

MRINMOY BISWAS MANOJ AGARWAL



PROJECT FINANCE IN THEORY AND PRACTICE



PROJECT FINANCE IN THEORY AND PRACTICE

PROJECT FINANCE IN THEORY AND PRACTICE

Mrinmoy Biswas Manoj Agarwal





Published by: Alexis Press, LLC, Jersey City, USA www.alexispress.us © RESERVED

This book contains information obtained from highly regarded resources. Copyright for individual contents remains with the authors. A wide variety of references are listed. Reasonable efforts have been made to publish reliable data and information, but the author and the publisher cannot assume responsibility for the validity of all materials or for the consequences of their use.

No part of this book may be reprinted, reproduced, transmitted, or utilized in any form by any electronic, mechanical, or other means, now known or hereinafter invented, including photocopying, microfilming and recording, or any information storage or retrieval system, without permission from the publishers.

For permission to photocopy or use material electronically from this work please access alexispress.us

First Published 2022

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication Data

Includes bibliographical references and index.

Project Finance in Theory and Practice by Mrinmoy Biswas, Manoj Agarwal

ISBN 978-1-64532-335-8

CONTENTS

Chapter 1. Study on the Feasibility Study — Mr. Mrinmoy Biswas	1
Chapter 2. Technical Nature of the Project	
Chapter 3. A Study on Vendor Finance	
Chapter 4. Report Consolidation and Distribution	
Chapter 5. Rivalry amongst the Existing Firms — Dr. Nishant Labhane	
Chapter 6. Technical Advice and Instruction in Finance	
Chapter 7. A Study of Cash Flow Statement	
Chapter 8. A Brief Discussion on Projections for Cash Flows — Dr. Vijayarengam Gajapathy	64
Chapter 9. A Study on the Sponsor Support Agreements	73
Chapter 10. An Overview on the Exchange Rate Risk in Finance — Mr. Venkatesh Ashokababu	
Chapter 11. Role of Political Risk in Finance	
Chapter 12. Socio-Political Risk of the Country — Dr. Vijayarengam Gajapathy	98
Chapter 13. A Study on Cost of funds	
Chapter 14. Importance of Various Stages of Project Financing — Chanchal Chawla	
Chapter 15. A Brief Discussion on Limited-Recourse Financing — Vivek Anand Singh	
Chapter 16. A Study on Types of Factoring	
Chapter 17. Role of Interest Rate Swaps in Finance — Pankhuri Agarwal	144
Chapter 18. The Role of Government Guarantees	
Chapter 19. Functions of Small Industries Development Bank of India	160

Chapter 20. A Study on Inflation-Indexed Bond	68
Chapter 21. Role of the Non-Resident Indians	76
Chapter 22. A Study on Security Documents Factors in Finance	82
Chapter 23. A Brief Discussion on Take-or-Pay Agreements	89
Chapter 24. A Study on Types of Offtake Contract	95
Chapter 25. A Brief Discussion on Construction Contract	01
Chapter 26. A Study on Permits and Others Rights	11

CHAPTER 1

A STUDY ON THE FEASIBILITY STUDY

Mr. Mrinmoy Biswas, Assistant Professor, Masters in Business Administration, Presidency University, Bangalore, India, Email Id-biswas@presidencyuniversity.in

ABSTRACT:

A feasibility study is a preliminary analysis that assesses the viability of a proposed project or idea. It involves examining the technical, economic, and operational aspects of a project to determine whether it is practical, achievable, and financially viable. The purpose of a feasibility study is to provide stakeholders with information about the potential benefits and drawbacks of a project, and to help them make informed decisions about whether to proceed with the project or not. The study typically includes an analysis of market demand, cost projections, risk assessment, and an evaluation of the project's potential impact on the environment and the community. The outcomes of a feasibility study can vary, and may recommend proceeding with the project as planned, modifying the project in some way, or abandoning the project altogether. The study provides a roadmap for the project, identifying potential risks and challenges and outlining steps that need to be taken to achieve success.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

To understand project management, one must first understand what a "project" is and what makes a project legal. Before using project management techniques, a project must already be under progress. Initiatives should essentially have certain components. It's possible that a project manager's duties vary depending on the company. Anyone in charge of efficiently and cheaply completing a task with a deadline qualifies as a project manager. A project's conception may be understood by looking at the idea, which must be technically feasible, economically feasible, politically appropriate, and socially acceptable.

Therefore, a project's physical goal or intended outcome are not always present. Whether the goal is to build a water dam or just finish an election, the process is continual. It is started with the intention of achieving a goal, and when that goal is accomplished within the allotted time frame, the project is considered to have finished. A project is a time-bound series of distinctive and connected actions meant to accomplish a single objective while adhering to predetermined budgetary requirements. A project is defined as "a one-time, time-limited, goal-directed, major undertaking, requiring the commitment of varied skills and resources" by the Project Management Institute, USA; alternatively, it is defined as "a combination of human and non-human resources pooled together in a temporary organization to achieve a specific purpose" by the same organization.

- 1. **One Goal:** A project without a goal is pointless and unfinished. When the objective is met, the project is finished.
- 2. **Specified Time:** A project must have a set time restriction in order to be completed. When a project is finished on schedule, it is deemed successful.
- 3. Single Entity: A project is handed over to a responsibility center as a single entity.
- 4. **Exercise with a team:** To accomplish a set of tasks, a variety of specialists from different fields are needed, which is impossible without teamwork.
- 5. Life Cycle: A project progresses gradually through several life stages, including conception, growth, saturation, and decay.
- 6. **Exclusive Activities:** For a particular project, the group of activities is distinctive in and of itself. A project is made specifically by its time frame, spending restriction, specialization, resources, etc.
- 7. **Successive standard:** It is impossible to predict how complicated a project will be as it works. Throughout the course of a project, the specifics of the various stages continue to be improved.
- 8. **Customization:** The client specifies a range of criteria, alterations, and restrictions on how the projects must be carried out.
- 9. **Connected Activities:** The typical characteristics of a project include a diverse yet interconnected collection of contributions from various resources. This adds to the project's complexity.
- 10. **Subcontracting:** Subcontractors are needed for big, time-consuming projects. The level of subcontracting is determined by the size and other complexity of the projects; the larger and more complicated the projects, the more subcontracting is used.

Risk and uncertainty are two fundamental elements that cannot be separated in the course of any commercial activity. Depending on how a project has progressed through various life cycle phases will determine the degree of risk and uncertainty [1].

Study of Feasibility

A feasibility study determines if a project has a chance of succeeding or failing. Prior to moving on with the planned strategy, this is the first stage. To determine if the project is feasible, a feasibility study is done. In order for the project manager to be aware of any potential concerns that can arise during the project's execution, a feasibility study allows us to properly comprehend all of the project's elements. The report also makes financial projections and suggests marketing approaches that could persuade banks or investors to make the necessary investment. A feasibility study assesses the likelihood of a project's success. The following five kinds of feasibility studies are taken into consideration for a project's success.

- 1. **Legal Suitability:** In order to prevent any complications later on, it is important to guarantee that all relevant laws and ethical standards are met up front. This might relate to social media legislation, environmental problems, etc.
- 2. **Economic Feasibility:** Economic feasibility is the appraisal of a project's ability to generate a profit from the entire amount of capital used. This thorough cost-benefit analysis

calculates the monetary worth of each expense and benefit to ascertain the project's economic feasibility.

- 3. **Technological Feasibility:** Verifying the technological resources and capabilities is the process of determining technical feasibility. It is an examination of the project's input resources, including fields, methods, etc. The financial analysis of the company must unavoidably be supported by the technological feasibility assessment. It aids the company in assessing personnel suitability and technical capability to turn concepts into functional systems. The suggested plan's additional hardware and software needs are also carefully examined in the research [2].
- 4. **Operational Feasibility:** This kind of feasibility analysis examines how effectively the project will be able to meet the operational demands of the business. It evaluates how much operational satisfaction a company has attained upon completion. Scheduling Feasibility Studies: Scheduling feasibility studies help to estimate how long the planned project will take to finish. This is one of the most crucial feasibility studies before a project is started since a poor choice might result in failure or a significant cost increase.

Understanding the fundamentals of Project Management

The aforementioned project features call for a rigorous strategy to ensure a project's effective conclusion. Project management refers to all of the extra efforts that go into making each of these projects effective and complete after its individual establishment. The following requirements must be completed for a project to succeed [3]. Project completion Project completion on schedule and within budget Performance that meets expectations

In other words, project management is made up of a variety of connected but distinct tasks that are ordered in order of importance.

Therefore, project management can be defined as a set of means, models, and structured approach that utilizes the appropriate client participation to deliver proper solution or fulfil client demands that matches with expected incremental organizational value. The Project Management Institute defines project management as "The application of knowledge skill tools, and techniques to project activities to meet the project requirements."

The synchronization of various tasks with the appropriate amount of money, equipment, and other resources such as raw materials, machines, human labor, etc. enables project management to monitor and control all project inefficiencies and help achieve pre-planned goals with the desired level of quality. Based on the standard established or prior experience.

Project Management's Goals

Project management aims to schedule, coordinate, and manage several connected and varied tasks in the contemporary industrial workplace.

To ensure that the planning, organizing, regulating, and monitoring activities of a specific project are effectively carried out, project managers must anticipate and investigate the unknown future uncertainties and challenges to the greatest extent feasible.

The following four basic project management goals are:

- 1. **Clear Objectives:** A project manager cannot afford to have ambiguous project goals. It will be simpler to accomplish the intended results if the goals are clearer.
- 2. Achieving Quality Performance: Since the introduction of the idea of whole quality management, all operational levels, rather than just the quality control department, are now responsible for ensuring quality in every activity.
- 3. **Budget:** There is relatively little chance that a project's financial budget will be exceeded. Budgeting might be completely disrupted. Failure is always possible and might lead to project abandonment if funding run out before it is finished. As a result, the project manager's financial resources are carefully considered [4].
- 4. **Duration to Complete:** Standard time is chosen to reflect the time needed to do each activity in reality. To prevent additional inefficiencies, appropriate input and improvements are provided periodically. Any form of delay might raise the project's cost and further dissatisfy the project's supporters.

Environmental Project

If a project manager wants to finish the project effectively and without problems, then understanding the project environment becomes very important. The project's commencement is when the project environment analysis is conducted. Within the project environment, several important elements need to be taken into account, including:

- i. a physical setting
- ii. a cultural setting
- iii. societal setting
- iv. political climate
- v. The Global Environment

Without knowing their cultural and social variety, interacting with individuals might become difficult. Different countries' differing values, gestures, colors, and languages, among other things, can have an impact on the project's success. For instance, calling someone by their first name is culturally accepted in America, however using their last name when greeting someone in Europe tends to be more professional whether it's a first-time business encounter or the people are well acquainted. Simply put, Americans are less formal than Europeans. Similarly, Japanese people's body language reveals a lot about their cultural ideals. In contrast to other cultures, theirs values respect for machines more than for both live and non-living objects. Even the same colors have distinct meanings to different individuals in various places [5].

Everywhere in the world has a different conversational protocol. In America, waiting on a call while on the phone is normal, however in Asia, it is considered disrespectful. The consumer may also not be pleased with the goods packing, shipping, etc. The date format used in documents is one of the frequent mistakes that may be made because people interpret things differently. For instance, 5/3 is interpreted as May 3, but it is March 5 everywhere in the globe. Such inaccuracies undoubtedly have the potential to mislead and cause extra work for any project.

The variety of customs and cultures and their influence on goods may go much beyond what is covered in this chapter, hence it is outside of its purview. In order to survive and expand, one must think globally while acting locally. This is what the majority of successful international corporations do.

The following are the fundamental actions that project management entails.

- 1. **Conceptualization and Initiation:** The first stage of project management begins with the broad definition of the objectives and strategy. In essence, at this first phase, it was determined whether or not the selected project was viable. To determine the viability of a particular project, the costs and advantages on the financial and social fronts are thoroughly assessed.
- 2. Setting Specific and Precise Objectives: Setting specific and precise objectives is often the first step in the planning process. The project's overall execution approach is outlined at the planning stage. After locating the project proposal, a thorough examination is required.
- 3. Execution: In this phase, site facilities are put up, which includes
 - (i) Engineering and project design
 - (ii) Contracting and negotiation
 - (iii) Construction
 - (iv) Instruction and
 - (v) Plant construction
- 4. **Performance Evaluation:** As soon as the project is commissioned, the monitoring procedure should begin. The difference between the idealistic and practical performance may be seen by periodically comparing the actual result to the expected one. The discrepancies between the standard and reality that could exist can also be fixed by this method. A documented form also facilitates improved decision-making for future use. Project Closure After a project is ended, the project manager may be left with a few responsibilities to perform. Contractors and lease agreements for hired or leased equipment associated to projects come to an end. The finished products are then collected in one location for later usage [6].
- 5. **Gantt Chart:** Using a Gantt chart to plot activities and tasks against time is a common practice. Each action is represented by a bar; the beginning and end of the bar correspond to the beginning and ending dates of the activity in question, and the length of the bar displays the activity's duration. Project scheduling is shown in the Gantt chart. It lists the anticipated actions to be taken on the vertical axis and the estimated times to be taken on the horizontal axis.

The critical path approach is a tool for reflecting a project's sequential activities from beginning to conclusion. One given project could have more than one crucial project, depending on the flow logic of the project. Time spent on any key route activity reflects how long the project will take to complete. This is an iterative mathematical computation of each project activity schedule.

Utilizing program evaluation and review techniques, which were created in the s for the US Navy Polaris project, a project's time and cost requirements can be decreased. It is used to determine

how long the project will really take to finish. It differs from CPM in that three time estimates are computed for the project, including the shortest feasible time, the most likely time, and the longest time each job would take in the event that things did not go as expected.

The most popular project management tool is called Microsoft Project. It facilitates a speedy start and simple project execution. Industry-specific software - These programs are designed to serve a particular industry or environment. Application service provider software (ASP) is a web-hosted project management program [7].

Project Management

A project's success or failure is entirely up to the project manager. He is responsible for coordinating and synchronizing a variety of linked tasks in order to finish a project on schedule. Very few project managers in India really succeed; that is, they finish the project on schedule. This can be the result of his incapacity or the worn-out bureaucratic structure that exists in our nation. One does not necessary require a degree from a management school to manage a project; instead, an experienced professional with extensive technical knowledge of inventories, machinery, etc. may be a preferable option.

Duties of the Project Manager

Project manager roles and duties may be divided into the following categories:

- 1. Maintaining the project's integrity
- 2. Developing and constructing a project execution plan
- 3. Creating processes that help you reach your goals by setting them.
- 4. Discussions about agreements
- 5. Governance, direction, and coordination of related activities
- 6. Selecting contractors, subcontractors, and related organizations.
- 7. Human resource administration
- 8. Maintaining the level of government and customer satisfaction.
- 9. Complete activity documentation.

Profession of Project Management

A better project is one that has a realistic, methodical, and comprehensive approach. The distinct, structured nature of project management places a focus on outcomes, which cannot be achieved via the combined efforts of all relevant departments. A good project management methodology includes frequent and clear communication, regular feedback, flexibility, and adaptability to changing needs. Adapting to these qualities produces positive outcomes not just for difficult technological undertakings but also for everyday tasks. Many organizations use project management tools in the modern world. Projects just need a single effort. Every project has to be managed separately and in a certain way. Together needs is the subsequent phase. To develop the project scope, it is critical to identify these needs and resources. Additionally, the project manager

examines potential adjustments to the scope and requirement and then recommends them to the sponsor for execution [8].

DISCUSSION

The emphasis of a project organization is mostly on elements like how to pick the correct projects and how to prioritize them as project clients and management teams get more sophisticated. The most frequent cause of many initiatives failing is poor project selection. The phrasing of the purpose, the lack of preparation, and the lack of team collaboration may all contribute to ineffective project selection. When choosing a project, the project manager must exercise extreme caution. He should think about the organization's goals and policies, the resources that are available, and the choice of the best team to take on the project. Project selection is a methodical procedure for picking a project concept from the range of potential project ideas. The project manager makes an effort to choose which project to pursue, which technology to create, and which approach to use. Although it is possible for project ideas to come about by accident, choosing a project is a conscious decision.

All of the possibilities must be properly prioritized by the project manager, who must then choose the best. A poor project selection might lead to inefficient resource usage and project failure. The many numerical and non-numerical strategies used by business management to choose the best project are covered in this chapter [9].

Models for Project Selection Based On Criteria

Every company must successfully manage change to thrive in a cutthroat market. In the past, businesses combined their real operations with a project as part of their strategy. Organizations now focus on finding and carrying out initiatives. Every project is crucial to the business, and every project requires a unique development and execution approach. A project manager has a responsibility to choose initiatives that are certain to provide profits soon. The proper project selection also impacts how resources are allocated with the goal of maximizing profits. Making logical decisions is crucial to choose the best project. The factors to be utilized while selecting a project selection model are described by Souder, a well-known author in the field of project management. He recommended that the project selection model meet the following requirements.

- 1. Realism
- 2. Capability
- 3. Cost
- 4. Flexibility
- 5. Usage ease
- 6. Simple computerization

Realism

All relevant factors that affect a project manager's decision should be taken into account in the model used to choose a project. The model should clearly outline the reasons the project manager and the company chose a certain project. It need to take project hazards into account as well.

Capability

The project manager's chosen selection model should be capable of delivering the best choice while taking into account all project risks and limits. Future project ideas should be able to be eliminated from consideration by the selection algorithm based only on the objective predicted returns of each project.

Costs

The expenses associated with finding the ideal selection model should be as low as possible. Costs for data production, processing, and storage are all part of the price tag for building a selection model. This project's goal is to determine the optimum selection model and reduce the cost associated with choosing the decision model. Additionally, businesses should make sure that the project's costs do not outweigh its advantages.

Flexibility

The chosen model must provide the expected outcomes under the specified circumstances and while taking the interests of the company into consideration. The model should be simple to alter or should be able to adapt to changes in the firm's environment on its own.

Easy of Use

The selection model need to be simple to use and straightforward to explain. The model should be put to the test to see how current workers can utilize it most effectively without extra interpretation before a choice is made.

Analyzing A Project's Uncertainty

Although the companies make every effort to develop the best selection criterion, they infrequently produce a single best option. This is due to the project's inherent risk and degree of uncertainty. It is true that risk is present in each and every project activity, and no project manager can foresee the kind or degree of risk. However, the project manager's goal is to lessen the effect of risk on important factors like project cost and schedule [10]. What the project manager performs and how the project is impacted by the business environment are two factors that greatly influence the outcome of a project activity. Risk, uncertainty, and certainty are the three types of conditions that affect the project manager's decision-making. The project manager determines the probability of occurrence and payback value of various natural states under risky circumstances. The anticipated value is determined as the product of the reward value and the probability that the natural state will occur.

The likelihood of any natural state occurring under ambiguous circumstances is unknown. There are no established standards for making decisions in such situations. To determine the anticipated values of the projects, the project manager thus assigns arbitrary probabilities to each condition of nature. As a result, the unclear situation becomes a risk. Under specific circumstances, the project manager adopts a single state of nature, and the anticipated project result becomes the anticipated value. By creating Performa papers that predict the projects' expected profit and loss, the project

manager attempts to lessen the uncertainty. Techniques for coping with uncertainty include risk assessment, simulation analysis, and window-of-opportunity analysis.

Risk Evaluation

The goal of risk assessment is to quantify the degree of uncertainty around the numerous criteria taken into account by decision-makers. Making decisions becomes exceedingly challenging when risk and uncertainty are present. The project manager carefully calculates the probability distributions for each investment made in such circumstances in order to determine the potential returns. Through the use of simulation, the probability distribution for the expected rate of return is calculated.

In order to investigate the features of the variables in the scenario, simulation analysis is the process of simulating the behavior of any situation or process using an appropriately similar situation.

Window-of-opportunity analysis: A company will only launch a project to develop a new procedure or product if it believes there will be an acceptable return on the project's success. A project manager is unsure of the benefits a new process or product will have for the company in the early phases of product development. The project manager's sole certainty at this point is that it will be technically feasible.

According to this study, the project manager thoroughly examines the present production process and makes a list of all the tasks that the additional innovation will make better. The project manager calculates the performance of the innovation as a percentage of the baseline system based on baseline information about the present process and its effectiveness. This makes it simpler for the project manager to choose projects [11].

Project proposals are the first step in turning a concept or policy into the specifics of a proposed project, including the results, outputs, significant risks, costs, stakeholders, and an estimate of the resources and time needed. It is created after a thorough analysis of several initiatives and the variables affecting each project. The typical components of a project proposal include an executive summary, cover letter, justification section, technical explanation of the planned work, budget, and a list of the main players involved. The proposal should be properly written since it is a letter intended to persuade the authorities to start the project. To assess the project's feasibility, the management may sometimes request that the project manager produce a project proposal. An internal project proposal doesn't need to be created with much care since it will be sent to the company's senior management. The upper management often approves the paper since it is merely being generated as a formality. This is because, while choosing the project, consideration was given to the organization's goals, tactics, and budgetary limitations. The resources that the project team will need are stated in an internal project proposal. After receiving the proposal, the top management determines whether to include the project needs in the proposal.

CONCLUSION

In conclusion, a feasibility study is an essential tool for evaluating the viability of a proposed project or idea. It provides valuable insights into the technical, economic, and operational aspects

of the project, and helps stakeholders make informed decisions about whether to proceed with the project or not.

Through a feasibility study, potential risks and challenges can be identified, and steps can be taken to mitigate them. This allows for better resource allocation and helps to ensure the success of the project. It is important to note that the outcomes of a feasibility study are not always positive, and may recommend modifying or abandoning the project. However, this can save stakeholders time, money, and resources that would have been wasted on an unviable project. Overall, a well-conducted feasibility study can help to ensure that projects are planned and executed efficiently, and that they ultimately contribute to the success of an organization.

