net Present Value	-	-	6.307

Table 10 NPV

Interpretation: An investment proposal should be approved if its net present value (NPV) is positive (NPV > 0) and rejected if it is negative (NPV < 0), following the acceptance criteria of the NPV method. Positive NPVs contribute to boosting shareholders' net wealth, thereby potentially elevating the value of a company's shares. A positive NPV indicates that the project's cash inflows exceed the opportunity cost of capital. As the project's Net Present Value is positive, the proposal may be approved.

- 3) Profitability Index:** One of the many names for the profitability index is the benefit-cost ratio. It's a lot like the net present value approach. The net present value (NPV) is calculated by subtracting the cash outflows from the cash inflows, whereas the profitability index technique calculates the “NPV of the returns per rupee invested”. To define it, we may look at the ratio between cash inflows and cash outflows at the present moment. Using the following equation:

$$\text{Profitability Index} = \frac{\text{Present Value of Cash Inflow}}{\text{Present Value of Cash Outflow}}$$

Profitability Index = 1.041

- 4) Internal Rate of Return (IRR):** The IRR is the rate of return at which the Net Present Value (NPV) of a project equals zero. Acceptability of a project is determined by whether its IRR exceeds the cost of capital. The IRR method allows for the comparison of multiple related projects, aiding in the selection of the one with the highest IRR. However, this method is inadequate when choosing between mutually exclusive projects. It assumes that a project's net cash flows will initially be negative before becoming positive for the rest of its lifespan, and vice versa.

However, this assumption does not always hold true, leading to different IRRs for the same project and complicating project selection. Additionally, relying solely on the highest IRR to choose a project without considering project-specific risk factors can often be misleading.

Year	Cash flows	Weights	Weighted average CF's
1	35.66	5	178.3
2	36.92	4	147.68
3	41.72	3	125.16
4	46.86	2	93.72
5	52.5	1	52.5
Total		15	597.36
Weighted average Cost =			39.824

Table 11 Weighted Average Cost

$$\text{Pay Back Period} = \frac{\text{Initial Investment}}{\text{Weighted average cost}}$$

Payback period = 3.8 Years

Year	CashFlows(lakh s)	PV factor @10%	Present value	PV factor @ 12%	Present value
1	35.66	0.909	32.414	0.893	31.84
2	36.92	0.826	30.495	0.797	29.43
3	41.72	0.751	31.29	0.712	29.7
4	46.86	0.683	32.005	0.636	29.8
5	52.5	0.621	32.603	0.567	29.76
Total PV		-	158.807		150.53
Less- Initial outlay			152.5		152.53
Net Present Value	-	-	6.307		-1.97
IRR	11.52398212				

Table 12 Internal Rate of Return

4.3 PSB's protocol for Handling Repayment Issues

PSB's protocol for handling repayment issues follows a structured process:

1. Initial Notice: Initially, PSBs send a notice to clients requesting settlement of their obligations.
2. Legal Notice: If there are no changes in repayment behavior following the initial notice, the bank issues a legal notice instructing clients to fulfill their payment obligations.
3. Compromise Agreement: As an alternative, a compromise agreement is proposed. This involves all parties discussing options and deciding on the next steps, such as making payments, pursuing legal action, or selling assets.

Analysis:

- The analysis focuses on assessing the project's potential profitability.
- Ratio analysis indicates the company's strong liquidity position and consistent adherence to standard ratios.
- The decreasing debt-to-equity ratio over the past years reflects prudent management of borrowings by the company.
- Improvements in both sales and capital utilization profit ratios suggest enhanced resource efficiency.
- The increasing debt service coverage ratio demonstrates the company's ability to meet loan repayment obligations throughout the project's debt tenure.
- The repayment timeframe aligns with the project's debt life.
- The net present value remains negative until the project generates cash inflows exceeding the opportunity cost of capital. Approval may be granted as the project's Net Present Value is positive.
- With the project's Internal Rate of Return surpassing the threshold, it may proceed.

CHAPTER 5: FINDINGS AND CONCLUSION

FINDINGS

A Public Sector Bank strictly adheres to the RBI's Project Finance Sanctioning Regulations for projects sanctioned by RASMECC (Retail Assets Small and Medium Enterprises Credit Cell).

- The bank exclusively relies on term loans for project financing, with the interest rate determined based on the Bank's Advance Rate and the specific project.
- If clients fail to pay interest three months after the loan's due date, the term loan is categorized as a non-performing asset.
- After an additional three-month period of overdue interest, the loan is classified as a questionable asset, with the interest rate reduced to zero.
- Subsequent to another three months of delinquency, the loan is considered a loss asset, and the bank writes off the account.
- Any company initiating a new project must secure insurance coverage with the same bank.