REFERENCES:

- [1] L. Uwineza, H. G. Kim, and C. K. Kim, "Feasibility study of integrating the renewable energy system in Popova Island using the Monte Carlo model and HOMER," *Energy Strateg. Rev.*, 2021, doi: 10.1016/j.esr.2020.100607.
- [2] K. E. Bevevino, J. F. Edwards, N. D. Cohen, and C. N. de Solis, "Ex vivo comparison of ultrasonographic intestinal wall layering with histology in horses: A feasibility study," *Vet. Radiol. Ultrasound*, 2021, doi: 10.1111/vru.12946.
- [3] V. S. Kalyna, M. V. Lutsenko, and M. M. Kharytonov, "Feasibility study of the technology of fatty coriander oil complex processing," *Ann. Agrar. Sci.*, 2018, doi: 10.1016/j.aasci.2017.10.002.
- [4] "Corrigendum to: Ex vivo comparison of ultrasonographic intestinal wall layering with histology in horses: A feasibility study (Veterinary Radiology & Ultrasound, (2020), 10.1111/vru.12946)," Veterinary Radiology and Ultrasound. 2021. doi: 10.1111/vru.12950.
- [5] T. Ayhan and H. Al Madani, "Feasibility study of renewable energy powered seawater desalination technology using natural vacuum technique," *Renew. Energy*, 2010, doi: 10.1016/j.renene.2009.06.021.
- [6] A. J. Watach, "Sleep, Physical Activity, and Executive Function in Obese Adolescents With and Without Obstructive Sleep Apnea Syndrome: A Feasibility Study.," *Sleep, Phys. Act. Exec. Funct. Obese Adolesc. with Without Obstr. Sleep Apnea Syndr. A Feasibility Study*, 2017.
- [7] A. Katz, J. Andres, and M. Scanlon, "Application of Therapeutic Intervention Scoring System (tiss) to an Electronic Health Record: A Feasibility Study," *Pediatrics*, 2018, doi: 10.1542/peds.141.1ma4.321.
- [8] D. Karlström and P. Runeson, "Combining Agile methods with stage-gate project management," *IEEE Softw.*, 2005, doi: 10.1109/MS.2005.59.
- [9] A. Tyberg *et al.*, "Curative Surgery After Eus-Guided Biliary Drainage: An International Multicenter Feasibilty Study," *Gastrointest. Endosc.*, 2021, doi: 10.1016/j.gie.2021.03.568.
- [10] D. A. H. D. Carunia Mulya Firdausy, "Analisis Kelayakan Investasi Pengembangan Perumahan Subsidi Di Kabupaten Tangerang," J. Manaj. Bisnis dan Kewirausahaan, 2019, doi: 10.24912/jmbk.v2i1.4805.

[11] M. I. S. Sule and S. Y. Siswanto, "Feasibility studies of intensively tea plantation on West Java," in *IOP Conference Series: Earth and Environmental Science*, 2019. doi: 10.1088/1755-1315/393/1/012080.

CHAPTER 2

TECHNICAL NATURE OF THE PROJECT

Ms. Leena George, Assistant Professor, Masters in Business Administration (General Management), Presidency University, Bangalore, India, Email Id- leenageorge@presidencyuniversity.in

ABSTRACT:

The technical nature of a project refers to the specific technical requirements, processes, and systems that are necessary for its successful implementation. It includes aspects such as hardware, software, infrastructure, engineering, and other technical considerations. In order to manage the technical aspects of a project effectively, project managers and stakeholders must have a clear understanding of the technical requirements and constraints, and be able to communicate effectively with the technical team. This requires a collaborative approach, with input from all stakeholders, to ensure that the technical components of the project are aligned with the overall goals and objectives.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The technical nature of a project plays a critical role in determining its feasibility, cost, and timeline. It is important to have a thorough understanding of the technical requirements of the project, as well as any potential technical challenges or constraints, in order to plan and execute the project effectively. The technical nature of a project also requires a team with specialized technical skills and knowledge. The team must be able to design, develop, implement, and maintain the technical components of the project, and ensure that they are integrated effectively with other aspects of the project, such as the business and operational requirements [1].

The proposal should be adequately recorded when it comes to an external sponsor of the government, such as an outside agency. The outside customer's ability to pay for the planned project must also be confirmed by the project manager. Several European engineering firms started working on projects in Iraq during the s, but the subsequent hostilities prevented payments from being made. Getting the project approved depends heavily on a well-written project proposal. The proposal paper has to be clear, concise, and well organized. Typically, it begins with an executive summary letter outlining the project's nature to the appropriate authority. This sentence should define the project's scope without being too technical. The cover letter, which serves as a crucial marketing piece, is presented after the summary statement. For complex projects, it is important to record both the organization's approach to each subsystem and the project's primary subsystems. The project proposal should make it clear what methods will be used to satisfy the client's unique technological needs.

Implementation Strategy

Estimates of the budget, timing, and materials utilized for each significant subsystem are included in this section of the project proposal. The entire cost and duration of the project are then estimated by averaging costs and time. The implementation strategy for each key subsystem is presented using Gantt charts, the critical path method, program evaluation, and review techniques. To assess the implementation phase, the key project stages and their anticipated completion dates are also supplied.

Administration and Logistics Plan

The proposal includes a thorough explanation of the layout of all necessary tools and routing facilities. Additionally, it outlines how all departments are administered, how raw materials are transported, how subcontractors are evaluated for performance, how internal and external audits are conducted, and how quality checks are conducted. The specifics of how change orders are to be handled should also be included in this section [2].

Summary of the Group

The description of the group portion of the proposal includes a full list of the main project workers, their qualifications, job descriptions, and experience. The proposal should persuade the sponsor or external agency that the project team is qualified to carry out the project. A project is a collection of distinct, interconnected activities that are planned and carried out in a particular order to create a unique product and/or service, within a specific timeframe, budget, and the client's specifications. In the case of internal projects, names and designations of all project members are sufficient. The following characteristics of tasks may make them projects: originality, focus on the objective, sequence of actions, allotted time, and interconnectedness. Project success hinges on the project manager's ability to properly handle the many resource restrictions that are present throughout project execution. Applying knowledge, skills, tools, and procedures to project activities in order to satisfy or exceed stakeholder expectations is known as project management. A project is made up of numerous phases with connected and intertwined subprojects. A good project will undoubtedly contribute to economic growth.

Establishing a strategy and putting it into action are both steps in the project management process that aim to achieve the project's goal. This planning effort entails clearly defining the project's objectives, dividing the project into major "pieces" known as work packages, specifying the specific activities that must be carried out for each work package, depicting the activities graphically in the form of a network diagram, estimating the amount of time needed to complete each activity, specifying the types of resources and how much of each resource is required for each activity.

Any project must have a well-thought-out plan in place if it is to be completed successfully. Once the project has begun, project management entails keeping an eye on its development to make sure everything is proceeding as expected. Measure actual progress, compare it to projected progress on a timely and regular basis, and take corrective action right away if required. This is the key to efficient project management. Whether you are the customer of your own project or a firm that is being paid by a customer to complete a project, having a pleased client is the ultimate advantage of using project management techniques. Everyone engaged in the project will feel very satisfied if the whole project scope is completed in a professional way, on schedule, and within budget. Acceptance Sampling is a product quality control method that examines a product's quality after it has been manufactured.

Administrative Closure is the process of compiling project records, examining the factors that contributed to a project's success and effectiveness, and archiving data for later use. Annuity Due: The annuity is referred to as an annuity due when cash flow happens at the start of each month. A series of equal, recurring payments or receipts, known as an annuity. The average rate of return is a metric used to assess how investments in a project compare to the average yearly earnings it generates. A different name for it is the accounting rate of return. An activity is a discrete piece of work completed for a project. Typically, an activity includes three components: cost, time, and resource needs. also known as a task.

Benefit-Cost Ratio: This metric measures the proportion of initial outlays to expected future cash flows. Additionally called the profitability index.

The term "Budget Cost of Work Scheduled" refers to the total of approved cost estimates for activities that are scheduled to be performed during a given period. "Budgeted Cost of Work Performance" refers to the total of approved cost estimates for activities that are completed during a given period. "Baloon Payment" refers to a final debt payment that is significantly greater than the initial debt payment. Planning for communication involves determining the varied informational and communication needs of the project's many stakeholders.

Interest that is earned on both the principle and the accrued interest is known as compound interest.

Apex: Long-term spending on property, plant, and equipment. Configuration management is a method of documenting that is used to guarantee that the project product's description is correct and comprehensive.

Customer Danger: This is a danger to the customer brought on by the choice of a poor lot. Contract Closure: This procedure includes product verification, updating all project documentation with the outcome, and archiving all project data for later retrieval. Contract administration is the process of ensuring that the vendor's performance meets the requirements specified in the contract for the project.

Contract Files: These are a complete collection of indexed documents created to be included in the project's final records.

DISCUSSION

Contract negotiations are a procedure intended to improve understanding and ensure agreement on the structural and purchasing features indicated in the contract before it is signed. A control chart is a visual depiction of how a process has performed over time. Cost Budgeting: It is the process of assigning the expenses to specific work items, depending on the cost estimates generated. Cost Benefit Analysis: The rationale for the project from an economic and social standpoint. Cost estimation: Opt refers to the process of locating and assessing potential cost alternatives. The minimal rate of return the company must achieve on its investments in order to appease the different investor types that have made investments in the form of shares, debentures, term loans, etc. Cost of Debentures: The discount rate used to determine whether the net proceeds from the issuance of debentures are equivalent to the present value of future principal and interest payments after taxes [3], [4].

The rate of return the business must achieve on the net cash it raises via the issuance of equity capital is known as the cost of external equity. Cost Overruns: Cost overruns are the additional expenses incurred in addition to the budgeted expenses. Cost Risk: The possibility that the task won't be finished within the allotted budget. Cost Variance: Any discrepancy between an activity's projected cost and its actual cost. Cost-Plus-Fixed-Fee Contracts: Under these agreements, the purchaser is responsible for paying the whole cost of the goods or services while the vendor is compensated with a set sum.

Cost of Conformance: These are the expenses businesses have to pay for the tools they use to produce excellence. They cover things like the price of auditing, testing, inspection, and training. Cost of Failure: External failure and internal failure both have costs associated with them. Internal failure costs are a consequence of flaws found both during manufacturing and when the product is being controlled by the company. When a flaw is found after the consumer has already got the goods or service, external failure costs are incurred. Debt capacity: The ability of a company's cash flow to meet debt obligations. The financial plan of the project will be declared viable if the debt capacity exceeds the debt requirements; else, the model will be disregarded [5].

Debt-to-equity Ratio: A company's debt-to-equity ratio. The ratio's value indicates how much financial leverage the firm has. Developmental agency: Financial organizations that invest in and provide finance to major industrial actors in developing nations. Event: An event is a time-based reference point that designates the beginning or conclusion of an activity. The symbol for it is a circle. Environmental risk: The financial or administrative repercussions of gradual or severe environmental damage. Feasibility study: A document that outlines every element of a certain project and enables a detailed assessment of whether this can be accomplished. The report, which focuses primarily on the technical aspect of the project finance plan, is often created by engineers. Following the conclusion of the initial plant tests, an independent engineer issues the Final Acceptance Certificate Document. As soon as the final acceptance certificate is granted, the SPV is responsible for the plant [6].

Gantt Chart: A grid visualization method with software-assisted graphics performance. Hedging agreement: Documentation on contracts that may be affected by interest rate volatility, currency rates, or other economic variables. This shows the calendar of duties and the list of activities. Bank for Reconstruction and Development: International. a group member of the World Bank. Risk from Inflation: As buying power diminishes, the risk from inflation is that it may reduce returns on investment. Joint venture: A contract between businesses creating a new business with partners contributing resources. Rankings of lenders and contractors based on debt, final approval, or the number of project financing loans or consulting mandates successfully executed within the allotted period. Legal opinion: Conclusive declarations made throughout the funding process that attest to

the legal applicability of the proposal's key features. Legal risk: The possibility that a contract party may be unable to carry out security provisions, uphold foreign judgments, choose the law, or submit disagreements to arbitration.

Leads a coalition of businesses that is awarded a crucial fixed-price contract to design and build a specific plant after winning an application to do so. A mixed project is one in which, for certain years throughout its existence, the unrecovered investment balance is larger than zero while, for other years, it is equal to or less than zero. In negotiations, parties exchange ideas and points of view in an effort to come to an agreement on a specific topic. Payback period: This is the amount of time that a company has to recoup its project investments. Performance reporting: This is the process of compiling and communicating all performance-related data on resource use and project objectives. Pessimistic time: Pessimistic time is the highest amount of time needed to finish a task. Perpetuity: An infinite-duration annuity. PMIS The project manager utilizes the project management information system to acquire, integrate, and distribute the information and outputs of various project activities. This occurs when the external environment is unfavorable [7]. Portfolio risk is a metric for the earning volatility brought on by the firm's operations and asset portfolio diversity.

Project Definition Statement: It is similar to POS and provides more in-depth information about the project as it is used as a reference point by the project team for carrying out the project. Precedence Diagram Method: In this method, the network diagram is constructed using nodes to represent the activities and connecting them with arrows to represent the dependencies. Project management processes: Procedures for outlining and planning project operations. Project leader: A person in charge of project management and team development.

Project Manager: A person who is in charge of the project, is accountable for it, and has the power to assume responsibility for the project's successful conclusion. A group of staff members, usually from a single department, form a quality circle and gather on a regular basis at their own initiative to talk about quality-related problems. Scope planning is the process of creating a scope statement that will serve as the foundation for all upcoming project choices. Data that is already in existence but may have been gathered for another reason or by a different organization is known as secondary data. Total Float: This is the amount of time by which an activity's completion may be put off over its anticipated earliest completion time without having an impact on the project's overall length.

Project financing aids in the creation of crucial industries like communications, oil and gas power, water supply management, mining, etc., which are crucial for a nation's economic development. Project finance is a crucial component of the funding options for big and expensive infrastructure projects in both developed and emerging economies. There are many instances of engineering and infrastructure projects that needed project financing to be completed. The Hong Kong-Zhuhai bridge, the Chad-Cameron oil pipeline, the Euro Tunnel, the Petrozuata oil field, the Ichthys oil field, and a long list of other large-scale infrastructure and capital-intensive projects are a few examples. In particular, commercial banks, bond issuance, subordinated debt, lease finance, and vendor finance are the focus of this unit's study of the private sector debt market for project financing [8].

The idea of project financing is not new. It was first employed throughout the Roman and Greek eras to finance the import and export of products via maritime channels and to share the risk associated with them from storms and pirates. Project financing was used to build railways in the middle of the eighteenth century, and in the s it was utilized to investigate oil resources and drill wells in America. Project financing started to become available in European markets in the late eighteenth century. Using project financing from the private sector, the railways, electricity, water, gas, oil fields, and telephone industries were developed all over the world in the 20th century.

Project financing gained traction this century. Despite the fact that it has slowed down over the years, there is still a demand for project financing. The table shows the total investment disbursement by the World Bank Group, International Finance Corporation, and the number of projects, nations, and projects from year to year. Commercial banks and bond holders often supply finance for private sector projects. The project firms get long-term financing from commercial banks. Bonds issued by project firms are bought by long-term investors like pension fund companies, insurance companies, etc. Bond investors are those people. Subordinated debt, lease finance, and vendor financing are some of the additional private sector project firmace markets; they are covered in more detail in the next parts of this chapter.

Commercial banks and bond holders are the two primary sources of debt for private sector projects. Large infrastructure projects need a lot of cash, hence several lenders are required to finance them. An multinational project will have financing from a number of different nations. Syndicates of lenders are often created. The largest project financing lenders are commercial banks. They provide the project firms long-term financing. The commercial banks perform a variety of other tasks in addition to their traditional function of providing financing, including construction financing, working capital financing, advisory services, intermediation to permanent long-term fixed rate financing, risk management services related to commodities, interest rates, currencies, etc., foreign tax absorption, and others. The project loan is organized by a limited number of arranging banks from the project's host nation, which sometimes underwrites all or part of the loan. As the loan agreement's original signatories in many cases, they assume the risk that they will eventually be able to sell the loan. They are also known as mandated lead arrangers since they organize and direct a group of investors in a syndicated loan for major project financing.

The local banks are often favoured for project financing in a certain nation since they are familiar with the local operating circumstances. Additionally, the funding will be made in local currency, eliminating the risk of currency exchange. In order to identify and quantify project risks, banks must have expertise in the project financing markets. In industrialized countries, local banks often fund projects, although sometimes international banks that have a branch or subsidiary operating in the country in question also do so. In contrast, the situation is different in undeveloped countries. Long-term debt markets may not exist, and local banks could lack project financing expertise. Projects are funded in these nations by public sector local development banks. The international banking market is crucial for project financing in emerging nations. Few large banks coordinate international project finance transactions and serve as lending managers. They are also known as Lead Banks or Mandated Lead Arrangers. They operate sizable project financing businesses in

important cities across the globe. They will have a minimum of one project finance office each in the United States, Europe, Asia, Australia, and the Middle East and Africa.

Bond Issue

In order to raise money, the project business offers bonds. The project firms commit to repay the bond holder the sum of the bond value plus interest when issuing these bonds, which are traded financial instruments. These bonds have a set term, and the bondholder receives a certain rate of interest on the amount he put in them. These bonds are a solid alternative for investors who desire a long-term fixed-rate return with no risk. The largest holders of these bonds are insurance and pension fund corporations.

These bonds are tradable securities in financial markets. They are typically sold by private placement to institutional investors who hold them in their portfolio until maturity. Even though the global project finance bond market is much smaller than the loan market, it has grown significantly in recent years. Bond issuance is concentrated in certain geographic regions. The biggest markets for project financing bond issuance are in Western Europe, the United States, and Asia.

Subsorbed Debt

Mezzanine debt or mezzanine finance are other names for subordinated debt. It is an unsecured loan with a set rate and a lengthy term. The financial gap between senior debt and equity is filled through subordinated debt. In terms of claims on assets or earnings in the capital stack, it is placed lower than other senior securities or loans. Capital stack is a ranking of investors, loans, and debt based on payback ability. Junior debt, also known as subordinated debt, is classed behind all other unsubordinated obligations and equity. This implies that if a borrower firm fails or files for bankruptcy, the subordinated debt holders will only be reimbursed after the senior loan holders have received full payment from all of their creditors. It is thus more dangerous than the other loans. Its interest rate is greater than that of senior or subordinated loans because to the increased risk involved. Junior debt is another name for it. For the purposes of calculating debt to equity ratios, it counts as equity.

It may also be used for advances that investors, guarantors, or sponsors need to pay for construction cost overruns, payments required to keep debt to equity ratios within acceptable bounds, or other guaranteed payments. Investor-provided subordinated debt is classified similarly to stock, but investors do not have additional rights to collect the loan ahead of senior lenders in the event of a failure. Only until the senior lenders have been completely repaid and there is adequate cash flow are they allowed to assert their rights to collect debt.

Large infrastructure projects may result in the corporation choosing not to purchase the necessary heavy gear or equipment. Instead, it leases them from the owner. The person who finances the purchase of the machinery or equipment is referred to as the lessor. It is leased by the lessor to the lessee. The project firm that is the lessee pays a rental fee to use the machinery or equipment. By doing this, the project firm avoids having to spend a hefty price to get these items. Leasing is a highly popular method of financing in project finance when heavy machinery and equipment are

needed. The project business receives complete control over the project but not full ownership. Sometimes a project organization won't require the equipment for a long time, therefore renting it for the specified term instead of purchasing the equipment makes financial sense. This will help reduce the cost of depreciation. Accelerated depreciation and the accompanying tax, which are deducted from the taxable revenue, benefit the lessor firm. The project firm compares the financing cost of the equipment with the alternative of purchasing the equipment and reducing its tax burden under the depreciation head.

CONCLUSION

In conclusion, the technical nature of a project is a critical component that must be carefully considered and managed in order to ensure the success of the project. It encompasses the technical requirements, processes, and systems necessary for the implementation of the project, and requires a team with specialized technical skills and knowledge. Effective management of the technical aspects of a project requires a collaborative approach, with input from all stakeholders, to ensure that the technical components of the project are aligned with the overall goals and objectives. This includes a thorough understanding of the technical requirements and constraints, effective communication with the technical team, and careful planning and execution of the technical approach. Overall, a well-planned and executed technical approach can help to ensure the success of the project and its ability to meet its objectives. It is essential for project managers and stakeholders to understand the technical nature of the project and to manage it effectively throughout the project lifecycle. This will help to ensure that the project is completed on time, within budget, and to the required technical specifications.

REFERENCES:

- [1] P. E. Vermaas and W. Houkes, 'Technical functions: A drawbridge between the intentional and structural natures of technical artefacts', *Stud. Hist. Philos. Sci. Part A*, 2006, doi: 10.1016/j.shpsa.2005.12.002.
- [2] M. Das, H. Luo, and J. C. P. Cheng, 'Securing interim payments in construction projects through a blockchain-based framework', *Autom. Constr.*, 2020, doi: 10.1016/j.autcon.2020.103284.
- [3] J. Whyte and A. Davies, 'Reframing Systems Integration: A Process Perspective on Projects', *Proj. Manag. J.*, 2021, doi: 10.1177/8756972821992246.
- [4] J. J. Bos and R. R. Brown, 'Realising sustainable urban water management: Can social theory help?', *Water Sci. Technol.*, 2013, doi: 10.2166/wst.2012.538.
- [5] A. A. Mahmoud al-Mukahal, 'Risk Management of Construction Projects', *Eng. Manag. Res.*, 2020, doi: 10.5539/emr.v9n1p15.
- [6] J. Steen, J. A. Ford, and M. L. Verreynne, 'A Dynamic Capabilities Model of Innovation in Large Interfirm Projects', *Proj. Manag. J.*, 2021, doi: 10.1177/87569728211033132.
- [7] S. B. Mickovski, 'Re-thinking soil bioengineering to address climate change challenges', *Sustain.*, 2021, doi: 10.3390/su13063338.

[8] C. Rae, S. Kerr, and M. M. Maroto-Valer, 'Upscaling smart local energy systems: A review of technical barriers', *Renewable and Sustainable Energy Reviews*. 2020. doi: 10.1016/j.rser.2020.110020.

CHAPTER 3

A STUDY ON VENDOR FINANCE

Dr. Kadambat Kumar, Professor, Masters in Business Administration (General Management), Presidency University, Bangalore, India, Email Id- krishnakumark@presidencyuniversity.in

ABSTRACT:

Vendor finance is a financing arrangement in which the vendor of a product or service provides financing to the buyer, allowing them to purchase the product or service on credit. This type of financing can be used for a variety of products and services, including real estate, vehicles, and equipment. Vendor finance can provide several benefits for both the vendor and the buyer. For the vendor, it can help to increase sales and revenue, as well as provide an additional source of income through the interest charged on the financing. For the buyer, vendor finance can provide a more accessible and convenient financing option, especially for those who may have difficulty obtaining financing from traditional sources.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Vendor finance can take several forms, including installment payments, leasing, or rent-to-own arrangements. These arrangements can provide flexibility and convenience for both the vendor and the buyer, allowing for customized payment terms and schedules. However, vendor finance arrangements also come with risks and challenges. For vendors, there is a risk of default by the buyer, which can result in lost revenue and additional costs. For buyers, vendor finance arrangements may come with higher interest rates and fees, which can increase the overall cost of the product or service. Overall, vendor finance can be a useful financing option for both vendors and buyers, but it is important to carefully consider the risks and benefits before entering into such an arrangement. Proper due diligence and risk management can help to ensure a successful vendor finance arrangement [1].

Sometimes the borrowing company may be short on funds or face rejection from banking institutions for credit or a loan. The provider of the project's machinery, equipment, or services in this instance loans money to the borrower company so that it may acquire the machinery, equipment, or services from the supplier. What is meant by this is vendor financing. Vendor financing is a kind of loan given to the borrowing company by the company that supplied the tools, supplies, supplies, equipment, or services needed for the project. The vendor industry deals with supplies. These loans often have interest rates that are greater than those provided by traditional banking institutions. The vendor starts a business to sell his goods and earns a higher loan rate despite the greater risk of default [2].

In terms of credit, lower initial outlays of cash, and the availability of the machinery, equipment, inventory, or services needed for the projects, the borrowing firm also benefits. Additionally, the business may use the bank funds at a later stage of the project. There are two forms of vendor financing: debt vendor financing and equity vendor financing. In debt vendor financing, the vendor sells the borrower the products or services at a predetermined, agreed-upon interest rate. The loan will be repaid by the borrower with interest. In an equity vendor financing arrangement, the vendor financing firm becomes a stakeholder in the borrower's business and exchanges products or services for stock or ownership in the borrower.

Government works with private corporations to fund, construct/develop, or run public infrastructure projects including airports, trains, highways, water and sewage systems, electricity and energy generating, etc. The phrase "public-private partnership model" refers to this kind of long-term agreement between the public and private sectors. The following definitions of PPP are provided by various organizations: "Public-Private Partnership is a long-term contractual arrangement between the government and a private partner whereby the latter delivers and funds public services using a capital asset, sharing the associated risks." - The Organization for Economic Co-operation Development

A public-private partnership, according to Weimer and Vining, "generally involves a private entity financing, building, or managing a project in exchange for a promised stream of payments directly from government or indirectly from users over the projected life of the project or some other specified period of time." In India, highway building is financed via public-private partnerships (PPPs), in which the private corporations making the investment are reimbursed by toll fees for a certain amount of time. The management is totally transferred to the government after they have recovered all of their investments. In this approach, both the government and private businesses benefit from the development of top-notch infrastructure. Government funding for the initiatives is provided in part, while private organizations generate the remaining amounts.

To finance, build, run, and maintain a project, a special-purpose vehicle corporation or special purpose entity is established. All rights and liabilities are taken on by the SPV, and in exchange, all cash flows are routed via the SPV. Cash flows of the ring-fencing kind are noted on the balance sheet. Ring fencing is the process of establishing a distinct legal organization in order to isolate certain assets and obligations from creditors.

In the PPP mode of project financing, the SPV takes charge of the project's governance. The government is not directly obligated to any lenders since it does not need to obtain the necessary funds. Therefore, it benefits both the public and private sectors of the economy. Government can build world-class infrastructure and increase the operational effectiveness of delivering public utilities and services with the aid of private sector innovation and technology.

Governments and private firms benefit from partnerships in the same way. For instance, technology and innovation from the private sector may aid in increasing the operational effectiveness of delivering public services. For its part, the public sector offers incentives to the private sector so that it will complete projects on schedule and within budget. Additionally, fostering economic diversification increases a nation's ability to compete by supporting its

infrastructure base and fostering related businesses like construction, equipment, support services, and other enterprises.

When operating in PPP mode, private entities are subject to certain risks. The hazards include construction risk in projects involving the building of infrastructure, such as roads, trains, etc., as well as cost overruns, schedule slippages, and technical flaws. From the perspective of a public body, there is a danger of monopoly by a private organization, anomalies and nontransparency in cash-flows, and failing to fulfill the criteria for safety and quality.

Any nation's infrastructure, including its roads, airports, rail system, hospitals, educational system, and power and energy generation industry, must be developed for the country to advance. Both developed and developing nations make significant investments in these fields. These projects require a lot of capital. It takes a lot of money to cover that. Equity and loans are used to raise this money. Both public and private funding is used to fund these capital-intensive projects. Commercial banks and bond holders are the major sources of project financing in the private sector. Vendor financing, lease financing, and subordinated debt are the other sources. The public-private partnership concept gained popularity in the 20th century. The financing of significant infrastructure projects takes place under a PPP model, where public utilities and services are developed via an agreement between the public and private sectors. Ring fencing is the practice of separating certain assets and liabilities from creditors by creating a separate legal entity. Public-Private Partnership is a partnership between a public sector entity and a private sector entity for the creation of a project. Mandated Lead Arranger - The Mandated Lead Arranger is the bank that leads a group of large project finance investors and facilitates a syndicate loan.

DISCUSSION

Assume a company has set up a project management system. It is a very flexible framework that welcomes projects in all its facets. This framework may be applied to any project. It is now being used by teams. The management, however, is not content. It was anticipated that more projects would be successfully completed if everyone used a project management technique. There hasn't been any discernible effect on project success so far. What actions may management take. The establishment of a project support office, where a consulting team offers advisory services such as legal, financial, technical, etc., has been one of the most significant organizational contributions to the success of project management. Those who are unfamiliar with the idea and its application may find these to be extremely overpowering [1].

Despite significant work being put into having a methodology established, documented, and deployed, project success rates seem to have been unaffected. In actuality, it is a major letdown. Senior management understands that a process alone is insufficient. When more was required, it didn't take long for the consultants to show there. The advisers open up the possibility of setting up a structure that guaranteed compliance. The project would undoubtedly be successful. In fact, advisers act as an insurance policy to safeguard the use and dissemination of the approach.

Advisors will contribute expertise and real-world experience to the project, as well as extra capacity to handle the unusually heavy and irregular demand that comes with completing difficult projects. In order to produce the correct project under the proper conditions, the businesses may

otherwise be exposed to enormous risks. Advisors will collaborate with the authorities to allow, promote, and achieve the optimal project conclusion if they are handled well. Finally, the management of the company will convey to PPP market stakeholders that its project is well-resourced and deliverable successfully by selecting reputable and experienced advisers.

In recent years, South East Asia has seen very fast social and economic growth, which has resulted in a massive rise in urbanization and all the related issues such as a lack of housing, pollution, unemployment, traffic, insufficient transit, and so on. However, in order to address the issues brought on by quick changes in social and demographic trends, new transportation-related techniques have emerged at a remarkable rate. During the same time period, inflation has greatly contributed to dramatic, if not astronomical, increases in the cost of transportation systems. The financing of these projects has received a lot of attention due to growing expenses, which has increased the significance of the financial advisor's position. All major projects, whether related to transportation or not, have economic, social, political, and occasionally ecological consequences that typically fall outside the purview of the financial advisor. As a result, that highly specialized function has gained widespread acceptance in the international financial community from both lending banks and major borrowers. This is especially true, for instance, in the case of a major airport development where issues like noise pollution, relocating the local community, and the need to build additional infrastructure are significant and may have a big impact on the airport's overall financing strategy. Naturally, the authority will need to take these factors into account and base its judgments on the recommendations from all of its experts. It is possible for developments to get forward that are not thought to be the most affordable or technologically sophisticated [3].

Differences of opinion amongst consultants are likely to arise, and compromises will inevitably be made; it will be up to the authority to find the optimal solution. Regarding the financial advisor, there is a particular conflict of interest on which you need to concentrate your efforts. That conflict of interest arises for a bank if it serves as both a financial advisor and a lender or, worse yet, if it leads the lending syndicate for a project developer. The rise of independent financial advisors, and I emphasize independent has made significant efforts to ease the worries of project developers. We are referring to the conflict of interest resulting from the opposing objectives of the lender and financial counselor. The lender's first priority when considering financing for a project is how to structure the loan to get the greatest security arrangement. Once he is satisfied with the credit risk, he turns his attention to pricing, including the interest spread and fees, to determine whether they are reasonable given the risk involved and whether they will result in business for him. In other words, the lender attempts to get the borrower to accept the finest security and the greatest price.

On the other hand, the Project Developer is the sole one to whom the Financial Advisor is answerable. He works with the Project Developer's finance and treasury teams. It is his duty to arrange the financing so that the Project Developer may get credit at a price he can live with and with the least amount of collateral possible. The financial adviser uses his extensive experience in related initiatives, as well as his understanding of how lending institutions assess and organize loans, to achieve this. His compensation is often time-based; although, there may be variations on this subject. It should not, however, be based on whether or not the required financing is successfully raised, since this might place him on the same side of the table as the lender. It is a serious misunderstanding to believe that the role of the financial adviser is to maintain the lender's margin at a minimum. Large-scale projects are complicated, especially when several partners are involved. The financial adviser might considerably shorten the project's timeline due to quick cost increases and high interest rates, and his fees would be negligible in comparison to the potential savings, which could total \$0, \$0, or even \$1 million every day depending on the size and complexity of the project [4].

It is now necessary to swiftly go through three fundamental project funding types in general. The first option is guaranteed financing, which entails that the project developer assumes all of the project's risks by providing legal guarantees for all of the project's borrowings. It is without a doubt the simplest and least expensive method of obtaining project financing. However, the project developer might feel restricted in using this financing strategy. If it were a government, it may choose to save that capacity for initiatives of greater importance or not have its ability to borrow from the outside world decreased when that ability is constrained. The financial adviser would typically see determining the greatest financial burden the project developer could bear without in any way restricting its financial flexibility as part of its duty.

Full recourse non-guaranteed finance is the second kind of financing structure, and it basically entails the project developer accepting full responsibility for all project-related risks while attempting to minimize the need for formal guarantees. This may be done by the project developer making promises to the lenders, such as guaranteeing a certain level of profitability or cash flow via pricing control, which might provide them entire assurance. Limited Non-Recourse Financing, the third kind of financing, has the following crucial components:

- Lenders would assume certain business risks. In the case of a bridge or toll road, lenders would be willing to assume the risks of a minimum traffic use being fulfilled and so feel secure in the knowledge that the minimum income anticipated to be collected will be enough to cover all expenses, as well as debt and principal repayments.
- (ii) The project developer, who in the aforementioned scenario would be a government or state authority, would not be required to support the project's financial commitments; if a default happened, it would not have an impact on the creditworthiness of the government or state authority.
- (iii) Because lenders would be incurring business risks, they would anticipate solid agreements governing the project's commercial activities and the right to reimbursement in the event that political action impeded their repayment.
- (iv) Commercial contracts between users and project developers would need to be created in order to produce enough non-recourse financing while minimizing the risks to lenders.

The benefits of limited non-recourse financing are clear; it lowers the project developer's risk exposure and raises its total borrowing capacity. On the other hand, it might impose restrictions on the project developer's ability to make commercial and financial decisions; it would typically call for more equity funding to be invested in the project than guaranteed or full-recourse financing structures; and it would be subject to a higher interest rate reflecting the greater risks taken by lenders [5]. Moving forward, our focus will be on project advisory work. Even though the focus

of this symposium is primarily on transportation, we feel it is appropriate to quickly go over the kinds of projects that could benefit from specialized, independent financial advice as well as the makeup of potential project developers.

Residence Projects

The largest property development project would be the most apparent form of private sector enterprise that may benefit from an independent financial adviser. Such projects often include full recourse financing, with the land, the finished project, and shareholder guarantees acting as security in that order. On the other hand, hotel projects may be set up with a less rigid security structure if the chosen hotel management company was willing to be flexible with its management fee agreements.

Industry-Related Work

After financing for real estate, there are large-scale industrial projects. Particularly in South East Asia, some type of government involvement is probably required here. The final finance structure chosen will often depend on the kind of processing facility to be built. You can all agree that it would be simpler to put up a funding proposal for a copper and zinc mining and smelting plant than for a large-scale wheat mill since those metals are traded worldwide, their prices are transparent, and they are thus more marketable than grain [6], [7].

Related Projects

Next, we have energy-related projects including petrochemical plants, oil refineries, and systems for collecting oil and gas. In South East Asia, you will see considerable government involvement in joint ventures with one or more oil majors. Shareholders will want to minimize their risks, such as by avoiding the need to issue complete guarantees, which makes the independent financial adviser crucial. This is due in part to the scope and complexity of such projects [8].

Projects Relating to Structure

Major infrastructure projects such as port facilities, toll roads, bridges, power producing systems, railway systems, and, of course, mass transportation systems are the next step after energy projects. Government agencies or government-established enterprises always take on these initiatives. In Hong Kong, where the private sector owns the bulk of utility firms, there are notable outliers. The tunnel between Hong Kong Island and Kowloon, which was funded, constructed, and operated by The Cross Harbour Tunnel business, a publicly traded business listed on the Hong Stock Exchange in Kong. In Hong Kong, where the private sector is so strong Hong Kong Telephone, Hong Kong Electric, China Light & Power, China Motor Bus, and the Harbour Tunnel the Mass Transit Railway, or MTR, remains firmly in the hands of the government despite mounting operational losses.

There are both temporary and permanent organizational units within the different advisory services. Temporary services are often given to meet the administrative and other support needs of a set of projects that are connected by purpose or objective. The advisers service is terminated after these initiatives are finished. Program offices are associated with several government

programs. Advisory services that are permanent supplied a variety of support services for projects organized by organizational unit, rather than objective or purpose. They are often long-term contracts and include millions or billions of dollars in financing.

CONCLUSION

In conclusion, vendor finance can be an attractive financing option for both vendors and buyers, providing flexibility and convenience for both parties. It can help vendors increase sales and revenue, while also providing buyers with a more accessible financing option. However, vendor finance arrangements also come with risks and challenges, including the risk of default by the buyer and higher interest rates and fees for the buyer.

Proper due diligence and risk management are essential to ensure a successful vendor finance arrangement. Overall, vendor finance can be a valuable tool in financing a wide range of products and services. It requires a thorough understanding of the risks and benefits involved, as well as careful planning and execution to ensure that the arrangement is mutually beneficial for both the vendor and the buyer. When managed effectively, vendor finance can provide a win-win situation for both parties, contributing to the success and growth of the business.

REFERENCES:

- S. A.R, V. Somasundaram, and M. S. A. A, 'Access to Finance Street Vendors' Dilemma in Two Towns of South India', *Int. J. Manag. Public Sect. Inf. Commun. Technol.*, 2015, doi: 10.5121/ijmpict.2015.6402.
- [2] N. Hehsan, H. Salamon, and N. M. F. Nik Zainal Abidin, 'Peluang Dan Cabaran Sistem Teknologi Maklumat (It) Kewangan Islam Di Malaysia (Opportunities And Challenges Of Information Technology System (It) In Islamic Finance In Malaysia)', Umr. - Int. J. Islam. Civilizational Stud., 2017, doi: 10.11113/umran2017.4n1.103.
- [3] J. A. Akuu, D. Danyi, and C. Dapaah, 'Factors associated with poor food safety compliance among street food vendors in the Techiman Municipality of Ghana', *African J. Food Sci.*, 2017, doi: 10.5897/ajfs2016.1510.
- [4] B. D. Haney, 'Assessing organizational readiness for E-learning: 70 questions to ask', *Perform. Improv.*, 2002, doi: 10.1002/pfi.4140410404.
- [5] N. Papadopoulos *et al.*, 'Article information : About Emerald www.emeraldinsight.com', *J. Eng. Des. Technol.*, 2016.
- [6] S. Barlas, B. Porter, G. Porter, R. Randall, and K. Williams, 'The ERP Vendor/World-Class Finance Connection.', *Strateg. Financ.*, 2004.
- [7] J. Y. Tsai, R. Jou, and W. M. Hung, 'A barrier option framework for optimal bank interest margin with vendor financing', *ICIC Express Lett.*, 2012.
- [8] C. Sooksriwong, N. Osirisakul, A. Sripairoj, and ..., 'Benefits to Hospital Finance from Hospital Pharmacy's Vendor Management Inventory', *Thai J. Pharm. Pract.*, 2019.

CHAPTER 4

REPORT CONSOLIDATION AND DISTRIBUTION

Mrs. Salma Syeda, Assistant Professor, Masters In Business Administration, Presidency University, Bangalore, India, Email Id-syeda.s@presidencyuniversity.in

ABSTRACT:

Report consolidation and distribution is a process that involves collecting and combining data from multiple sources into a single report, and then distributing it to relevant stakeholders. This process is often used in businesses and organizations to provide a comprehensive overview of data and information, and to ensure that all stakeholders have access to the same information. The process of report consolidation and distribution can involve a variety of tools and techniques, including data integration, report design and formatting, and distribution methods such as email, web portals, or printed reports. It is important to ensure that the report is accurate, up-to-date, and presented in a clear and easy-to-understand format. The benefits of report consolidation and distribution include improved communication and collaboration among stakeholders, better decision-making based on a comprehensive view of data, and increased efficiency and productivity by reducing the need for manual data collection and analysis.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The advisers are making an effort using these support services to shift as much non-value-added labor as they can from the project team to the advisory services. More importantly, the advisers team will be far more educated about how to deliver these services since they will be extremely acquainted with the tools and systems that enable them, which will allow the project team to concentrate on the task of the project rather than being distracted by so-called "administrivia". These six categories describe the services offered by the fully operating future advisory organizations. Services that are in accordance with the six primary duties listed above are offered by the complete consulting service. The following sections provide a short discussion of them. Not every adviser will provide every SICD capability.

The choice of what counsel an advisor will provide is made by senior management. However, all six functions are incorporated into the entire project management process because they are necessary to fully support the complex project management. Below is a concise list of the six objectives of an adviser. Unless otherwise specified, these services apply to all project types. Depending on the kind of job, there may be changes in the advice provided. The advisers' objective is to provide these non-value-added services for less money than would be required if the project team handled them. More importantly, the project team members' skill sets are unlikely to include the abilities necessary to provide these services, whereas the advisors staff members who will

actually provide the service only need minimal office skills. As a result, the service will be provided by a less expensive person who is positioned and educated effectively for the task.

Project support is the term for all the administrative assistance that a program manager and the project teams could get from an adviser. These are what they are:

- 1. Reporting and modifying the schedule
- 2. recording and maintaining time sheets
- 3. development and dissemination of reports
- 4. Reporting success
- 5. consolidation and dissemination of reports
- 6. Reporting notebook upkeep

In addition to assisting project teams, the advisers also assist with project portfolio management on a managerial level. Some businesses let project teams to budget for the administrative help they might need. Typically, the amount of support required is determined by deducting a certain proportion from the total labor anticipated for the project.Consulting and Mentoring

The advisors profile lists qualified project consultants and trainers who may assist the project teams with their consulting and mentoring requirements. They serve as a safe haven for the project manager and team members in this role. Project teams and project managers may request the professional staff members of the advisers as needed. They are there to provide any specialist support. The list of consulting and mentoring services they may provide is as follows:

- 1. Support for proposal development
- 2. Leading meetings to collect requirements
- 3. Leading meetings for project planning
- 4. Risk evaluation
- 5. Interventions inside projects
- 6. Coaching and mentorship for project managers
- 7. Senior management mentoring

The most seasoned project managers are those who work as consultants. They have a wide range of rich experience. Nothing will surprise them since they have heard and seen most scenarios. They are capable of assisting the project manager even in the most complicated situations. This include creating proposals, compiling and reporting weekly progress data, keeping track of the project notebook, and helping with the audit after implementation. The team is in a unique position to collaborate and implement best practices from throughout the business. Due to this, project teams should consider them as extremely important resources. Through the professional consultants of the advisors, those resources are made available to the team [1].

One of the useful suggestions in this respect is to make it easier to organize the project planning meeting. This frees up the project manager from having to facilitate meetings, allowing him or her to focus on the project plan itself. The advisers are focused on conducting a successful planning session. Due to the fact that these advisers performed considerably more planning meetings than the project manager, they will have superior planning and facilitation abilities. acting as a virtual

expert who is managing projects while out in the field, but who has specific experience in areas that they are willing to make accessible to others as required. Simply put, the advisers serve as a matchmaker and clearinghouse for these services. Confidentiality is essential in this situation.

The service that every adviser must provide is represented by methods and standards. Without a standardized technique, there would be no way to monitor and enforce it or get a decent Return on Investment. This covers aspects including project start-up, planning, selection, and prioritizing as well as templates for Work breakdown Structures, risk assessment, project documentation, reporting, software selection and training, post-implementation audits, and the sharing of best practices.

The services covered by this function are listed below:

- 1. Creating project management procedures together
- 2. Setting, observing, and upholding regulations.
- 3. Choosing projects for the portfolio.
- 4. Construction using WBS
- 5. Development of project network diagrams
- 6. Upkeep of a tool and procedure library
- 7. Preparation of bids
- 8. Risk mitigation
- 9. Risk evaluation
- 10. Status updates
- 11. Process for managing scope changes
- 12. Documentation
- 13. Change requests

For newly constituted advisers, establishing, monitoring, and enforcing standards is a significant task. This duty may have a greater impact on the culture and operations of the business than any other that advisers will do. The process of choosing projects for the portfolio should go from suggesting projects to the portfolio for senior management to fully supporting senior management with regard to portfolio management.

Advisors should focus their ongoing attention on risk assessment. They are in the ideal position to compile a library of risk and mitigation techniques to be used across all projects since they can see every project. Lessons from previous risk management initiatives are beneficial lessons. It would be unrealistic to expect project managers to contribute to such a library and to utilise its resources when developing new initiatives. To make this resource valuable to others, someone must be in charge of it. Such responsibility should only be left in the hands of advisors [2].

Software tools: Every advisory body should be trying to increase productivity. It's crucial for teams to continue working effectively while they are scattered. One must allow time and distance to create performance hurdles in today's technologically advanced corporate environment. The adviser is the only organizational component capable of offering the assistance required for the market's constantly evolving selection of tools. It is in charge of approaching, assessing,

instructing, and entering into contracts with these tool providers. The software services that the organization relies on the adviser to offer are listed below:

- 1. Software assessment
- 2. Software preference
- 3. Software licensing and purchase
- 4. Vendor discussions
- 5. Computer training
- 6. Software upkeep and management.

All software that supports project work is evaluated, chosen, installed, supported, and maintained as part of the function.

Training: Compared to other organizational methodologies, project management training has likely been around the longest. Unfortunately, top management has the mistaken assumption that by providing everyone with project management training, their high percentage of project failure may be reduced. They are searching for a magic solution, but there isn't one here. The professional team has participated in a variety of project management training courses across several businesses. As a consequence of their training, they do not adhere to any one strategy. Everyone is still, in a way, going about their own business. Some people adhere to the method they were taught, while others do what they have always done, and yet others learn on their own [3].

The creation and implementation of a curriculum that is in line with the organization's project management approach must thus be handled jointly by the advisers and the training department of the organization. The adviser must also take on any duties that the training department is unable or unwilling to do. Regardless, the work needs to be finished. The list of training services that the advisers should be ready to provide is as follows:

- 1. Project management fundamentals
- 2. Professional project management
- 3. Project Management Specialist
- 4. Specialized subjects
- 5. Assistance to the training division
- 6. Course creation and content creation
- 7. Teaching classes
- 8. Choosing a project management training provider

The interaction between the training department and the advisor must be cooperative when it comes to project management training. Both the subject matter expert from the advisory group and the curriculum development specialists from the training department should be involved in the creation of the project management curriculum. The training department or the advisers may both give the program. If the training department is in charge of it, the curriculum design ought to adhere to a facilitative design. This spares the training department the onerous, at best, task of finding trainers with real project management experience.

Staffing and Professional Development: In the absence of a Human Resources Management System managed by an HR department, advisers are often in charge of project staffing and project manager professional development. This must be done, and it may be done in conjunction with an HR department that manages an HRMS. The HRMS must be able to help hiring suitable project managers and team members since this is a crucial and demanding task [4].