DRAWBACKS

In scenarios where investments and returns seem straightforward, traditional financial appraisal methods are typically reliable. However, when dealing with the complexities of the real world, quantitative and traditional approaches can encounter challenges:

- Profit Uncertainty: There's no guarantee that expected profits will materialize as planned.
- Non-Financial Advantages: Projects often offer benefits beyond monetary gains, such as reductions in labour costs.
- Strategic Initiatives: Quantifying monetary returns can prove challenging for strategic projects, like implementing new computer systems to enhance organizational connectivity.
- Non-Profit Entities: Evaluating projects becomes more intricate for non-profit entities, such as government bodies or charities, where financial gains may not be the primary focus.

RECOMMENDATIONS

Banks play a crucial role in both risk management and fostering economic growth, underscoring the importance of integrating sensitivity analysis and social cost-benefit evaluations into their project assessments. While current evaluations predominantly focus on financial, technical, and commercial factors, it's imperative for banks to also scrutinize security availability and the sincerity of borrowers and guarantors to mitigate potential losses effectively.

When evaluating a project for bank funding, several key factors must be meticulously assessed to ascertain its feasibility and likelihood of success. Here are some recommendations:

1. Conduct a comprehensive feasibility study: Delve deeply into the project's economic viability, budget adherence, and timeliness, taking into account market demand, technical feasibility, financial viability, and legal compliance.
2. Develop a detailed business plan: Craft a comprehensive business plan delineating the project's objectives, strategies, and budget. Provide a detailed description of the project, target market, marketing and sales plans, operational expenses, and revenue estimates.
3. Evaluate project risks: Identify and evaluate various risks, including market, operational, financial, and regulatory risks. Consider potential impacts of external factors such as regulatory changes and economic fluctuations.
4. Assess the project team: Ensure that the project team possesses the requisite expertise and experience to execute the project successfully. Verify references and assess past performance.
5. Determine fair market value: Accurately assess the project's fair market value to ascertain the required financing amount.

CONCLUSION

Public Sector Banks (PSBs) have garnered valuable insights into project financing through their execution processes, contributing significantly to the understanding of project funding within the nationalized banking sector. Project financing plays a pivotal role in enhancing the revenue generation capabilities of PSBs.

However, challenges emerge when PSBs engage in project funding, as they may encounter limitations in applying all components or comprehensively covering every aspect for each project type. It is imperative to acknowledge the strides made by PSBs, including the State Bank of India, in the realm of project financing. Thanks to collaborative efforts between management and staff, PSBs have made notable advancements in key areas.

Ultimately, conducting a thorough assessment of projects before providing funding is essential for ensuring success in project finance endeavors undertaken by PSBs.

REFERENCES

- Esty, B. (2014). An overview of project finance and infrastructure finance 2014 update. *HBS Case*, (214083).
- Rao, V. (2018). An empirical analysis of the factors that influence infrastructure project financing by Banks in Select Asian Economies. *Asian Development Bank Economics Working Paper Series*, (554).
- Ganbat, K., Popova, I., & Potravnyy, I. (2016). Impact investment of project financing: opportunity for banks to participate in supporting green economy. *Baltic Journal of Real Estate Economics and Construction Management*, 4(1), 69-83.
- Ueda, M. (2004). Banks versus venture capital: Project evaluation, screening, and expropriation. *The Journal of Finance*, 59(2), 601-621.
- Sarmiento, J. M., & Renneboog, L. (2016). Anatomy of public-private partnerships: their creation, financing and renegotiations. *International Journal of Managing Projects in Business*, 9(1), 94-122.
- Yescombe, E. R. (2002). *Principles of project finance*. Elsevier.
- Gardner, D., & Wright, J. (2012). Project finance. *Encyclopedia of debt finance*.
- Esty, B. C. (2003). The economic motivations for using project finance. *Harvard Business School*, 28, 1-42.
- Esty, B. C. (2004). Why study large projects? An introduction to research on project finance. *European Financial Management*, 10(2), 213-224.
- Steffen, B. (2018). The importance of project finance for renewable energy projects. *Energy Economics*, 69, 280-294.
- Morrison, R. (Ed.). (2016). *The principles of project finance*. Routledge.
- Dewar, J. (Ed.). (2011). *International project finance: law and practice*. Oxford University Press.
- Sorge, M. (2011). The nature of credit risk in project finance. *BIS Quarterly Review*, December.
- Kleimeier, S., & Megginson, W. L. (2000). Are project finance loans different from other syndicated credits?. *Journal of Applied Corporate Finance*, 13(1), 75-87.

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