Project Manager Resources: The advisers' last responsibility involves providing a range of project manager-related human resource services. The list that follows is rather extensive and includes evaluation, development, and deployment services:

- 1. Develop human resources
- 2. Skills identification and evaluation
- 3. Members of the team are chosen
- 4. Evaluation of project teams
- 5. Professional advancement
- 6. Career growth and advice

One of the following methods is used to carry out this function: In certain instances, project managers will designate the advisers. The adviser will next give them their project assignment. This is the more typical scenario, when project managers are allocated to a company or functional unit. Even in this situation, the advisor is still able to assign projects and provide the human resources services listed under this function. In this situation, the advisors offer project managers resources for advice, suggestions, and career guidance. Regardless of the organizational structure in which the advisors are hired or already exist, the project manager lacks any other secure location to seek guidance and advice. The consultants are perfect for this old. There are many different human resources services available.

DISCUSSION

In order to finance the options that the project study has determined are suitable, the financial adviser will collaborate closely with the project authorities. The chosen method must be acceptable to lending banks and export credit organizations as well as the authority's and governments financial policies. There may be disagreements between the developer and the adviser in this area; for instance, the government may not want to provide formal guarantees, while the financial advisor may believe that the project's economics preclude raising money without such assurances. Tasks normally handled by a financial specialized adviser. The advisor's duties in this capacity would include:

- (i) Analyzing the project's economics and sensitivity to adjustments in operational factors in-depth;
- (ii) Investigating prospective funding options for the whole project cost, including cost overruns, contingencies, and working capital, using a variety of security arrangements
- (iii) Creating the appropriate security framework for the project authority that will allow money to be raised and achieve an acceptable cost;

- (iv) Analyzing the creditworthiness of bidders to determine their capacity to fund the to evaluate bids, talk with contractors on the terms and currency of payments, and to complete the work and address cost overruns;
- (v) Obtaining in-principle pledges from export credit organizations about the conditions of the forthcoming subordinated financing;
- (vi) Requesting bids from preselected banks for commercial financing on behalf of the project authority based on the best security structure developed;
- (vii) researching the conditions and currencies under which funding should be obtained to align with project cash flows; and
- (viii) Up to completion, final paperwork with banks and export credit organizations.

Given the rules and limitations that his client must abide by, the financial adviser must get to know and understand his client in order to create a security structure on which money may be raised and on terms that his customer can live with [5].

There are at least four reasons why a company might opt to engage advisers. At the end of the day, the fundamental duty of the financial advisor must be to guarantee that the funding is accessible without the project developer having to sell his soul. They are listed below.

- 1. The company must create formal processes for managing the volume and variety of projects as its portfolio's size and complexity increase. The organization sets out the processes that must be followed for starting, proposing, authorizing, and managing projects in order to achieve this.
- 2. More skilled project managers are required as volume rises. It will be necessary to identify and train those who are interested in serving as advisers. Those who are already trained need more instruction to handle the more complex projects. The advisory group serves as the organization's repository for its skills inventory of existing and aspiring project managers or subject-matter experts. The advisors is the organization that is best equipped to determine the training requirements of project managers and their teams since managers utilizing the advisors are aware of the sorts and complexity of existing and upcoming projects.
- 3. Lack of guidelines and standards increases inefficiencies and lowers production. Project failure rates are rising, which is evidence of this. The advisers may improve effectiveness and productivity via the creation and enforcement of standards and procedures.
- 4. More resources are needed since projects are becoming more complicated and numerous. It goes without saying that the lack of information technology specialists has turned into a challenge for project success. The same may be stated regarding the need for additional business analysts with higher levels of training. The advisers may maintain the right balance via training by keeping an eye on the need for highly trained project teams and the availability of such teams. That necessitates close coordination with HR for the training function between the advisors [6].

Even if the adviser is charged with selecting project managers, it is doubtful that they will also be charged with selecting team members. It's up to their functional manager to handle it. To help in staffing project teams for projects in the portfolio, advisers are responsible for maintaining the inventory of available skills and competences. The training and professional development of team members may fall under the purview of these same advisers as well. Assigning team members in accordance with talent profiles and professional development plans would thus fall partially on the shoulders of the project manager. In order to operate in the best interests of the person, this creates a collaborative atmosphere between a functional manager, the adviser, and the project managers.

Choosing Advice-Giving Organizational Structure

The location and structure of the advisers have been handled differently by different organizations. The following section discusses several forms. A virtual advisor fulfills all the duties of any other advisory body, with the exception that its personnel is assigned to the business unit. These virtual participants are only on hand when their services are required. They don't carry out any clerical duties. The virtual advisors do not have any other budgeted staff members outside a director and perhaps an administrative staff. The project-related professional staffs from the business divisions have agreed to provide the advisers with temporary assistance as required. These people, who are often also project managers, consent to serving for a period of time before being replaced. They only volunteer to provide a certain service or services in any scenario.

A genuine adviser does have a professional team that is budgeted, including multiple senior project managers. Numerous routine tasks are carried out by them, including project reviews, training design, training delivery, and software evaluation. The project evaluations are a useful tool for mentoring other coach managers, tracking how the technique is being used, and identifying best practices. Their greatest asset is probably the fact that they provide project teams with a good amount of project support services as needed.

Active Versus Inactive

The proactive adviser closely resembles the actual kind of advisor, whereas the reactive advisors closely resemble the virtual advisors. The actual form contains staff members who may assume leadership positions in a range of initiatives to enhance project management procedures and practices, so it can be proactive. The reactive advisor, on the other hand, is unstaffed and performs well by just responding to team members' and project managers' requests for assistance. It will also play a proactive role in monitoring and compliance tasks. When necessary, it will assist the project managers and team as part of its reactive role. Advisory groups that are temporary in nature are dissolved as soon as their portfolio is finished. Alternatively, they might have a very long lifespan and frequently add new endeavors to their portfolio [7].

Programs are groups of connected initiatives. There is a requirement for an oversight group like advisers since connected initiatives usually have certain reliance on one another. Because of the interdependencies between the projects, significant resource management issues will occur, and only supervision from the perspective of an adviser can effectively address such issues. They must provide services to all disciplines on a corporate level. They often have enough resources and employees. They may play strategic roles and are visible at senior management and project portfolio levels. At the functional level, they typically support the requirements of a particular discipline. They often lack the resources and staffing that their enterprise-level counterparts do.

A significant portion of the organization, such as at the division or business-unit level, is served by the advisers. For the group of projects and project managers it has stewardship duties for, advisers' main goal is to improve project management procedures and practices. The success of an adviser appointment is determined by how many fewer projects fail for which the advisors are held directly accountable. The advisers must also be well-aware of the abilities and knowledge that each prospective member has. Only then will they be able to provide advice and technical suggestions for the project.

Actual Finish Date: The moment when a planned activity really came to a finish. Activity Sequencing is the process of identifying and documenting dependencies between schedule activities. Approved Change Request is a change request that has been processed through the integrated change control process and approved. The process of acquiring the human resources required to complete the project. Brainstorming is a generic data collection and creative process that may be used to uncover risks, ideas, or solutions to challenges by employing a group of team members or subject-matter experts. This is in contrast to desired change. Every participant's thoughts are typically recorded during a brainstorming session for further analysis. An expansion project is one that aims to expand the plant capacity of the present product line.

Project scheduling is the process of arranging all of the project's actual activities in the time order in which they are to be completed, keeping in mind the logical sequence of the activities. Post project audit is an evaluation of a project after it has been completed. Replacement project is a project that aims to replace some of the existing infrastructure. WBS - A method for breaking down a project into different sub-projects, sub-projects into different tasks, tasks into different subtasks, and lastly, tasks into work packages [8].

You were aware of the advisers' involvement in project funding from the prior unit. With their knowledge, experts fill the gap between the project's expectations and reality for investors or developers. Before the project begins, we will attempt to comprehend its many phases and how it develops in this unit. Prior to the project's start, planning must be done to ensure that the project will produce the expected results.

As is well known, a sizable, long-lasting infrastructure is now required for the growth of the economy and of the country as a whole. Long-term financial commitment is necessary for this. After careful planning, development, and management, the cost of a project failure can be extremely high for both organizations and investors. The investors want a plan that can ensure the estimate of the project at various stages and appraise the course and success of the project as it advances in order to make this failure proof.

The whole process includes concept development, idea appraisal, and the choice of the most lucrative project idea for the investors based on anticipated future results. Projects are chosen based on a variety of factors, including the investors' time horizon, the cash available, the project's possibilities for the future, the product's availability on the market today and future demand predictions, etc. Without taking into account the cost variables associated with the various phases of the project, these criteria are insufficient. The price rely on a number of variables, such as the country's and global markets' exchange risk, interest rates, and inflation rates. Cost estimates are

useful throughout the planning and management stages of a project in determining where to get funding and how to use it.

For this, the estimations required to be accurate and justified in light of the current economic climate, as well as the knowledge and advice of the project advisers. Without it, carrying out the financial evaluation, making the company strategy, producing project budget sheets, and other thorough reports would be impossible. It gives project managers the ability to exert control over other cost components like raw materials, labor, equipment, etc. In order to have efficient project management, we will first go into great detail on the development and screening of project ideas, project stages, and cost estimates. These elements will aid in maintaining and achieving the project's goals while ensuring that it is limited as a scheduled activity based on the various project stages [9].

Growth of Project

The success and future returns of the project are determined by the planning and assessment of its many components. Because it determines the future growth rate and direction of the entire organization, this exercise must be completed carefully and cautiously. For the concepts to get financial investments, they had to pass rigorous testing procedures. Before allocating funding for the chosen project proposal, a feasibility study is carried out in this regard. To examine every little element, a viable project must undergo a thorough investigation. Details like cost-benefit analysis are given the weight they deserve since they aid in forecasting future cash flows. Future cash flows are influenced by a variety of risk variables, both internal and external in nature. These elements are taken into account, and a discount factor is taken into account to produce the project's required rate of return. This guarantees maximum revenues while lowering risk throughout the project's economic years.

We shall make an effort to comprehend the numerous facets of project concept creation, screening, and various stages of project finance in the section that follows. This calls for a thoughtful comprehension of the environmental circumstances and the organizational capacity to transform conceptions into reality. The business environment is made up of economic factors, government factors, technological factors, sociodemographic factors, competitors, and the presence of buyers and suppliers. Organizations conduct SWOT analyses on their internal capabilities to realistically understand their strengths and weaknesses so that they can better take advantage of opportunities from the external environments.

CONCLUSION

However, there are also challenges associated with report consolidation and distribution, such as data security and confidentiality concerns, and the potential for errors or inaccuracies in the data. It is important to address these challenges through appropriate security measures, quality control processes, and regular review and validation of the data. In summary, report consolidation and distribution is a critical process for businesses and organizations that need to share information and data among stakeholders. It requires careful planning and execution, and a focus on accuracy, security, and efficiency. When done effectively, report consolidation and distribution can provide significant benefits in terms of improved communication, collaboration, and decision-making.

REFERENCES:

- [1] S. Sajikumar, R. G. M. Morris, and M. Korte, 'Competition between recently potentiated synaptic inputs reveals a winner-take-all phase of synaptic tagging and capture', *Proc. Natl. Acad. Sci. U. S. A.*, 2014, doi: 10.1073/pnas.1403643111.
- [2] G. Roberto *et al.*, 'Coronavirus disease 2019 (COVID-19) in Italy: features on chest computed tomography using a structured report system', *Sci. Rep.*, 2020, doi: 10.1038/s41598-020-73788-5.
- [3] C. Salvatore *et al.*, 'Clinical and laboratory data, radiological structured report findings and quantitative evaluation of lung involvement on baseline chest CT in COVID-19 patients to predict prognosis', *Radiol. Medica*, 2021, doi: 10.1007/s11547-020-01293-w.
- [4] M. Carotti *et al.*, 'Chest CT features of coronavirus disease 2019 (COVID-19) pneumonia: key points for radiologists', *Radiologia Medica*. 2020. doi: 10.1007/s11547-020-01237-4.
- [5] J. Azadbakht, H. Haghi-Aminjan, and B. Farhood, 'Chest CT findings of COVID-19infected patients, are there differences between pediatric and adult patients? A systematic review', *Egyptian Journal of Radiology and Nuclear Medicine*. 2020. doi: 10.1186/s43055-020-00261-8.
- [6] K. Wang, S. Kang, R. Tian, X. Zhang, and Y. Wang, 'Imaging manifestations and diagnostic value of chest CT of coronavirus disease 2019 (COVID-19) in the Xiaogan area', *Clin. Radiol.*, 2020, doi: 10.1016/j.crad.2020.03.004.
- [7] S. D. Schmidt *et al.*, 'The role of carbonic anhydrases in extinction of contextual fear memory', *Proc. Natl. Acad. Sci. U. S. A.*, 2020, doi: 10.1073/pnas.1910690117.
- [8] R. R. Kumar, A. K. Singhai, S. V. Lokare, and S. P. Pandya, 'Pneumomediastinum and subcutaneous emphysema as complication in COVID-19 patient with high CT severity score: Two case reports', *Indian J. Radiol. Imaging*, 2021, doi: 10.4103/ijri.IJRI_629_20.
- [9] A. D. Grosmark and G. Buzsáki, 'Diversity in neural firing dynamics supports both rigid and learned hippocampal sequences', *Science*, 2016, doi: 10.1126/science.aad1935.

CHAPTER 5

RIVALRY AMONGST THE EXISTING FIRMS

Dr. Nishant Labhane, Assistant Professor, Masters in Business Administration (General Management), Presidency University, Bangalore, India, Email Id- nishantbhimrao@presidencyuniversity.in

ABSTRACT:

Rivalry among existing firms is a critical aspect of competitive analysis in business strategy. It refers to the degree of competition and intensity of rivalry among companies operating in the same industry or market. This competition can be based on price, product differentiation, marketing efforts, and other factors. Understanding the nature and intensity of rivalry among existing firms is essential for businesses to develop effective strategies and remain competitive. High levels of rivalry can result in price wars, reduced profit margins, and increased marketing expenses, while low levels of rivalry can result in complacency and reduced innovation. Several factors can influence the intensity of rivalry among existing firms, including the number and size of competitors, industry growth rate, and barriers to entry. In highly concentrated industries, where a few large firms dominate the market, the intensity of rivalry may be higher due to limited market share and a greater likelihood of direct competition.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Rivalry among existing firms is a key aspect of competitive strategy, as it determines the degree of competition and intensity of competition between companies operating in the same industry or market. Understanding and managing rivalry among existing firms is essential for businesses to remain competitive and achieve long-term success. Several factors can influence the intensity of rivalry among existing firms, including the number and size of competitors, industry growth rate, and barriers to entry. In highly concentrated industries, where a few large firms dominate the market, the intensity of rivalry may be higher due to limited market share and a greater likelihood of direct competition. To successfully navigate rivalry among existing firms, businesses must focus on developing unique value propositions, optimizing cost structures, and building strong customer relationships [1]. This may involve investing in product differentiation, effective marketing and advertising, and strategic partnerships and collaborations. Another important factor in managing rivalry among existing firms is to maintain a strong focus on the customer. This means understanding their needs and preferences and delivering high-quality products and services that meet those needs. It also means developing strong customer relationships, building brand loyalty, and providing excellent customer service.

Ultimately, successful management of rivalry among existing firms requires a strategic approach that emphasizes differentiation, cost optimization, and customer focus, and a commitment to

continuous improvement and innovation. By understanding the nature of competition in their industry and implementing effective strategies, businesses can stay ahead of their rivals and achieve long-term success. To successfully navigate rivalry among existing firms, businesses must focus on developing unique value propositions, optimizing cost structures, and building strong customer relationships. This may involve investing in product differentiation, effective marketing and advertising, and strategic partnerships and collaborations.

Overall, understanding and managing rivalry among existing firms is essential for businesses to remain competitive and achieve long-term success. It requires a strategic approach that emphasizes differentiation, cost optimization, and customer focus, and a commitment to continuous improvement and innovation. Future advantages for the project arise from implementing a successful idea. But where can we find an idea that can be developed into a future investment that will be profitable? The typical approach in this field is to seek for the operational objectives that support the development of such ideas. Utilizing SWOT analysis as the second technique, situational analysis is ensured to support strategic plans, budgets, and operational plans. It actually makes the project ideas feasible. The acronym SWOT stands for Strength, Weakness, Opportunities, and Threat analysis. In this instance, the company's internal elements are its strengths and weaknesses, while the external environment in which the business works provides the organization with possibilities and dangers. In this model, Prof. Michel E. Porter had made a flawless distinction between the elements responsible for the industry's competitive advantage. Therefore, after examining the five competitive forces that are having an impact, projects that aid industry in strengthening it by giving it better features.

- i) Threats from recent competitors
- ii) Threats posed by imitation goods
- iii) Competition among the current businesses
- iv) Suppliers' negotiating leverage, and
- v) Buyers' bargaining strength

Threats from new entrants: In an established industry, new competitors are constantly a threat in the form of decreased market share due to price wars, better marketing, competitive, and occasionally lower prices; offers to attract competitors' customers; technological advantage; products with added features; and the option for customers looking to switch.

Existing business organizations aim to eliminate or lessen this risk by gaining a competitive edge. In order to protect their interests, they establish organizations, have representation, and are heard by the governments. Government, as a significant stakeholder, makes sure that the interests of the economy are protected and that improvements may be made to the sector. Threats from replacement goods: Sometimes, substitute products replace current products and lower their market share. This is how the industry strives to gain a competitive edge. For instance, refined oil formerly served as a replacement or substitute for vegetable oil, but it has now supplanted both vegetable oil and expensive ghee or butter in terms of market dominance. Rivalry among the existing businesses: Competition between the various firms of the same industry takes place in order to increase or maintain the current market share. As a result, the firms strive to have in order to get rid of such alternatives. For this firm, being competitive in the market depends on factors like pricing, quality, product characteristics, patents and copyrights, services, etc. These factors cause the profitability and profit margins to decline. As a result, it is difficult for new competitors to emerge and become successful. Other causes of competition among the industry players include:

- 1. In general, the industry with the fastest rate of growth has more rivalry.
- 2. Industries with larger fixed cost investments.
- 3. Overcapacity and underutilized resource industries.
- 4. Existing product discrepancies in some industries.
- 5. With time, brand recognition becomes a competitive advantage for established businesses.
- 6. Due to greater switching costs and departure restrictions, some companies choose to stay in the market.
- 7. Only the current competitors are given room due to the competitors' diversity.
- 8. Companies having corporate stakes that are subsidiaries or auxiliary units have to continue competing.

Suppliers' Negotiating Power: If suppliers raise the cost of the product's parts, the product's price will likewise go up. Because of this, businesses with such suppliers lose their edge over rivals. Dependence on suppliers for such raw materials reduces the firm's profitability. Differentiation between inputs supplied by certain providers.

- a. Higher switching costs for suppliers and businesses in the sector give the supplier greater negotiating leverage.
- b. Less alternative inputs are available to the companies.
- c. Association brought forth by supplier concentration in one location forces them to set the price and prevents them from losing out to industries or buyer businesses.
- d. Due to their strong monopolies, a select few large volume suppliers are more significant since they are the only ones who can fulfill customer demand and set prices.
- e. The price and significance of raw materials from certain suppliers for the overall purchases made by the particular industry.

Suppliers will have greater negotiating leverage if they are skilled and driven enough to pursue forward integration and begin manufacturing the same product. While it decreases if there is any threat of backward integration by industry players to break such a monopoly or supplier bargaining power [2]. Purchasers' negotiating power increases if they belong to a union or organisation that advocates for their rights to a fair price and other interests. They may ask for better goods, services, and associated features, which would raise the price and lower the company's profit margins. With the growth of new and emerging markets for the company's goods, buyers' negotiating power decreases.

The following factors are the main causes of buyers having stronger negotiating power:

- a. Unions or associations of consumers have greater clout than those of businesses or sectors.
- b. The firm's goods are in great demand from consumers in large quantities.
- c. The lower switching costs of the buyer compared to the company makes it more difficult for the supplier to gain a competitive advantage over the buyer.

- d. A more prepared and knowledgeable buyer may utilize the information and make better demands.
- e. higher availability of alternatives for the customers, etc.

DISCUSSION

Professors Alan Rowe, Richard Mason, and Karl Dickel devised the Strategic Position and Action Evaluation Matrix. The SPACE matrix is a useful management tool that aids in the analysis of the company's strategy. It may be used in conjunction with other analytical techniques, such as SWOT and BCG Matrix. The sort of project the company should accept in order to reap the most rewards depends on an examination of its situation. The matrix specifies the four quadrants for this. For example, see Figure Format of SPACE matrix.

- 1. Aggressive
- 2. Conservative
- 3. Protective,
- 4. Competitive

Project should support the company's goal of gaining a competitive advantage over its rivals. The management of the business will undoubtedly give attention to a concept that can make this happen. The SPACE matrix aids in the analysis of the following elements prior to choosing any strategy:

- 1. Competitive advantage of the company
- 2. Industry Power
- 3. Financial stability of the business
- 4. Environmentally sound

Now, on the Cartesian graph with X and Y coordinates, the SPACE matrix is used to assess the significance of each of these dimensions. The CA and IS values are shown on the X axis, while the FS and ES values are plotted on the Y axis, in accordance with the definition's assumption that CA and ES values range from -1 to -6, while the IS and FS values range between +1 and +6. Depending on the outcomes, several postures will develop, and these postures will propose the kind of approach that the project should support, such as;

When all the factors are favorable and a project proposal is needed to increase sales and market share, an aggressive stance should be taken. When a company has a significant competitive advantage but its financial strength is insufficient to offset environmental volatility, competitive posture becomes important. By raising capital, cutting costs, etc., financial strength must be strengthened to support this. When a company lacks the potential to generate a return on investment while being financially solid, a conservative stance is evident. The project proposal should provide possibilities for competitive advantage and diversity [3].

When all four dimensions exhibit poor performance, defensive posture develops. The project proposal should be available at this point to bolster the company's advantages and aid in enduring difficult times. Nowadays, it is widely accepted that businesses and their products have a life cycle, just like other living things. As time goes on, they are born, develop, and eventually perish; it is

the management's vision that ensures that they remain relevant in the ever-evolving corporate environment. The stage of the company or product in its life cycle should be considered while developing ideas. Beginning with the product's acceptability in relation to the firm's life stage and goal, management evaluates projects. According to the life cycle method, the product went through four main stages:

- i) **Product Introduction:** At this stage, the company presents the product and any features, new technology, and intellectual property that go along with it. As a result, there may be comparable items that attempt to join this market, raising the degree of competition. The most novel and resilient concept, however, will have the best chance of surviving and thriving in the future.
- ii) **Growth Stage:** After a good introduction, the company or product goes on to the growth stage. At this point, each product is attempting to gain market share and generate revenue for the company.
- iii) **Maturity Stage:** Following the end of the growth stage, this is also the stability stage. In general, businesses and products benefit the most from the market, therefore now is the time to provide or else die.

The firm/product often dies a natural death if nothing is launched, improved, advanced, diversified as new to the market, or altered in any way for the future [4], [5].

Ideas for Projects Are Seen

The most promising project ideas may be compiled into a list using the provided matrixes, tools, and methodologies. However, the current challenge is to choose only the most promising idea, which can then become the most promising project going forward. The first screening is meant to weed out concepts that won't work for businesses or organizations. The steps listed below might be taken into consideration in this regard: Management vision and mission: The idea must be in harmony with the management's vision and purpose. It should help the organization now and in the future in this manner. Organizations operate as responsible citizens and refrain from engaging in commercial ventures that they deem to be either unethical or inconsistent with their mission. Since over time it harms the organization's overall brand image. Resources are readily available; but, as resources add cost to a product, if the product needs expensive resources or inputs, its ultimate cost must also be expensive. For such products, taking the lead and gaining market share becomes challenging. As a result, investors choose project concepts that have simple access to resources because they perceive them to be practical [6].

For instance, emerging nations are able to draw projects where resources are widely accessible inside their own borders while the globe has evolved into a single market without borders thanks to information, communication, telecommunication, and transportation. Due to the accessibility of inexpensive raw materials, building vehicles in India is less expensive than making them elsewhere. Due to this, any global firms create their projects to take advantage of these chances. Market demand: If the project concept is able to close the gap between the market's wants and the supply of products to meet those demands, it is widely accepted for financial investments. According to the life cycle concept, if the product can satisfy consumer demand, it is a huge

success. A company may explore both local and foreign markets, taking advantage of pricing differences between the nations, provided it has the ability and resources, such as means of distribution, to do so.

Producing typewriters, for instance, could seem like a good business concept, but without a demand-supply imbalance, investing in such projects is pointless. Cost competitiveness: If organizations have cost advantages, projects are preferable to invest in. For instance, companies that produce coffee beans and tea benefit from having access to raw materials and lower costs. Therefore, it would seem that investing in a project to market the finished product to consumers would be a wise business move. Their control over the cost aspects is the main justification.

Government policies should be taken into account while developing ideas for project finance. This makes it easier to get licenses and approvals. The plan should benefit both the country's economic and overall well-being. The project's potential to provide economic and social possibilities for the nation's population will determine how successful it is in the future. For instance, because of the state government's promotional policies, setting up pharmaceutical units is easier in various states in India. In this manner, state governments are able to draw money to their regions and create job possibilities. Which of the ideas can be implemented within the aforementioned key criteria will be determined through concept screening.

Now that the project has gone through the basic stages of concept generating and screening, what is required for it to go forward? knowledge the various project funding phases is necessary for a better knowledge of project identification and execution. These can be used to further determine the project's need and funding sources. Due to the capital expenditure required for decision-making, the organization has to plan the project more carefully. The goal of every organization is to keep costs down while improving project profitability [7].

Project Management and Cost Estimation

Analyzing and estimating costs is a key decision-making tool after choosing a project proposal in the early phases. The process of cost estimating results in the adoption of the project's final decisions, budgets, and other control measures in the future. In this manner, the benchmark is established by which the project's success is assessed throughout the project's development. Investors, stockholders, and other stakeholders may be pleased with the project's development in this manner. With careful planning and risk analysis, decision-makers can lower the risk of certain occurrences occurring in the future via cost projection. Through wise budgeting, they can also keep the entire process under control.

Process for Calculating Project Costs

We now understand the many types of expenses and the need of creating a cost spreadsheet. We would be able to ascertain the resources needed to make it effective via the cost estimate. To plan, carry out, and complete the project by the predetermined deadline, we must now consider the many choices. At this point, when the project will begin operating in the future, we have to make it successful and meet the objective for the company that established it. Cost-wise, we have to now recommend the ideal cost for the project creation and its administration. Success may be measured

on a number of criteria, from cost cutting to profit maximization, but generally speaking, we can say that a project is successful if it:

- 1. **Review of like initiatives:** For this, we take into account the costs of past projects that were formed similarly. As a result, it is sometimes referred to as "Historical data analysis." With this methodology, we estimate costs for the current project based on historical data that was previously established and established costs. This strategy is used either alone or in conjunction with other cost estimating tools and methodologies (parametric model). This tool makes cost projections for the present project using historical and statistical data. The precision necessary for a project's success may be assured by relying on such data.
- 2. **Bottom-up analysis:** Each cost element is taken into account separately for the whole project and each cost component. In order to make the project better and ensure that project estimates are correct, this is done. Later, costs of a similar nature are grouped together under various categories and sorted in accordance with them for the effective decision-making for evaluation, control, and reporting.
- 3. **Top-down analysis:** In this analysis, the whole cost is taken into account rather than the individual expenses being combined into different heads as in Bottom-up analysis. The Work Breakdown Structure's first stages of the project are used in this study to establish the project's cost variables. WBS takes into account the required work pieces and packages when estimating costs. The amount of work that can be completed within the project's resource constraints is determined by the experts based on these items and packages. The addition or deletion of things may be done in accordance with budgets based on the cost per item and per package.
- 4. **Reserve Estimation:** This technique was significant because it could be used to deal with inflated or underestimated project costs. This approach evaluates such deficiencies and aids in ensuring the project's quality and control. In this method, we take into account contingency allowances or reserves for preventing price increases brought on by uncontrolled and unanticipated unpredictable situations. The risk is reduced throughout the project life cycle by include reserves in the cost calculation [8].

You examined the many project phases, including concept creation, choice, planning, cost estimate, and project development, in the previous unit. You will learn about project appraisal, cost, funding sources, cost of production, and project cash flow statements in this course. Project financing is not a novel idea. Historians claim that this practice dates back to the period of the Greeks and Romans, who used to borrow money to pay for their maritime journeys and split the risk of encountering pirates and storms. Many limited recourse loans were made in the late nineteenth century to fund railroads, oil, and gas projects. So what exactly is project financing? Let's examine it using the different writers' definitions.

CONCLUSION

In conclusion, rivalry among existing firms is a critical aspect of competitive analysis and strategy for businesses operating in the same industry or market. Understanding the nature and intensity of competition is essential for businesses to develop effective strategies and remain competitive. Several factors can influence the intensity of rivalry among existing firms, including the number

and size of competitors, industry growth rate, and barriers to entry. To successfully navigate this competition, businesses must focus on developing unique value propositions, optimizing cost structures, and building strong customer relationships.

Maintaining a strong focus on the customer is also crucial in managing rivalry among existing firms. By understanding customer needs and preferences and delivering high-quality products and services, businesses can build brand loyalty and maintain a competitive edge. Ultimately, effective management of rivalry among existing firms requires a strategic approach that emphasizes differentiation, cost optimization, and customer focus. By staying ahead of their rivals and continually improving and innovating, businesses can achieve long-term success in their industry.

REFERENCES:

- T. Morgan, S. Anokhin, L. Ofstein, and W. Friske, 'SME response to major exogenous shocks: The bright and dark sides of business model pivoting', *Int. Small Bus. J. Res. Entrep.*, 2020, doi: 10.1177/0266242620936590.
- [2] R. Šperková and H. Hejmalová, 'Intensity of rivalry among existing competitors in the wine-making branch', *Acta Univ. Agric. Silvic. Mendelianae Brun.*, 2012, doi: 10.11118/actaun201260020429.
- [3] D. Isabelle, K. Horak, S. McKinnon, and C. Palumbo, 'Is Porter's five forces framework still relevant? A study of the capital/labour intensity continuum via mining and IT industries', *Technol. Innov. Manag. Rev.*, 2020, doi: 10.22215/timreview/1366.
- [4] Z. Stojkovic, 'Big Data Analytics and Natural Data Design for Enterprise Management', *J. Comput. Nat. Sci.*, 2021, doi: 10.53759/181x/jcns202101014.
- [5] M. E. Porter, 'The five competitive forces that shape strategy', *Harv. Bus. Rev.*, 2008.
- [6] B. Sulistyadi, N. Wening, and T. Herawan, 'Competing strategies evaluation on consumer visit reduction: A case study on a culinary business operation', *J. Environ. Manag. Tour.*, 2019, doi: 10.14505/jemt.v10.2(34).04.
- [7] J. Borrell, 'The Post-Coronavirus World Is Already Here', *European Council on Foreign Relations*. 2020.
- [8] M. E. Porter, 'Strategy Strategy the Five Competitive', *Harv. Bus. Rev.*, 2008.

CHAPTER 6

TECHNICAL ADVICE AND INSTRUCTION IN FINANCE

Ms. Swati Sharma, Assistant Professor, Masters In Business Administration, Presidency University, Bangalore, India, Email Id-swatisharma@presidencyuniversity.in

ABSTRACT:

Technical advice and instruction in finance refers to the guidance and expertise provided by financial professionals to help individuals and organizations make informed decisions about financial matters. This can include advice on investment strategies, financial planning, risk management, and other related topics. Effective technical advice and instruction in finance requires a deep understanding of financial markets, instruments, and regulations, as well as strong communication and analytical skills. Financial professionals must be able to provide clear and concise explanations of complex financial concepts, tailor their advice to the unique needs and goals of their clients, and stay up-to-date on the latest industry trends and developments. The benefits of technical advice and instruction in finance are numerous. For individuals, it can help them achieve their financial goals, maximize their returns on investments, and manage risk. For businesses, it can help them make sound financial decisions, secure funding, and navigate complex financial regulations

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Technical advice and instruction in finance is a valuable service that can help individuals and organizations make informed decisions regarding their financial goals. Financial professionals provide guidance on various financial topics, including investment strategies, risk management, financial planning, and more. The financial world can be complex and confusing, and it can be challenging to navigate without expert guidance. Financial professionals are equipped with the knowledge and experience necessary to help clients achieve their financial goals. They are able to analyze financial data and market trends to develop effective investment strategies, provide advice on asset allocation, and help clients manage risks associated with investments.

Financial professionals also provide advice on financial planning, which involves developing a comprehensive plan to meet long-term financial goals. This can include retirement planning, education planning, and estate planning. By developing a plan tailored to the unique needs of each client, financial professionals can help individuals and families achieve financial security and peace of mind. In addition to technical advice, financial professionals provide instruction on financial literacy. They help clients understand complex financial concepts and develop the skills needed to make informed financial decisions. This can include education on budgeting, saving, and credit management, as well as advice on financial products and services.

Overall, technical advice and instruction in finance play a critical role in helping individuals and organizations achieve their financial goals. By providing expert guidance and support, financial professionals can help clients navigate the complex world of finance and achieve long-term financial success. To provide effective technical advice and instruction in finance, financial professionals must be highly knowledgeable and experienced, with a strong commitment to client satisfaction and ethical practices. They must also be able to adapt to changing market conditions and evolving client needs, and continually seek opportunities for professional development and growth. Overall, technical advice and instruction in finance play a critical role in helping individuals and organizations make informed decisions and achieve their financial goals. By providing expert guidance and support, financial professionals can help their clients navigate the complex world of finance and achieve long-term success. A non-recourse or limited recourse financing structure that combines debt, equity, and credit enhancement for the building, operation, or refinancing of a particular facility is referred to as "project finance" in capital-intensive businesses.

The funding of the development or exploitation of a right, natural resource, or other asset when the majority of the financing is to be given by means of debt and is to be repaid mostly out of the assets being funded and their income, according to Andrew Fight. Project finance is a method of raising long-term debt financing for major projects through 'financial engineering,' based on lending against the cash flow generated by the project alone," according to Wikipedia. It depends on a detailed evaluation of a project's construction, operating, and revenue risks, and their allocation between investors, lenders, and other parties through contractual and other arrangements.

According to Stefano Gatti, "Project finance is the structured financing of a specific economic entity the SPV, or Special-Purpose Vehicle, also known as the project company created by sponsors using equity or mezzanine debt, and for which the lender considers cash flows as being the primary source of loan reimbursement, whereas assets represent only collateral." Project finance is the use of limited or no recourse loans to fund long-term, capital-intensive infrastructure for industrial and public utility projects. The capital and interest are returned from the project's cash flows. The project structure includes lenders who are lending institutions or a group of banks as well as sponsors who are the equity investors. Only the project assets are used as security for the limited or non-recourse loans that the lenders offer for the project's operation. They are reimbursed using the project's financial flows. Energy, mining, communications, and oil and gas are a few industries where project financing is used. These are the big projects that need a lot of capital money, which is accomplished via project financing. The project is regarded as a standalone financial entity, distinct from the firm carrying it out, and non-recourse to the company's assets. Only the cash flows produced by the project are used to pay the interest and capital repayment. The company's assets won't be used to pay off these obligations.

Budget is crucial for any business, whether it is private or public. Due to their long-term impacts, irreversibility, and significant outlays, choices about spending on different inputs of production, tools and processes, cost of capital, etc. are the most crucial ones for every organization to make. In a large plant, there will be a significant investment in specialized or custom-made equipment.

If the equipment does not meet the required specifications, there will be a loss, and the decision made cannot be changed. As a result, making choices about capital expenditures must be done with great care, and project assessment is crucial to this process. The numerous project activities and their cost considerations, any variations in cost, risks connected with them, etc. are scheduled with the aid of the project cost estimate. Different costing options are found and taken into consideration during cost estimation.

The following factors affect the project's cost:

- 1. Building and land
- 2. Machinery and equipment
- 3. Technical advice and instruction
- 4. Other than plants and machinery, fixed assets
- 5. Budgetary Charges
- 6. Costs related to obtaining funds
- 7. Anteoperative costs
- 8. Working capital as a margin of safety
- 9. Additional costs and a reserve money

Land and Building

The base cost of the land, if acquired, or the premium to be paid, if taken on a lease, leveling and development costs, costs for internal and approach roads, costs for water and electricity, etc. are all included in the cost of the land. Building costs primarily include cost of civil works, building for the plant and equipment, workshops, laboratories, warehouses, water supply, power station, godowns, basins, tanks, hoppers, chests, bins, and other structures necessary for installation of the plant and equipment, sewers, drainage, staff offices, staff quarters, guest house, canteens, and other structures. It depends on the location because the cost of land and site development is higher in urban areas compared to rural areas.

Vegetation and Machinery

It constitutes the bulk of the project's expense. It comprises the price of both locally produced and imported equipment, as well as any associated expenditures such as shipping, taxes, loading and unloading of these machines, etc. The price of shops and replacement parts is also included.

Training and Technical Consultation Number

Buying equipment for a plant is insufficient. It is equally crucial to know how to use, maintain, and debug it. Technical advice is necessary for it. It is often necessary to work in conjunction with a local or international technical business for the initial installation of equipment, training of operators, supervision, and problem-solving. The cost of the project includes the consulting fees for the engineering education and services as well as technical know-how [1].

Other Fixed Assets Beyond Plants and Machinery:

Other fixed assets exist that are not involved in the direct manufacturing process. They include things like office furnishings and equipment, transportation, electricity, boilers, generators, and

transformers, as well as workshop and laboratory equipment. Non-tangible assets like licenses, copyrights, trademarks, and patents are also included. When determining the project cost, all associated costs must be taken into account.

Preliminary Outgoings

Finding the project is the first step in the project development process. Once the project has been chosen, its marketability and financial viability are evaluated. The process of forming the firm and creating the memorandum and articles of association follows the feasibility and viability report's favourable conclusion.

Preliminary expenditures refer to any costs spent during these phases and are included in the project cost.

Costs Associated with Raising Capital

There are a number of organizations engaged in the process when capital is raised from the general public. They consist of stock exchanges, brokers, underwriters, portfolio managers, registrars, advertising agencies, etc. They are referred to as capital issue expenses and are incorporated into the project cost.

Pre-Operative Costs

Pre-operative expenditures include all of the first costs incurred before to the commencement of commercial production, including setup and establishment costs, rent, taxes, travel expenses, interest on borrowings, mortgage costs, insurance premiums, start-up costs, etc. Any delay in the project's implementation leads to an increase in these costs because they are directly dependent on the schedule. A little allowance is often given for these costs since some implantation delay is anticipated [2], [3].

Money as A Margin for Working Capital

It is the percentage of the loan amount that the financial institutions block and hold until there is a working capital deficit or the project is finished, at which point it is released. It is a significant project cost component. A certain sum is set aside for unanticipated circumstances or other miscellaneous expenses. It comprises costs brought on by higher-than-average inflation as well as an increase in the cost of other project components. It also covers the early monetary losses that the majority of projects experience.

DISCUSSION

Equity Capital

Equity capital and preference capital are the two types of share capital. The investment made by firm owners and equity shareholders is known as equity capital. They assume the risk of financial loss, and the dividend rate is variable. Preference shares are used to raise the preferred capital, and the dividend is often set.

Debenture Capital

The financial instruments that are utilized to produce debt capital are called debentures. Debentures come in two varieties: convertible and non-convertible. The pre-specified period and price determine whether the convertible debentures may be converted into equity shares in whole or in part. Non-convertible debentures are financial securities with a set rate of interest and a maturity term ranging from five to nine years.

Year Loans

The main source of funding for a new project is term loans. They are a crucial source of funding for the growth of ongoing initiatives as well. They are secured loans offered by banks and other financial institutions. Rupee term loans and loans in other currencies are the two most popular forms of term loans in India. The rupee term loan is available for funding land, buildings, civil works, indigenous plant and equipment, etc. The foreign currency term loan is used to cover the foreign exchange costs associated with importing the machinery, equipment, technical know-how, consultancy, training, etc. [4].

Deferred Credit

Deferred credit may be obtained by providing a bank guarantee or by mortgaging certain assets. In this case, the supplier of the plant and equipment offers a different payment option, allowing the customer to pay for the plant and machinery he bought from the provider after a certain amount of time has passed.

Government subsidies or Incentive Sources Totaling

The government sometimes offers financial aid as an incentive to stimulate the establishment of industrial units in particular places in order to boost economic activity and for the welfare of the local populace. These incentives might take the shape of a subsidy, extremely low interest-rate seed money, tax breaks, etc.

Leasing and Hiring Purchases

In a lease financing arrangement, the lessor grants the lessee the right to use the asset for a certain time in exchange for lease rental. Ships, aircraft, and other huge, heavy equipment are often financed in this way. In hire purchase, the user makes a down payment to secure the asset and then pays the remaining balance plus interest over time. The user acquires ownership of the asset at the conclusion of the period and upon completion of all payments.

Discrete Sources

Unsecured deposits and public deposits are examples of other sources of funding. Unsecured loans are those that business owners who are the promoters of the company borrow from family and friends without any kind of security. On their loan amount, the lenders may or may not get interest. Public deposits are sums of money withheld from the general populace for a minimum of six months and a maximum of months.

You learned about the different project financing sources in this part. How to decide which financial source to use is now the issue. It is subject to financial institution and regulatory rules, as well as important commercial factors including cost, control, flexibility, and risk. The government, financial institutions, and regulatory authorities create certain standards that must be followed and ease the project financing choices in order to safeguard investors and instill caution in project financing decisions. Because the interest paid on debt is deductible from taxable income but the dividend to be paid on equity is not, the cost of debt financing is lower than the cost of equity financing [5], [6].

Control over the project's operations and business is the second important business factor. Therefore, the project's promoters would prefer a source of project financing that allows them to maintain the most amount of control. To raise capital in the future, if necessary, flexibility in reserve borrowing capacity is crucial. The most significant factor in selecting a financing method for a firm is risk. Financial leverage is financial risk. Therefore, if there is little financial risk, the project can withstand changes in demand and price. Understanding the production and sales predictions is necessary before determining the cost of production. It would not be necessary to alter the final stock of items in the early years since sales would be equal to production. The dealer's commission must be included in the selling price, but not GST. The following table displays the information that must be included for estimating sales and production:

Sales and production may be calculated jointly since they are closely connected. Estimating the cost of manufacturing is simple if output and sales are anticipated. The different project cost estimating methods were previously covered in detail in the prior unit. Therefore, the primary project cost components will be described in this unit. The price of all the commodities and services required to produce final items is known as the cost of production, and it primarily consists of the costs of raw materials, labor, utilities, and manufacturing overhead. We'll go through each of them individually [7], [8].

- 1. **Material Cost:** This includes the price of all the raw materials needed for manufacturing, as well as the cost of equipment parts, chemicals, and consumable supplies. It is the most crucial element of the production cost. Along with its price, the cost of raw materials will also include freight and insurance.
- 2. **Cost of Utilities:** Cost of utilities, such as gasoline, water, and electricity, is included into the price of manufacturing. The tariff set by the relevant electrical boards determines the cost of electricity. Water supply departments must pay the cost of the water used for boilers and other production-related processes. Costs for oil, firewood, coal, gas, and other fuels are included.
- 3. Labor Cost: The total amount of salaries and other compensation given to all workers is considered labor cost. The predicted salaries are based on the going rates in the sector. The quantity of people recruited and their rate of compensation determine the labor cost. Daily earnings, basic salary, housing allowance, dearness allowance, leave trip reimbursement, gratuity, provident fund, medical reimbursement, conveyance allowance, bonuses, overtime, etc. are all included in the compensation.

4. **Factory Overheads:** This category includes all expenses incurred for rent, taxes, insurance, repairs, and upkeep. The machinery's age directly affects the repair and maintenance costs. The old equipment will need a lot of repairs and maintenance, but the new machinery won't need as much. Therefore, it is important to budget for repairs and maintenance costs based on the age of the machinery. Under factory overhead costs, there should also be some room for other factor expenses.

Wage and Salary Requirement

Working capital is the money needed to pay for the project's immediate needs, such as raw materials, component imports or local purchases, creditors, inventories of completed items and work-in-progress, consumable stores, and operational costs. Some of the primary sources of working capital finance are commercial banks, trade credit, accruals and provisions, and long-term sources of funding. Up to their specified aggregate permissible lending limits and against those current assets for which a certain amount of margin money is provided, commercial banks offer working capital advances. Commercial banks use the second approach recommended by the Tandon Committee to determine the maximum permitted amount for working capital [9].

When an entrepreneur invests in promoting a project, his goal is to make a profit. Governmentsponsored initiatives may not use financial returns as a criteria for assessment since they also take into account the advantages of social costs, but for privately funded enterprises, financial returns are the primary driver of investment and promotion. Which project will be better and provide the investor with the highest return if there are numerous projects and they all seem to have a strong potential for profit? Before choosing one, the investor must do a comparative analysis or financial analysis of all the options' returns. This is referred to as cash estimate or project value. The following two methods are used to value the project:

- 1. Discounted cash flow methods,
- 2. Methods for non-discounted cash flow.

These techniques were thoroughly covered in your "Financial Management" course. So a brief recap is provided in this unit.

Techniques for Discounted Cash Flow

As the name implies, this approach of project valuation discounts the future cash flows by a rate that takes inflation, time value of money, and opportunity cost into account. You have previously studied time value of money from a prior semester. There are four ways to evaluate investments using discounted cash flow models. These are what they are:

- 1. The Net Present Value approach
- 2. Using the internal rate of return
- 3. The Profitability Index approach, and
- 4. The benefit-cost ratio approach

The Net Present Value approach:

This is yet another technique for project valuation. It also goes by the name "profit investment ratio." By dividing the present value of anticipated future cash inflows by the project's original investment, this approach allows investors to evaluate the amount of value per unit invested. Projects with higher profitability indices will provide investors enticing returns on their investment. Profitability Index is calculated as Initial Investment in the Project – Present Value of Future Cash Inflows.

The Benefit-Cost Ratio Approach

The cost-benefit analysis process uses this technique. It contrasts the cost and investments of a project or investment with the present value of all benefits, or the present value of all future cash inflows. Investment will result in losses if BCR is less than 1, meaning it will not be profitable. Investment choice won't be lucrative or lose money if BCR = 1. The investment option is beneficial if BCR exceeds 1.

Techniques for Non-Discounted Cash Flow

The Pay Back Period method and the Accounting Rate of Return method are the two techniques used to value projects.

Payback Period Technique:

This approach is among the easiest for evaluating investments or projects. The payback period is the length of time needed to recoup the project's initial expenditure, expressed as the number of years.

Method of Accounting Rate of Return:

The Average Rate of Return approach is another name for it. ARR stands for after-tax return on investment. Profit after Tax is the project's average yearly cash inflow after taxes.

Cash Flow Projection Statement

The company's cash inflows and outflows are shown on the cash flow statement together with their effects on the cash balance. The listing of cash inflows and outflows for a future time, often a year, is a projected cash flow statement. It is used to assess the cash inflows and outflows to predict when, how much, and how long a company will experience cash deficits or surpluses over the course of a forthcoming time period, often a year. The cash flow statements only include cash-related elements. If the forecasted cash flow statements include information that indicates a cash surplus, strategies and timetables for debt repayment and short-term investments may be created. It may support the need for a loan if it demonstrates a cash imbalance. It is thus particularly beneficial for project appraisal, financial planning, and money management. Here is a straightforward projected cash flow format [10].

The side of the project's liabilities displays the many types of financing employed, including equity and preference share capital, reserves and surplus, which are the company's accumulated retained profits, secured loans, unsecured loans, current obligations, and provisions. the total retained profits, which include general reserves, dividends realized, and the repayment of debentures. The debts against which security has been offered include secured loans from commercial banks and financial institutions, such as debentures and term loans. Unsecured loans, such as unsecured loans from promoters, family members, and friends, as well as public fixed deposits, are loans for which no security is offered. Current liabilities are short-term debts that include payments due for rent, salaries, wages, and other expenses as well as for supplies and raw materials used in manufacturing. Pension, gratuities, taxes, dividends, and other provisions are represented by provisions.

On the assets side of the balance sheet are the monies that were used in the company. They comprise fixed assets like equipment and other resources utilized in the creation of goods and services, and they are represented at their original purchase price less depreciation. The financial securities that the company possesses are represented by investments. Cash, inventory, creditors, loans, and advances made by the company are examples of current assets, loans, and advances [11].

Project finance is the use of limited or no recourse loans to fund long-term, capital-intensive infrastructure for industrial and public utility projects. The capital and interest are returned from the project's cash flows. The cost of the project is determined by the following factors: Land and building, Plant and machinery, technical consultation and training, Fixed assets other than Plant and Machinery, Preliminary Expenses, Capital-Raising Expenses, Pre-operative Expenses, Margin Money for Working Capital, Miscellaneous Expenses and Contingency Fund. The cost of production is the cost of all the goods and services used as inputs in the production of final goods, and it primarily includes material costs.

CONCLUSION

In conclusion, technical advice and instruction in finance are crucial for individuals and businesses to make informed financial decisions. It involves providing expert guidance and knowledge on various financial matters, including investments, budgeting, risk management, and taxation. Proper financial advice can help individuals and businesses to achieve their financial goals, mitigate risks, and maximize returns. When seeking technical advice in finance, it is important to consider the qualifications, experience, and reputation of the financial advisor or consultant. Additionally, individuals and businesses should understand the fees and potential conflicts of interest associated with the advice being provided. Overall, technical advice and instruction in finance are essential for achieving financial success and should be sought out by individuals and businesses who want to make informed financial decisions.

REFERENCES:

- [1] J. D. Fletcher, "Comments and reflections on ITS and STEM education and training," *International Journal of STEM Education*. 2018. doi: 10.1186/s40594-018-0106-7.
- [2] D. Milde, E. Klokočníková, and A. Nižnanská, "Practical guidance for organizing small interlaboratory comparisons," *Accredit. Qual. Assur.*, 2021, doi: 10.1007/s00769-021-01458-8.

- [3] K. S. Samsson, S. Bernhardsson, and M. E. H. Larsson, "Perceived quality of physiotherapist-led orthopaedic triage compared with standard practice in primary care: A randomised controlled trial," *BMC Musculoskelet. Disord.*, 2016, doi: 10.1186/s12891-016-1112-x.
- [4] B. Renner, M. Prilla, U. Cress, and J. Kimmerle, "Effects of prompting in reflective learning tools: Findings from experimental field, lab, and online studies," *Front. Psychol.*, 2016, doi: 10.3389/fpsyg.2016.00820.
- [5] A. Syska, "When the flipped classroom disappoints: engaging students with asynchronous learning," *J. Learn. Dev. High. Educ.*, 2021, doi: 10.47408/jldhe.vi22.771.
- [6] H. M. Palmer, "Using Antibodies: A Laboratory Manual," *J. Antimicrob. Chemother.*, 2000, doi: 10.1093/jac/45.3.413.
- [7] S. Misra, B. Daly, S. Dunne, B. Millar, M. Packer, and K. Asimakopoulou, "Dentist-patient communication: What do patients and dentists remember following a consultation? Implications for patient compliance," *Patient Prefer. Adherence*, 2013, doi: 10.2147/PPA.S43255.
- [8] F. H. M. van Herpen, R. B. van Dijsseldonk, H. Rijken, N. L. W. Keijsers, J. W. K. Louwerens, and I. J. W. van Nes, "Case Report: Description of two fractures during the use of a powered exoskeleton," *Spinal Cord Ser. Cases*, 2019, doi: 10.1038/s41394-019-0244-2.
- [9] K. Taylor, S. Nettleton, G. Harding, and S. Bartholomew's, "Social Research Methods," in *Sociology for Pharmacists*, 2010. doi: 10.4324/9780203381175_chapter_9.
- [10] A. J Flynn, J. A. Milstein, P. Boisvert, N. Gittlen, C. Lagoze, and G. Meng, "ScriptNumerate: A Data-to-Advice Pipeline using Compound Digital Objects to Increase the Interoperability of Computable Biomedical Knowledge," *AMIA ... Annu. Symp. proceedings. AMIA Symp.*, 2018.
- [11] C. Lim and M. Khine, "Managing teachers' barriers to ICT integration in singapore schools," *J. Technol. Teach. Educ.*, 2006.

CHAPTER 7

A STUDY OF CASH FLOW STATEMENT

Ms. Neha Saxena, Assistant Professor, Masters In Business Administration, Presidency University, Bangalore, India, Email Id-nehasinha@presidencyuniversity.in

ABSTRACT:

The operating activities section shows the cash inflows and outflows related to a company's core business operations. The investing activities section shows the cash inflows and outflows related to investments in property, plant, and equipment, as well as investments in securities. The financing activities section shows the cash inflows and outflows related to raising or paying off debt, issuing or buying back stock, and paying dividends.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

A cash flow statement is a financial statement that provides information about the cash inflows and outflows of a business over a specific period of time. It shows how cash moves in and out of a company's accounts and is used to evaluate the liquidity and financial health of a business. The statement is divided into three sections: operating activities, investing activities, and financing activities. The cash flow statement is an important tool for investors, creditors, and analysts to assess a company's financial health and liquidity. It provides valuable information about a company's ability to generate cash from its operations, invest in growth opportunities, and pay its debts and obligations [1], [2].

As such, it is an essential component of a company's financial reporting and is required under generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS). You can infer from the definition that a project requires a significant amount of funding. Share capital, term loans, debenture capital, deferred credit, incentive sources or government subsidies, unsecured loans and deposits, lease and hire-purchase agreements, and other sources are among the numerous ways or sources of funding. Working capital is the money needed to pay for the project's immediate needs, such as raw materials, component imports or local purchases, creditors, inventories of completed items and work-in-progress, consumable stores, and operational costs. Some of the primary sources of working capital finance are commercial banks, trade credit, accruals and provisions, and long-term sources of funding.

Both non-discounted and discounted cash flow approaches are used to value the project for profitability. The Net Present Value approach, Internal Rate of Return method, Profitability Index method, and Benefit Cost Ratio method are used in non-discounted cash flow financial analysis.

Pay Back Period Method and Accounting Rate of Return Method are both utilized for discounted cash flow analysis. If the expected cash flow statements reveal a cash surplus, strategies and timetables for debt repayment and short-term investments may be created based on the data. It may support the need for a loan if it demonstrates a cash imbalance. It is thus particularly beneficial for project appraisal, financial planning, and money management. The balance sheet shows a company's financial situation at any given moment. The projected balance sheet shows the anticipated changes in current obligations, equity financing, and asset investments. It aids in long-term financial planning strategy.

Project Finance: Project finance is the use of limited or no recourse loans to fund long-term, capital-intensive infrastructure for public utilities and industrial projects. The capital and interest are returned from the cash flows produced by the project. Deferred Credit: In this situation, the supplier of the plant and machinery offers a different payment facility, meaning the buyer can pay for the plant and machinery he has purchased from the supplier after a specific amount of time has passed. Debentures: Debentures are the financial instruments used to generate debt capital. Lease Financing: In a lease financing arrangement, the lessor grants the lessee the right to use the asset for a certain time in exchange for a lease rental.

Working capital is the capital required for short-term financing of the project's operations, such as raw materials, importing or local purchasing of components, debtors, stock of goods-in-progress, stocks of finished goods, and so forth. Cost of Production: The cost of production is the cost of all the goods and services used as inputs in the production of final goods, and it primarily includes material cost, labor cost, utilities cost, and factory overhead cost.

Cash Flow Statement: The cash inflows and outflows of the business are shown together with their effects on the firm's cash balance for the forthcoming term, which is typically a year. The balance sheet shows a company's financial situation at a certain moment of time. of the prior lesson, you learned how to value a project and predict its cash flows. You should be able to comprehend the precise requirement for such massive initiatives by this point. Projects may be supported via public-private partnerships by governmental entities, private businesses, or both. To maintain stability, they must raise enormous sums of money and make predictions about the future. Typically, these funds are raised by constructing a financial structure that includes debt, equity, or both, as well as credit enhancement. The credit rates vary in project financing according to the project's stage of life. The necessity for the projects' cash flow estimates is necessary to make them more suitable and relevant. The project sponsors combine the credit facilities with the equity finance. This enables them to properly pay all expenses while taking into account all risks and the need for working capital needs [3].

Assuming that the project goes as planned, they are often based on secondary data and the accessible internal information. According on the prior performance of the individual teams, the estimates are often expected. This serves as the foundation for project costs and cash flow projections. However, because the period of engagement of funds is lengthy and irreversible, they must pass the viability test to fully proof the results in the future. Due to the nature of project financing, cash must be set aside with a long-term outlook. But before they can be put into action, they must pass a feasibility test to get the management or board's permission. In this lesson, we'll

attempt to comprehend the idea of market and technological feasibility and how important it is. Additionally, we will learn how to apply market, technical, and financial feasibility techniques.

The process of funding a project often begins with the identification of potential projects in project finance scenarios. Based on examination of many characteristics, a rating of these potential projects will be determined. Only the best projects will be taken into account when allocating cash, and the project's implementation will follow. The market feasibility, technical feasibility, and financial feasibility are often examined in most projects. However, in the case of projects that are funded by the government, two additional factors—economic and social viability—are included. Environmental viability must be taken into account in addition to these two factors. The relevant feasibility group, which studies the project's numerous components, conducts surveys in this way. They research the project's technical, financial, and marketing aspects as well as its long-term finance. They gather data and provide a specific suggestion using these surveys. These proposals assist the decision-maker in making a choice based on the adequate data provided with the proposal.

Concerns about these initiatives include:

A project manager works to guarantee the cash flow from the operations at the project level in order to assure the project's economic viability. For instance, because highways are often built under the public-private partnership model, the party in charge of maintaining them must guarantee that there is enough traffic in order to collect tolls and attempt to turn a profit as soon as possible [4].

- 1. **The Economic Aspect:** this refers to the accessibility of resources, including people, equipment, materials, and money. It should be consistent with the project's business goals so that they can make the projected profits while maintaining demand. Volumes may be used to control factors like as sales, purchases, costs, and so forth.
- 2. **Financial Aspect:** All of the project's resources must be acquired or paid for using the project's financial resources. This requires that the plan take into account financial factors including the cost of capital, the sources of funding, the prediction of sales, production, and cost, budgeting, working capital management, the break-even point, expected cash flows, and the projected financial statements. Comparing expected and actual performance at the project level is made easier with the aid of budgeting.
- 3. **Technical Aspect:** The project's technical assistance is helped to be available by the project's technological component. A corporate organization may assess its capacity or seek assistance for outsourcing via consulting thanks to the technical components of the project. It aims to make the project run more smoothly in the future. For this, the team must guarantee the availability of land set aside for the project, resources like water and electricity, transportation, communication, human resources, and support needed to make them productive workers, such as food, lodging, transportation on and off site, etc., technical support for the project during the shutdown period for repair, and ensuring the availability of raw materials in accordance with demand and project phase.
- 4. **Social Aspect:** This section primarily addresses social problems and the social costs connected with carrying out the project. The project cost cannot be seen in a vacuum; it is

always accompanied with the expected future economic benefits. As with all projects, society serves as both the supplier and the customer by providing the necessary input factors. We do a social-cost-benefit analysis for such factors, identifying and quantifying the costs and advantages of the project.

5. **Management vision and mission:** The project's destiny is decided by the management's dynamism in this area. This kind of project takes a long time to implement and complete. Therefore, it is the management's foresight to investigate the risk factors associated with the projects and ensure their success despite any potential future obstacles. By providing timely feedback and taking appropriate action, management has the traits that can successfully complete a routine project.

Interest and Scope

The availability of the project site, the project type, the technology to be employed, the volume of the project, the scope, and the pace of the project's execution are all factors in the project life cycle, which spans a period of time. The commercial, economic, financial, technological, social, and managerial aspects must be taken into account for this. The significance and extent of the project funding may be better appreciated due to the following factors:

- A. **Growth:** An investment decision's impact never manifests itself in isolation. It always has an effect on both the present and the future. Due to its long-term nature, the effects of the present spending may have an impact on how the whole company is headed in the future. A successful project could draw in larger initiatives in the future, and vice versa, a failing project would damage the reputation of the sponsors and keep them away from prospects [5], [6].
- B. **Risk:** Sponsors may incur significant costs if they underestimate risk. When it comes to them, the limited resource must be used sensibly to ensure future returns. Returns from one project might augment those from the others in the future and assist to lower their risk. As money is allocated in a methodical chain, each outcome is related to the project's beginning or stage.
- C. **Funding:** Because every initiative has an opportunity cost, the sponsor has limited sources of funding. This cost represents the potential return on investment from the next-best option, which was passed up in favor of the project proposal and its related rewards. These funding sources require dedication to guarantee future dividend or interest returns.
- D. **Irreversibility:** The project is executed after considering all of the feasibility studies and the time commitment. For the duration of the project, financial and other commitments are made later. It is difficult for the executing party to permanently restore everything to how it was. For the project's topic, irreversibility or cancellation is exceedingly expensive for the project's funders.
- E. **Complexity:** The sponsors' most challenging choice is whether to make long-term financial commitments. They are taken into account after a thorough evaluation of the alternatives and the selection of the best for the long-term interests of the stakeholders. The feasibility report is crucial for the decision makers because it allows them to forecast the future using the historical data that is already accessible.

The examination of the project's commercial aspects, the plant's capacity, the availability of technology, the support system for the equipment and civil works, the working environment for the personnel on site, and the supply and availability of raw materials for the production all contribute to defining the project's scope. The in-depth studies are taken into account in feasibility reports, which aid in calculating the production costs and expected cash flows to achieve breakeven and then turn a profit.

DISCUSSION

Products that are designed with the client in mind and are in demand on the market are always beneficial as investment options. Although the factors influencing demand may vary from one location to another, the fundamental characteristics of the product may not change. The demand for a refrigerator, for instance, may vary from north to south and east to west depending on the climate, but the function of such refrigerators will always be the same. The market feasibility research aims to ascertain possible market demand and estimates based on the survey that was done. The sponsors can comprehend the market's demand and the level of competition based on these surveys [7].

The product varies depending on the market's need. The sponsor has made the decision to use its initiative to satisfy a segment of the market's need. For instance, the demand for refrigerators is influenced by many factors, including the size of the room, the cost of the refrigerators, the customer's brand loyalty, the company's after-sale service, and many others. Before making a final decision regarding the production of a product like this or a new or unique product, the decision maker must gather and analyze the relevant data. This also goes by the name of market analysis. The rivals' previous performance may be examined for the already-available items of a similar sort, and projections can be made based on the data that is now accessible. However, predictions for a new product can be based on alternatives or other products that could displace it. An illustration would be the introduction of the personal telephone handset; prior to that, fixed landlines were available but with various features. Therefore, in order to convince customers to switch from landlines to mobile devices, these phones must offer better ring tones, better screens, and features like mobility.

Therefore, before production and pricing of the product, a company had to take into account various factors like the economic and financial conditions of the customers. Before engaging funds for the long term, the decision maker had to conduct a market analysis. At that time, mobile handsets were competing with fixed landline phones. This may be accomplished by analyzing historical data and the variables influencing the market's supply and demand for the product. We may categorize them roughly into:

- a) Economic variables and markers
- b) Demand forecasts
- c) Supply projections
- d) Demand-supply imbalances
- e) Important success variables
- f) Situational analysis

Economic indicators and factors: The gap between the demand for a product and its supply is quite large. An individual wants both necessary and opulent things in life, but his ability to pay for them determines whether he buys a given item or not. We may thus conclude that in order to fulfill demand at the local level, wants and requirements must be backed by the buying power. Economic variables including inflation, GDP, per capita income, population, literacy, income, income inequality, urbanization, money supply, currency exchange rates, government expenditure, tax rates, etc. may be used to assess the buying power and demand in this situation.

Forecasts predict demand for seasonal goods like air conditioners, fans, coolers, and other items that are often purchased more at the start of or throughout the summer. It is crucial to be clear about the demand for the items and their availability to satisfy it for the product providers [8]. The question of how a provider will decide on the demand in advance can come up. In order to achieve so, he may analyze the elements impacting demand, such as the user of the product, key characteristics of the product, the availability of complementary and alternative items in the market, demand based on regional, local, and global levels, and the availability of infrastructure to meet the demand;

Users of the product assist in making judgments about future market demand. Consider soaps as an example. The consumers in rural and urban markets are significantly different. Therefore, for the marketer to increase demand, changing their mindset can be a significant challenge. Sometimes raising consumer awareness of a product's features might assist to boost demand.

- a) **Important Product Feature:** The southern region of India has a higher demand for soaps made with sandalwood and coconut oil, and as a result soap production and marketing there varies from everywhere in the nation.
- b) Products that are complementary to one another are readily available on the market, and they help to increase demand for the complementary product. We can see the transition from the 2nd Generation to the 4th generation and other generations of mobile devices as a result of the expansion in information technology and telecommunication. While fixed landline phone sales were declining on the substitutes' side as a result of technological advancements and shifting consumer demand.
- c) Regional, national, and worldwide demand: India has been identified as a manufacturing center for a number of nations. Demand, the availability of raw materials at the national level, and supply to satisfy needs abroad are the causes. In addition to servicing at the municipal, state, and federal levels, many pharmaceutical and R&D firms also provide services internationally.
- d) Support from infrastructure to meet demand: By infrastructure, we mean both physical and sociopolitical support. The government's strategy in place allows firms to forecast future product demand. As in the case of IT support for Indian Railways' website-based ticketing system. It had made it simpler for customers to purchase tickets and made it feasible to reserve every seat on the trains. With this sort of infrastructure assistance, railroads can lower ticket production costs and enable mobile phone seat reservations. It is comfortable for travelers and lucrative for trains thanks to computers, etc. Infrastructure assistance aids in improved demand generation and supply management.

Supply Projections: Predicting the supply is just as important as projecting the demand. Based on two considerations, supply may be better understood.

- i. Accessibility of raw materials for product production: Availability of raw materials depends on national availability; otherwise, they must be imported; infrastructure support in the form of ports for ships, airports for product dispatch and receipt; roads to transport raw materials for production from ports to production units; and time required to make products available.
- ii. **Supply of completed products to fulfill demand:** The competition's huge, established players may limit supply of finished goods. Due to the lack of technical or subject matter experts, dependence on the global markets for expertise and technical know-how will result from these factors, as well as sociopolitical factors that may interfere with supply-side policies intended to prevent the entry of new foreign companies.
- iii. Demand-Supply Discrepancies: When investing money with a long-term outlook, this factor must also be taken into consideration. If a product can cover one of these gaps, it will be advantageous to produce it. For instance, since gold is so widely used there, demand there is quite high. However, making gold ornaments by hand is expensive and yields fewer ornaments overall. Therefore, some businesses had filled this gap by molding gold ornaments and manufacturing them in large quantities. Companies were able to make more things for less money this manner than they might have otherwise. Therefore, long-term investments of this kind will close the supply-demand gap and bring in money for the sponsors. Depending on the intricacy of the variables influencing them, demand supply estimations may be multistage.
- iv. **Important Success Factors:** A product's marketability depends on a number of variables, including its features, patents and copyrights, distribution channels, suppliers' and vendors' availability, government and environmental policies, socioeconomic conditions, competition, inflation, and interest rates, among others.
- v. **Situation Analysis:** It's crucial for project planning as a component of market analysis. We provide a framework for scenario analysis while creating a marketing strategy. It is an internal factor analysis that also takes outside aspects into account. Information about the company's goods, consumer brand loyalty, the company's purpose and vision, strategic objectives and goals, the company's dominant culture and values, technology and R&D for patents, and the company's financial resources are just a few examples of internal variables.

In order to improve market share and income, businesses want to stay competitive. Technology encourages competition in this way. The life cycle of technology as goods and services begins in the incubators or research facilities of the company's R&D division. The firm has to spend money on the technology's development and patenting. For this reason, they want to introduce it to the market where it could face competition in order to get the most out of it. After the developed market has reached saturation, technological products are then introduced in underdeveloped or

undeveloped markets. Therefore, developing the right technology at the right time and developing technology for the future are the two factors that are of the utmost importance when examining technical feasibility.

CONCLUSION

In conclusion, the cash flow statement is a critical financial statement that provides valuable information about a company's liquidity and financial health. It tracks the inflows and outflows of cash for a specific period, categorizing them into operating, investing, and financing activities. The cash flow statement is an essential tool for investors, creditors, and analysts to assess a company's ability to generate cash from operations, invest in growth opportunities, and meet its financial obligations.

By analyzing the cash flow statement, investors and creditors can gain insight into a company's financial position, assessing its ability to generate cash to cover operating expenses and debt obligations. The statement also provides important information about a company's capital expenditures, financing activities, and dividend payments. In conclusion, the cash flow statement is an essential component of a company's financial reporting and is required under GAAP and IFRS. It helps stakeholders to make informed decisions about a company's financial position and provides a valuable tool for financial analysis and decision-making.

REFERENCES:

- [1] A. J. M. Aghdas Jafari Motlagh, 'Accounting: Cash Flow Statement', *IOSR J. Bus. Manag.*, 2013, doi: 10.9790/487x-074109116.
- [2] M. S. V Jadhav, 'Cash Flow Statement Analysis', *Think India J.*, 2019.
- [3] D. D. Nguyen and A. H. Nguyen, 'The impact of cash flow statement on lending decision of commercial banks: Evidence from Vietnam', J. Asian Financ. Econ. Bus., 2020, doi: 10.13106/JAFEB.2020.VOL7.NO6.085.
- [4] I. Itan and W. Riana, 'The impact of cash flow statement on firm value in indonesia', *FORUM Ekon.*, 2021.
- [5] F. F. de Souza Maciel, B. M. Salotti, and J. O. Imoniana, 'Incentives for accounting choices in Cash Flows Statements', *Rev. Contab. e Financ.*, 2020, doi: 10.1590/1808-057x201908670.
- [6] M. Pavlovic and J. Bogdanovic, 'Cash flow statement', *Sk. biznisa*, 2013, doi: 10.5937/skolbiz1304129p.
- [7] D. D. Nguyen, 'The impact of methods of presenting cash flow statement on loan decision: Evidence from Vietnam', J. Asian Financ. Econ. Bus., 2020, doi: 10.13106/JAFEB.2020.VOL7.NO8.087.
- [8] Y. Ni, P. Huang, P. Chiang, and Y. Liao, 'Cash flow statements and firm value: Evidence from Taiwan', *Q. Rev. Econ. Financ.*, 2019, doi: 10.1016/j.qref.2018.09.004.

CHAPTER 8

A BRIEF DISCUSSION ON PROJECTIONS FOR CASH FLOWS

Dr. Vijayarengam Gajapathy, Professor, Masters in Business Administration (General Management), Presidency University, Bangalore, India, Email Id- vgajapathy@presidencyuniversity.in

ABSTRACT:

Projections for cash flows involve forecasting the future cash inflows and outflows of a business over a specified period. Cash flow projections are an essential aspect of financial planning and help businesses to manage their finances effectively. The projections are based on assumptions about future sales, expenses, capital expenditures, and other factors that impact cash flows. Cash flow projections can help businesses to identify potential cash shortfalls or surpluses and to plan accordingly. The projections can be used to make informed decisions about capital expenditures, financing options, and investments. They can also help businesses to develop a cash management strategy, including managing accounts receivable and payable, optimizing inventory levels, and managing working capital. Cash flow projections are important for lenders and investors, as they provide insight into a company's future cash flows and ability to meet financial obligations. Projections can also be used to identify potential risks and opportunities, enabling businesses to make adjustments to their operations and strategies accordingly.

KEYWORDS:

Financial, Economical, Risk, Management.

INTRODUCTION

Creating the correct technology at the right moment is crucial for technical viability. The technology must also be exploitable and financially successful. Commercial refers to the ability to manufacture anything in large quantities to fulfill demand, and exploitable refers to having a life that is unhindered by the existence of other technologies. Due to the absence of market demand for these items, manufacturing simple typewriters for the modern market that prints using keyboards is not a commercially viable or exploitable alternative. The project team must thus research and look for the best technologies. The alternative technology should be technically feasible and accessible on the market. These alternative technologies may be used by current rivals in the same industry or by competitors in other industries. The technology may be created in this respect, or cooperative partnerships for technical assistance might be investigated. For instance, the government has prohibited commercialization in space exploration. Therefore, businesses can explore business opportunities through joint ventures.

The labor-to-capital ratio and the cost-benefit analysis shall be the only determining factors in any joint venture or technological development. The older technology can still function in poor countries since labor costs are lower. While this is impractical in developed nations where labor costs are higher, new technology can replace the human workforce and reduce costs for the

business. In other words, whether or not to employ old or modern technology depends on the price of the product or service. Keep in mind that depending on the market potential and the company's financial situation, creating technology may not be possible. The alternative that is open in this situation is to acquire the technology rights from the other R&D organization. In the case of a small pharmaceutical firm, for instance, it is preferable to buy technology from a company that has already patented the formula and technology of a medicine rather than creating a new one.

Future Technology Development: Businesses may offer new items and expand their market share with the aid of technological breakthroughs. Some businesses are leaders in technological advancements, but to maintain this status, they must continually invest in and improve technology. As a result, before to making an investment, businesses must evaluate the current state of technology as well as the potential of new technology, depending on their financial situation, human resources, and other resources. For instance, while floppy drives were still widely used in the IT industry, corporations made investments in the development of technologies to transmit data over Compact Discs. However, in order to stay in business, CD manufacturing companies must continue to develop new technologies like external drives. The project costs and operational expenses may be calculated using the information from these studies on technical feasibility.

The sponsors need a copy of the financial feasibility study in order to determine the product's ultimate cost. Details pertaining to the project's financial elements should be included in this report. These reports must to include the ability to produce projected balance sheets, profit and loss statements, and cash flow statements. These are projected based on actual data from related projects or standards established for projects of this type. Due to the life cycle of the product, the business cycle, the capital structure of debt and equity, economic considerations, etc., such estimates are accepted for a period of time. The best capital structure for the firm may be developed with the use of cost of debt and equity analysis. For the purpose of generating revenue and repaying loans, these financing choices should be taken into account. Schedules are made for this repayment and other significant difficulties, such as:

- a. Paying back debts, which includes both interest and principal payments
- b. Short-term funding plan
- c. Schedule for working capital
- d. Working capital repayment schedule
- e. A schedule for depreciation according to the Companies Act,
- f. Cash flow from operations schedule
- g. Forecasts of cash flows

The discounted and non-discounted strategies aid in choosing the best project from the possibilities offered. The time worth of money is taken into account in discounted cash flow methodologies. The time value of money element is thus compounded by the monetary input and outflow. In other words, it's important to take into account the decline in the value of the currency brought on by an increase in inflation rates. While the Non Discounted Cash Flow gives higher rankings to projects that pay back the money invested as soon as possible. The Net Present Value is the most widely acknowledged and understood concept in DCF and is solved in the example below to help you understand. This form of project appraisal for investment is cash flow-based. To determine the

actual amount of cash flow, it takes into account all cash inflows and multiplies them by the time value discount rate. It is stated to have a positive NPV and will likely provide value for the investors if the outflows are fewer than the inflows. Projects with a positive NPV are approved, while those with a negative NPV are turned down. Project evaluation is the first phase in the development process. It is attempted to determine the project's future value by looking at its commercial viability. When conducting a feasibility study, we take into account the project's technical, marketing, and financial aspects. The findings are based on the feasibility studies that the various teams presented. The marketing feasibility studies identify the discrepancy between the product's current demand and supply based on historical data and trend research [1], [2].

Technical feasibility studies provide a strong emphasis on the production's technical features, as well as the available technology, skills, and training. The producing business will thereafter be able to meet the demand as predicted by the marketing feasibility study. The cost of capital structure, available funding options, cost estimates for the project, and projected operational expenses are all taken into account in the financial feasibility study to forecast cash flows. The DCF and NDCF approaches are used here as suggestions for the projects' acceptability based on ranking.

The demand for significant infrastructure expenditures is increasing along with technological advancement, economic expansion, and population rise. Funds are required for these infrastructure improvements, not only in developing nations like ours but also in rich nations. Dependence on government financing is not feasible. Taxes and other indirect modes of collection are used to take it from the people. The funds that have been gathered are then budgeted. This kind of financing increases the pressure on the populace and the government. The necessity for public-private partnerships is now evident. In order to advance the development of the country, the government collaborates with participants in the business sector. In order to finance and build the infrastructure, the private sector is crucial.

Risks are mostly taken into account in the project's contractual and financial structures. However, because it doesn't address all of the associated risks, it is insufficient for investors. These limitations may be attributed to a variety of factors, including productivity, equipment and maintenance support, operational efficiency, demand, and force majeure. Force majeure in this context refers to the failure of the responsible parties to accept responsibility for failure to perform as a result of certain unforeseen circumstances beyond of their control. Due to the complicated transactions involved, the variety of stakeholders and their interests, the nature of construction, technology-related risk, performance-related risk in the future, the distance between production and the market, and the transportation of raw materials to the production unit and supply of finished goods to the sales counter, project finance entails such force majeure risks [3].

Coordination between the different stakeholders, including the government, sponsors, guarantors, construction firms, suppliers, and other parties, is essential to a project's success. Meeting their expectations becomes difficult, however, since they had a variety of factors at play. Estimating income and cash flows from financial assets becomes challenging because of the projects' extended time horizons. Therefore, the reliance on cash flows cannot be on a single project alone, as problems also increase with the number of projects. Due to competing interests, legal restrictions,

and other necessities for project finance and execution, there are several. Because of the complicated transactions linked to each project's distinct qualities, no two projects can be the same. The primary risk elements connected to project funding are;

- a. Financial organization
- b. Project's nature and likelihood of success
- c. Risk from Socio-politics
- d. Economic hazards specific to the operating nation

Future project design, procurement, construction, commissioning, and performance all include certain risks that are associated to project commercialization. Cost overruns might result in financial concerns, which can be caused by macroeconomic issues like inflation, currency exchange rates, etc. We will learn more about macroeconomic factors in the next section. The business risk will be particularly covered in this item. The most challenging part of project finance may be deemed risk management. Therefore, it is essential for decision-makers to be able to recognize and pinpoint the source of risk. They can forecast potential outcomes and a solution to the issue based on such identification [4].

- 1) Commercial risk during construction; focuses on the project's initial state, including regulatory, political, legal, and currency risk, markets, and other aspects including labor, materials, force majeure risks, environmental risk, and building licenses.
- 2) Commercial risk during operations, including operating or performance risk, new and untested technologies, and demographic and economic shifts.

These risks can be transferred with proper identification:

- a. Insurance based on the project's type and duration
- b. Construction work is contracted out in part or in whole to a subcontractor
- c. Changes to the contract's terms and conditions that apply to the sponsors and other parties involved

Risk to Business During Construction

There may be particular hazards related to developing the plan and putting it into action by building the project throughout the construction stage. Only if the project is fully operational on the designated date may cash flow for the project begin. If the project is not completed by the predetermined date, costs will rise and the project's profitability will suffer. The sponsors may be entitled to reimbursement for their losses as a result of construction delays under a condition in the project contract. Depending on the project's needs, this phase might last anywhere from a few months to many years. Construction on toll roads, for instance, may be completed in a matter of months, but it may take years to build a railroad. Because money is being invested but no cash flows have yet been generated, the fund's lenders are therefore more at risk [5].

Commercial risk may develop for a variety of causes, including:

Cost overruns: The majority of projects always have a tiered development strategy in place. And as we all know, the project's lifespan is divided into years, and a lengthy time period is taken into

account for planning and development. The interest of the different parties and the nature of the project are additional causes for the lengthy timeline. Several government and ministry permissions are required for the project's construction. Then, in order to guarantee it in the future, certain agreements on terms and conditions had to be made to ensure the resources and their consistent supply.

The cost factors are associated with rising inflation and falling time value of money. For instance, the costs of commercial projects like road construction are estimated during the planning phase for land acquisitions, compensations to land losers, raw materials, etc. However, they are also dependent on international price factors, low production of raw materials like cement and steel, strikes, or any natural calamity like flood, etc. When this occurs, the project's cost exceeds the projected cost inflow and outflow.

Project Delays: Long-term concerns are related to project funding. Phases are separated into the extended time to make it more efficient. Although there are many factors that could delay the project's completion, phase-wise costs are relatively low. For instance, in order to start an airport construction project, state and federal governments must provide their consent along with approval from the aviation ministry, environment ministry, power and energy department, development and planning authority, etc. The contracts are delayed and the expenses rise as a result of issues obtaining timely clearances.

Start-up and Testing Issues: Projects may only be delivered to sponsors after they have received final approval and are operational. For this, appropriate testing is carried out, and quality assurance is guaranteed. In turnkey projects, teams from various nations may occasionally work in various cities around the world. After finishing, they go back to their home country. Therefore, the project must be checked and tested before they leave the site, and only then can it be given to another party. Defects must be examined and corrected as necessary when they are discovered. This might cause a delivery delay for the project. Due to the failure to provide it on time and in accordance with the contract, the effect of this is shown in the delayed cash flows and sometimes in penalties. This causes the project's sponsors to lose money. Payment defaults by the contractor: At the time of project handover, the contractors or project developer provide a completion certificate. If the contractor or other parties are not paid, they might refuse to provide the completion certificate. They cannot be included on the other party's balance sheet until the assets have been transferred. Therefore, they are unable to claim the advantages related to depreciation and other taxation problems. Due to such payment failures, normal cash flows are affected, which results in a loss of profit [6].

DISCUSSION

Hidden flaws for some projects, the issues only become apparent after they have been delivered. It begins with the identification of concealed flaws that become apparent as the project develops and is used after delivery. Before the project is turned over, payments are made to the contractors, suppliers, and other parties. But these flaws are discovered so late that the project's intended cash flow is disrupted. This kind of risk is a component of the business risk associated with construction lead.

Force Majeure: These risks increase as a result of the unwillingness to assume responsibility for performance gaps brought on by unforeseen circumstances beyond the participating organizations' control. These dangers include things like floods, earthquakes, and other natural disasters, as well as technological and building-related problems. Companies may be excluded from force majeure risks, but given the severity involved, this might still result in a default. Sponsor risk: Lenders favor sponsors that have the necessary financial resources, technical experience, and project-specific knowledge. Because of this, lenders like banks divide sponsor risk into two categories: (1) equity commitment, and (2) corporate strength and expertise. If they locate both elements in a project, their ranking improves and the project is funded. Environmental Risk: This results from the laws where the project is based's emission standards and other environmental obligations. Given that the lenders don't want to be associated with a project could have an impact on the environment:

- a. The activities of the construction might have an impact on the surrounding environment, including the plants, trees, and natural habitat.
- b. The project's proximity to the water might have a negative effect on aquatic life.
- c. The project's proximity to critical structures including hospitals, historical sites, and other landmarks.
- d. Impact of projects on regional populations and cultures
- e. Emission standards established by local legislation for the sectors involved in the projects
- f. Water and water contamination as a result of the project's existence.
- g. effects of the project's presence on the traffic, the local people, and the infrastructure that might be impacted by the presence of such a large project.
- h. Infrastructure requirements in the future that might be required owing to how the project functions in the future and how it affects the environment.
- i. The extraction and transportation of raw materials like coal from coal mines for the generation of electricity may have a negative influence on the environment.

Construction Permissions: Depending on the project, different licenses may be needed to import construction equipment temporarily or for the duration of the project. For instance, the Metro Rail Corporation had to import the materials and construction tools required for the laying and building of the rails. For this, approvals from the federal and state governments must be obtained, as well as preparations at ports and transportation to the location.

Risk During Commercial Operations

After the project is finished, the lender who provided the project financing will rely on consistent cash flow to repay the loan. It's crucial to take into account the risk connected to the project's potential future cash flows at this point. They often have to deal with the normal operational expenses, raw material prices, risk associated with regulatory requirements, and product marketing. The projects should make sure to accumulate cash, working capital funds, and the amount for interest and dividends in order to safeguard themselves [7].

Operating or performance risk: This risk develops when revenue and cash flows are interrupted. Most of the projects' funding comes from debt. Interest on debt must be paid on a regular basis. Therefore, it's crucial for the project to continue producing regular revenues and cash flows. As we had previously said, projects are conducted in phases, therefore if one of the phases is disrupted, the phases that follow it will also be. As a consequence, the cost goes up and the income is delayed, which has an adverse effect on the project's cash flow.

They only depend on the merits of the project, rather than the creditworthiness of the project sponsors, as we had seen in the case of non-recourse finance. Even the credit evaluation is reliant on the projects' cash flows. In such circumstance, the project should provide a continuous flow of revenues and cash flows to prevent any credit suspension. It is crucial to have a better understanding of cash flows throughout the operating phase. Because of the way the loans are structured, the real cash flows from activities will automatically go to the lenders. This is accomplished with the use of security measures like restricted accounts. The project business then receives the balance of the cash flows.

The availability of another source of cash flows should be taken into account when calculating construction risk during operations. This is required when there is an excess or shortage of funds owing to unforeseen risks like political and economic threats. Lenders had to make sure that experienced third parties managed post-construction activities and that contractors with a solid track record maintained them. This allows for the quickest possible recovery of the fixed expenses. Lenders will accept the cash if the project sponsors have the necessary expertise to oversee the project; otherwise, they prefer that it be transferred to another qualified party to reduce the danger of default.

New and untested technology: As costs are reduced due to technical advancement, new technology may lead to an increase in product quality. However, riskier than tested and proven technologies are those that are new and unproven. The acceptability and usefulness of technology in the future make failure of technology unavoidable. Lenders thus want to lessen the risk that comes with new technologies. A skilled user of technology during operations who can ensure that the debt will be paid back with the appropriate cash inflows in the future might reduce this risk [8]. Lenders consider these risks and possible vulnerabilities of new technologies very carefully. The risk is then valued appropriately in their fund offering. Even though new technology has the potential to be extremely efficient, costs associated with such unproven technologies are typically on the higher side because of higher funding costs. The lender might attempt to lower the risk associated with new and untested technologies by charging these higher fees.

Economic Shifts: The structure of debt repayment may alter in response to changes in economic policy like interest rates and taxation. Economic risk takes into account variables such as domestic and foreign loans, inflation, reliance on imports for raw materials, and GDP growth. The project may not be able to fulfill its debt or other commitments as a result of changes in these circumstances. Like the financial and economic crises, many changes in the economic environment are unpredictable. However, in order to project cash flows, it is necessary to project these risk factors using forecasts based on historical data. Even loans are given ratings, ranging from AAA least dangerous to D riskiest, depending on economic circumstances and the risk attached to them.

The ranking and rating for such debt changes depending on the state of the economy of the nation where the project is located. These rankings are based on the nation's economic system, which includes:

- j. The quality and accessibility of infrastructure
- a. Availability of natural resources
- b. Availability of productivity
- c. Contribution of the public sector to productivity

Demographic Changes: The increase in level and growth of the population, age structure, urban population and urbanization, and labor force are all factors that contribute to commercial risk during operations.

These adjustments might make the project more risky throughout the project's operation phase after completion. Projects are established to meet the needs of a certain area, locality, and population since they are based on forecasts. However, the goal of the project may be compromised by the changes in the rise in demand brought on by population growth and urbanization. For instance, a city's water and sanitation systems are first designed, then constructed. However, as a result of the pressure brought on by the population growth, these projects were unable to satisfy consumer demand. These are the sole causes for the failure of town planning efforts. To conceive the many tasks that must be completed by each partner, contracts and an appropriate framework are required. The parties are bound by these agreements since they were established in advance. Each party is also aware of their respective roles and obligations. The contracts for the following are formalized to do this:

Pre-development agreements: For the project to go smoothly in the future, several agreements should be reached before the project is started.

Licenses: These comprise the government's consent to do business inside the national boundaries in accordance with applicable laws. For instance, international corporations doing business in India must first get permission from the government to do so. Only then, after paying taxes to the government, may these companies export their profits to their home countries. Companies that extract natural ore from Indian mines must get a license from the state and federal governments in order to operate a production facility. The sponsors, lenders, and government are all given security by these licenses.

Concession Agreements: For instance, in the case of express roads, the government gives the contractors the land and other resources in exchange for a discounted rate on the construction, operation, and return of the functioning motorways to the respective governments. This is an example of a public-private partnership, where both sides share the cost and the risk of the production. Private party makes an initial payment and will later recoup it in modest amounts. In this manner, the public partner benefits from completing the development at a reasonable cost and with little investment. Shareholder agreements: A variety of stakeholders, including the public and commercial sectors, are engaged in the projects. Therefore, the shareholders agreements must address financing issues pertaining to working capital and operating stage financing, as well as the stages of development, construction, voting rights, and other matters.

CONCLUSION

In conclusion, projections for cash flows are an important aspect of financial planning for businesses. They involve forecasting future cash inflows and outflows based on assumptions about sales, expenses, capital expenditures, and other factors. Cash flow projections help businesses to manage their finances effectively, identify potential risks and opportunities, and make informed decisions about investments, financing options, and capital expenditures. Projections for cash flows are important for lenders and investors, as they provide insight into a company's future cash flows and ability to meet financial obligations. Accurate and realistic projections can also help businesses to identify potential cash shortfalls or surpluses and take necessary actions to manage working capital, optimize inventory levels, and manage accounts receivable and payable. Overall, projections for cash flows are an essential tool for businesses to plan and allocate resources effectively, manage their finances, and make informed decisions. By utilizing cash flow projections, businesses can develop a solid financial plan that ensures their long-term financial sustainability and success.

REFERENCES:

- [1] A. Jumran and R. Hendrawan, 'Stock Valuation using Discounted Cash Flow Method with Free Cash Flow to Equity and Relative Valuation Approaches on State-Owned Banks Listed on IDX for 2021 to 2025 Period Projection', *Int. J. Sci. Manag. Stud.*, 2021, doi: 10.51386/25815946/ijsms-v4i4p118.
- [2] L. Zulaihah *et al.*, 'Analisis Studi Kelayakan Investasi Dengan Metode Capital Budgeting', J. IKRA-ITH Teknol., 2019.
- [3] L. Langemeier, D. Klinefelter, and D. McCorkle, 'Cash Flow Projection for Operating Loan Determination L-5276', *Buildings*, 1999.
- [4] J. Fojtík, J. Procházka, and P. Zimmermann, 'Approximate Valuation of Life Insurance Portfolio with the Cluster Analysis: Trade-Off Between Computation Time and Precision', *Statistika*, 2021, doi: 10.54694/STAT.2021.23.
- [5] M. L. Lipson, 'Financial Analytics Toolkit: Cash Flow Projections', *SSRN Electron. J.*, 2021, doi: 10.2139/ssrn.3460758.
- [6] G. Uwonda, N. Okello, and N. G. Okello, 'Cash flow management utilization by Small Medium Enterprises (SMEs) in Northern Uganda', *Merit Res. J. Accounting, Audit. Econ. Financ.*, 2013.
- [7] G. Uwonda and N. Okello, 'Cash Flow Management and Sustainability of Small Medium Enterprises (SMEs) in Northern Uganda', Int. J. Soc. Sci. Econ. Invent., 2015, doi: 10.23958/ijssei/vol01-i03/02.
- [8] R. Khoirudin, 'Penilaian Saham Pt Pembangunan Perumahan Properti Dalam Rangka Initial Public Offering', *J. Keuang. dan Perbank.*, 2017, doi: 10.26905/jkdp.v21i1.1225.

CHAPTER 9

A STUDY ON THE SPONSOR SUPPORT AGREEMENTS

Mr. Venkatesh Ashokababu, Assistant Professor, Masters In Business Administration, Presidency University, Bangalore, India, Email Id-ashokababu@presidencyuniversity.in

ABSTRACT:

A sponsor support agreement is a contract between a company and a financial sponsor that outlines the sponsor's commitment to support the company's financial needs. The agreement typically specifies the amount and terms of the financial support that the sponsor will provide, including any equity or debt financing, guarantees, or other forms of support. Sponsor support agreements are commonly used in mergers and acquisitions, leveraged buyouts, and other transactions involving private equity firms and financial sponsors. These agreements provide assurance to lenders and other stakeholders that the sponsor is committed to supporting the company's financial needs and can help to secure more favorable financing terms. Sponsor support agreements may also include provisions relating to the sponsor's governance rights and obligations, such as board representation, voting rights, and reporting requirements. These provisions can help to ensure that the sponsor has a say in the company's major strategic and financial decisions.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Partnership agreements: For instance, in the case of development projects like metro in cities, the State government, Central government, and the foreign government must all sign the agreement. These agreements before the projects begin make it simpler for the project in the future to get authorization for land purchases, ministry permits, local problems, and the transfer of technology. As they must supply the land, authorization, and Technology. Agreements for Joint Ventures: From a legal perspective, the joint ventures are distinct from both parent firms. In such scenario, the Joint Venture Company should be duly established in accordance with local legislation. As a result, both parents of the Joint Venture should agree on the ownership structures, voting rights, technology agreements, human resources agreements, training and development agreements, transferability of shares and ownership, completion of the project, etc [1], [2].

Construction agreements are necessary for the contractors to complete projects on schedule. When it comes to numerous matters involving money, completion, and payments, they bind sponsors and contractors. They can be for projects and for guarantees, such as turnkey projects, which need to be started from scratch before being given to the sponsors with instructions on how to manage them in the future. According to this agreement, the contractor is in charge of planning and managing the project. The project is given to the appropriate person after he has been paid. Other contractual projects: in these situations, the costs and the timing of the payments are determined

in advance. Since the project must be finished on schedule, the contractor should only issue a completion certificate during the allotted time. The contract must include a penalty provision if it doesn't. The majority of these contracts attempt to just take force majeure occurrences into account on a single occasion. Only once a completion test has been passed and the testing period has ended are the contractors freed from their respective obligations.

Advance Payment: The project company, in accordance with this agreement, gives the contractor the initial funds to make arrangements for raw materials through agreements with suppliers, leasing and further agreements, laborers, etc. This also obligates the contractor to start the project on the predetermined date; otherwise, they might be asked to return the same amount. Retention guarantees: For the correction of any construction-related flaws that may not be apparent at the time. The retention assurances provide this assurance. Before making the final payment to the contractor, it permits withholding the amount from the progress payment for such deficiencies.

Maintenance Bonds: Even after the project has been finished, tested, etc., there may still be instances when repairs are necessary because of construction-related problems. By extending the duration of the performance or retention bonds, such bonds may be used. Operating and maintenance agreements: In the preceding section, we made an effort to reduce the risk involved in project construction. In this part, we'll aim to reduce the risk connected to project operations and maintenance. Supply or Pay Agreement: The manufacturing unit requires a sufficient supply of inputs to operate efficiently. Therefore, these contracts work to guarantee the availability of such materials or the payment in cash for open market purchases.

Sales Agreements: Depending on the product's availability and demand, pricing on the free market might change. These agreements guarantee the predetermined price for the product from the manufacturing unit, protecting the lender against such swings in the future. For instance, it is challenging for a new private gasoline refinery to grow and compete with the established national and private refineries. But as soon as these refineries start up, the output needs to be bought in order to start up production. In this manner, the project may guarantee cash flow while reducing market-related risk. Then it will be able to raise money to pay for future debt repayment and fixed costs.

Sponsor Support Agreements: These are required to tie sponsors to the payment of money and the satisfaction of demands created by funding. They assist in meeting demands that arise as a result of;

Working Capital Contracts: under these contracts, the sponsors are responsible for paying the money required as working capital to ensure that the project runs well. Before the initiative is able to cover its basic needs on its own, the sponsors must guarantee that working capital requirements will be met. For instance, fewer passengers may be present in a recently created railroad corridor. As a result, the project's profits will be lower. The sponsors have currently met the demands for operating finance. Beyond its requirements for operating capital, a project could also need money for upkeep. This is known as a cash deficit agreement. The project may anticipate receiving funds from sponsors for cash-deficit circumstances if there is a prior arrangement.

Management Agreements: These agreements are helpful in government-supported initiatives with several partners or stakeholders. With the use of these agreements, the management structure may be chosen before the project even starts. In-depth work is done on budgets, financing, future projections, record-keeping, and reporting to the appropriate ministries and departments, among other things.

Representations and warranties: When two or more countries are parties to an international enterprise. The key functions may be determined with the use of representations and warranties. Contractual statements include representations. The parties in these contracts guarantee the other party's authenticity and current factual information. These agreements are legally binding and obligate the parties to responsibly carry out the intended outcome. If not, they may be challenged in court to protect the parties' and the project's interests.

Project Loan/Credit Agreements: These agreements guarantee that the sponsors will get the appropriate cash from the lenders. Additionally, it persuades lenders that the project will be profitable in the long run. For this, they carry out their due diligence, look up as much information as they can on the project, and evaluate the sponsors' and parties' credit.

DISCUSSION

Risk is an element that is inherent in project finance. Utilizing new technology, monitoring product market response, and ensuring steady cash flow all increase risk. The main factor is the distribution of costs and benefits over a lengthy time. Lenders of capital are looking for companies with strong potential for revenue and profit growth. They use financial tools to make investments with medium- to long-term time horizons. Risks are mostly taken into account in the project's contractual and financial structures. Due to the fact that it doesn't address all of the dangers, lenders believe it to be insufficient. This may be attributed to a variety of factors, including scope limitations brought on by particular geographic locations, productivity, equipment and maintenance support, operational efficiency, demand, and unavoidable circumstances. They decide to manage the project-related commercial risk for this reason [3].

Commercial risk develops when the project is being built and run.

- 1) Commercial risk during construction; largely relates to the project's initial state and includes market, regulatory, political, legal, and currency risk as well as other aspects including labor, materials, force majeure hazards, environmental risk, and building licenses.
- 2) Commercial risk during operations, including operating or performance risk, new and untested technologies, and demographic and economic shifts.

With the right contractual terms, this risk may be controlled to ensure that the project runs well. The following phases of the project are covered by the agreements: a) Pre-development; b) Construction related to funds, completion, and payments; c) Operating and maintenance of the project; d) Sponsor support for the payment of funds and meeting needs that may arise in the future; e) Management agreements for the role and responsibilities of the management in the

project; f) Representations and warranties to make the two eligible parties enter into legal contracts; and g) Project loan/credit agreements.

Operating or Performance Risk: This risk develops as a result of disrupted revenue and cash flows. In the previous unit, you understood the commercial risk associated with the project. Force majeure: These risks arise as a result of not accepting responsibility for performance shortfall due to unanticipated events outside the participating entities' control. It happened while the project was being built and run. We will attempt to comprehend the macroeconomic aspects in this section as well as how they affect projects [4].

A strong infrastructure is required for the country's economic and financial growth. The need for infrastructure to enable development develops along with population and economic expansion. Large infrastructure need long-term financial investments of this kind. Due to resource limitations, the necessity of projects can be clearly seen for developing and impoverished nations. The government's budgetary resources and other resources cannot bring about the desired development. The Public Private Partnerships play a significant role at this point. To build and supply financial infrastructure for the projects, the government collaborates with the private sector in this regard.

Businesses operate in several countries offering a variety of goods and services. They create several projects for this in various currencies and get funding from various banks and financial entities. These banks and financial organizations provide money in their respective currencies. Because of this, it is crucial to take the exchange risk between various currencies into account when funding a project. Local and international parties may pursue business prospects via offers and bids from governments and commercial entities. The borders of a country have no bearing on these parties. The growth of emerging nations like India involves foreign businesses and other legal entities. They make investments and profit handsomely from them. Their earnings are based on a number of variables, including interest rates, exchange risk, and inflation rates for the various currency sets. The terms "currency sets" and "host country currency" are interchangeable. If a corporation is based in the United States of America, its home currency is the dollar, and if it operates in India, its host currency is the rupee [1]. We will first go into great detail on how to handle the risks of inflation, interest rates, and currency rates for the project's advantage.

Risks to the Macroeconomy

The project funding is hazardous because of the existence of unpredictable elements. Additionally, it becomes more difficult for the lenders to access a project when there are regional, national, and international factors at play. Macroeconomic risks are those that have an impact on project investments as a result of the economic climate of the host nation. These hazards are of an external character and are not within the project sponsors' sphere of influence. Macroeconomic hazards are classified by Economic Intelligence Unit as project-related environmental concerns. This made a crucial difference regarding the risk factors associated with project finance, such as interest rates and foreign currency risk. These hazards are connected to the project's internal decision-making process and the steps followed. Inflation, interest rates, and currency rates for international projects are the three main components of macroeconomic risk. The performance of the project is being impacted by external influences. Thus, it is uncontrollable because it is an outside factor. It differs

from one nation to the next, thus a diversified project portfolio may provide a range of profits while still carrying some risk.

From rich to underdeveloped nations, the macroeconomic risk varies. The demand for infrastructure is great in growing nations like India, yet there are several problems related to the current economic conditions at the moment. These nations have higher risk owing to the erratic and unstable macroeconomic characteristics. The absence of steady economic policies made it riskier. International businesses, for instance, do not consider the monetary policies to be adequately developed and stability-promoting over the long term. Transfer risk exists because there is a foreign currency component. The sensitivity to inflation, devaluation, and convertibility risk that exists between the currencies is referred to as transfer risk [2].

Fluctuation Risk

Risks that can be controlled and those that cannot are crucial considerations when making projectrelated decisions. There are very few corporate entities that are unaffected by increases in inflation. Inflation lowers the currency's buying power and, thus, the actual revenue of the projects. This results in weaker buying power in the revenue and cash flows for the businesses. The increase in money supply in the economy causes inflation, which drives up prices. The rate of inflation in our nation was mild. Inflation has two effects on companies and industries: (i) it affects the economy's asset creation activities, which reduces demand; and (ii) it affects the capital structure of the company organization.

A company seeks to keep an eye on inflation using its intelligence network. But neither is inflation a very novel or simple to measure term in relation to investments. With the Harmonized Index of Consumer Prices, economists can calculate inflation while taking into account the average prices of different product baskets. It is true for the economy, but not when it comes to project financing. The reason for this is that project funding also had a diverse basket of goods to take into account. Each of these goods and services is impacted by inflation, but in very different ways. Investments range from pipeline and gas to agricultural ones. Therefore, to calculate such inflation, these components had a specific need for custom indexes. Contractual agreements are then made to stabilize the impact of inflation. These agreements make it easier to identify inflation risk, manage it, and reduce macroeconomic risk. The effect of inflation on capital budgeting investments is attempted to be as little as possible using discounted cash flows. Such project finance-related risks are decreased by the use of financial modeling. However, because inflation risk reduces the real returns on the project's investment, it has an effect on the entire financing model.

The relationships between inflation, interest rates, and foreign exchange rates were established through the use of the purchasing power parity, spot and forward parity, and interest rate parity formulae. Due to their high home country's inflation and interest rates, emerging nations find it costly to increase their foreign debt. However, the devalued currency is a plus. Lenders must thus keep such variables in mind when obtaining financing from the domestic and global financial markets. The local money is seen as not being very useful. The reason is that income and expenses are calculated in locally inflated currencies before being translated into a foreign stable currency. For this conversion, the exchange rate taken into account produces dollar equivalent amounts that

don't accurately reflect the situation. As exchange losses cannot be reversed and therefore represent the true cost to the firms, they are reflected in the parent organization's financial statements.

The projects are impacted by inflation in the following ways:

- 1. **Growth Rate:** The actual growth rate is impacted by inflation. This is impacted by the decline in buying power, and the effect of such growth is lessened by inflation. In this manner, even when the projects begin to produce cash flows and revenue as anticipated, their true earning potential is hindered. Therefore, even with a positive growth rate, the project becomes less profitable and occasionally is unable to secure funding for the project's subsequent phases. It has been noted that certain projects even those with favorable growth rates are abandoned because of rising costs and less attractive returns they provide.
- 2. **Cost of capital:** A significant component of the cost of capital is inflation. As a result, the projects must pay more for inflation. The gap between the actual cost of capital and the nominal cost of capital is shown by inflation in an economy. Therefore, a higher inflation rate causes a greater disparity between the projects' real and nominal cost of capital. Here, we can observe how the inflation risk has affected the project finance model as a whole. As debt service dries up, inflation increases harm investors' and lenders' real returns. In such circumstances, ensuring consistent and real cash flows turns into a significant challenge for project financing.
- 3. Shareholders' value and share prices: From a long-term standpoint, inflation has a detrimental effect on these two factors. Since the firms' fund managers are required to request an increase in earnings per share. To combat the value-eroding consequences of inflation, they must significantly raise their profits growth. In reality, inflation makes it difficult to add value to projects and businesses. Additionally, it becomes unpredictable for both managers and investors when the annual growth rate exceeds long-term average levels. The problem with businesses is that they can't pass on the cost rise to their consumers without losing sales and market share. As a result, the cost of capital in real terms increases and causes a loss on net asset positions. Even while expenses continue to rise, this non-passing of costs becomes difficult over time and really affects cash flows.
- 4. **Operating and net cash flows:** As expenses rise, the cash flows are impacted by the difference between the nominal and real rates of return. It becomes much more complex due to the timing of the influence on the inflows and outflows. The price of the finished product rises along with the cost of raw materials. But the rate of increase in product demand is not correlated with inflation. As a result, the project's operational and net cash flow expectations are not met due to this discrepancy.
- 5. **Capital Budgeting Techniques:** Following the financial crisis and recession, the global macroeconomic landscape has completely shifted. Due to scarcity and stringent risk management by financial institutions, risk premiums on debt and equity have skyrocketed. Therefore, in terms of absolute value and time extension, long-term financing had lost its allure for projects. These days, shorter-lived initiatives are preferable.

Inflation, borrowing rates, and currency devaluation are all likely to be higher for a project in a developing nation with high rates of inflation. For many developing nations, borrowing money from international financial institutions may be more cost-effective, but currency depreciation more than makes up for it. As a result, the cost of the foreign debt increases. Projects with shorter payback periods and net present values that outperform cash outflows are now being assessed using capital budgeting methodologies [5].

Changes in interest rates increase the project's risk, particularly for projects with highly leveraged project funding. Additionally, if the project is in a developing nation, a more critical assessment of future cash flows is necessary. The danger of rising interest rates is caused by the unpredictability of economic policy, the political system, and other macroeconomic problems. In other words, we may argue that the risk associated with interest rates arises from the likelihood that they will grow during the course of the project. More importantly, we require high capital intensity with lengthy payback periods for infrastructure projects in India. In this case, the high capital intensity indicates that the cost of interest makes up a significant amount of the entire cost. Due to changes in interest rates throughout the course of the project, risk rises with a lengthy payback time [6], [7].

When it comes to international finance, the lending institution seeks to lower its risk by funding in the local currency. Given that it includes both the cost of hedging and the hard currency interest rate, this is also referred to as the successful cost of hard currency borrowing. The lending institution or overseas fund provider seeks to introduce it to the local currency borrowings in this manner. The project is under pressure to provide predictable and recurring cash flows as a result. Interest rates primarily affect the amount owed by projects to their financiers. These lenders are making investments in long-term initiatives. Therefore, long-term borrowings are typically used to finance projects. For project finance, interest rates on these instruments are crucial. The reference rate and the interest margin were two parts of the cost of borrowing, or interest rate.

The project sponsors may request loans with adjustable interest rates for project funding. However, it is very difficult to maintain such interest rates in line with other macroeconomic variables that are in flux. This is the reason why the ideal interest rate for project finance is a fixed interest rate. By include the debt associated with the fluctuating reference rate, some projects were able to reach a compromise. However, in order to qualify for such interest rates, the project must have sufficient cash flow available to meet such debt obligations [7], [8].

We can infer that the interest rate is influenced by other uncontrollable local, national, and global factors as well as the expansion of the economy. Thus, interest rates change whenever economies go through cycles of increasing or decreasing the reference rate. Companies from industrialized nations find it difficult to reduce risks because of the undeveloped financial markets in emerging nations. The lack of such risk-reducing tools as derivatives for interest rate swaps is the main cause. Other variables such as interest rates also play a significant role since they have an impact on estimates. The reason being that any delays or cost increases of any kind might cause a delay in loan repayments, which would result in higher interest rates and debt accumulation. Exchange rates, inflation, taxes, payment delays, and other eventualities throughout the project are additional contributors influencing interest rates.

CONCLUSION

In conclusion, sponsor support agreements are an essential component of transactions involving financial sponsors and private equity firms. These agreements provide assurance to lenders and other stakeholders that the sponsor is committed to supporting the company's financial needs and can help to secure more favorable financing terms. Sponsor support agreements typically outline the amount and terms of the financial support that the sponsor will provide, including equity or debt financing, guarantees, or other forms of support. These agreements may also include provisions relating to the sponsor's governance rights and obligations, such as board representation, voting rights, and reporting requirements.

By providing a framework for the sponsor's governance rights and obligations, sponsor support agreements can help to ensure that the sponsor has a say in the company's major strategic and financial decisions. This can be critical for preserving the sponsor's investment and ensuring that the company is managed in a way that maximizes its long-term value. Overall, sponsor support agreements are an important tool for facilitating transactions involving financial sponsors and private equity firms. They provide a mechanism for ensuring that the sponsor is committed to supporting the company's financial needs, securing more favorable financing terms, and providing a framework for the sponsor's governance rights and obligations.

REFERENCES:

- [1] T. J. Kloppenborg, D. Tesch, and C. Manolis, 'Investigation of the sponsor's role in project planning', *Manag. Res. Rev.*, 2011, doi: 10.1108/01409171111117852.
- [2] 'Challenges in Recycling End-of-Life Rare Earth Magnets', JOM, 2013, doi: 10.1007/s11837-013-0783-0.
- [3] D. S. Martin, B. L. Bourdeau, and J. Stephan, 'Measuring the effectiveness of facility naming rights sponsorships', *J. Bus. Res.*, 2020, doi: 10.1016/j.jbusres.2019.12.036.
- [4] H. Hengelbrok and E. L. Baker, 'Connecting with coaches, mentors, and sponsors: Advice for the emerging leader', *J. Public Heal. Manag. Pract.*, 2021, doi: 10.1097/PHH.00000000001380.
- [5] K. Binnemans, P. T. Jones, K. Van Acker, B. Blanpain, B. Mishra, and D. Apelian, 'Rareearth economics: The balance problem', *JOM*, 2013, doi: 10.1007/s11837-013-0639-7.
- V. F. Martin, D. Larios, Di. M. Solis, J. M. Taboada, L. Landesa, and F. Obelleiro, 'Erratum: [6] Tear-and-Interconnect Domain Decomposition Scheme for Solving Multiscale Composite Penetrable Objects' Access (2020)8 (107345 - 107352)DOI: (IEEE 10.1109/ACCESS.2020.3000650)', IEEE 2020. doi: Access. 10.1109/ACCESS.2020.3042680.
- [7] A. Garcia-Bernabeu, A. Benito, M. Bravo, and D. Pla-Santamaria, 'Photovoltaic power plants: a multicriteria approach to investment decisions and a case study in western Spain', *Ann. Oper. Res.*, 2016, doi: 10.1007/s10479-015-1836-2.
- [8] M. Goodfriend, 'Money markets', *Annu. Rev. Financ. Econ.*, 2011, doi: 10.1146/annurev-financial-102710-144853.

CHAPTER 10

AN OVERVIEW ON THE EXCHANGE RATE RISK IN FINANCE

Dr. Bipasa Maity, Professor, Masters in Business Administration, Presidency University, Bangalore, India, Email Id- bipasha@presidencyuniversity.in

ABSTRACT:

Exchange rate risk is a significant factor in international finance and involves the possibility of financial loss due to fluctuating exchange rates between different currencies. This risk is faced by companies engaged in international trade, investors with holdings in foreign currencies, and financial institutions that provide currency exchange services. Exchange rate risk arises due to the volatility of exchange rates, which can fluctuate due to various factors such as geopolitical events, economic conditions, and government policies. This risk can have a significant impact on the profitability and financial stability of businesses and investors. To mitigate exchange rate risk, companies and investors can employ various strategies such as hedging, diversification, and using financial instruments such as options and futures contracts. Hedging involves using financial instruments to lock in a specific exchange rate and protect against losses due to currency fluctuations. Diversification involves spreading investments across different currencies and countries to reduce exposure to any single currency or market.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The project requires funding for a lengthy gestation time, thus these finance institutions will be available to lend. Due to cheaper capital costs, raising money from overseas markets is simpler than from Indian financial markets. Therefore, cross-border transactions must be conducted in two exchangeable currencies. Due to its acceptance across countries in international commerce, a corporation cannot depend just on one currency for trading. A currency exchange market, often known as the foreign exchange market, is required for this. This market makes it easier to exchange currencies for use in cross-border transactions. Major financial institutions from global financial hubs like London, Singapore, Mumbai, etc. participate in this market. The buyer and seller institutions do the trade online. Its primary purpose is to facilitate the meeting of buyers and sellers who then agree to exchange currencies at a rate that is equal.

The term "exchange rate" refers to such a matched and accepted rate. For the sake of simplicity, we might state that it is the exchange rate between two currencies. For instance, we may acquire US dollars using Indian rupees at the current currency rate offered by commercial banks if we need them for a loan for travel or schooling. If we had extra US dollars after returning from the US, we could sell them at the current exchange rate and exchange them for Indian rupees at the commercial banks. The challenge here is to get money in a tradeable and appropriate currency. The demand

and supply of that currency, as well as the current agreement between the nations, determine how simple it is to exchange currencies. Inflation rates and interest rate differences between the two nations are some of the other variables that affect exchange rates.

When we apply the same idea to a project, we will see that there are several instances when the exchange rate is significant. For the project, we need to buy machines, pay technical experts' salaries, import raw materials for production from other countries, pay for patents and copyrights, compensate for technology transfer, pay interest to the lenders, etc. All of these expenses require foreign currency. Therefore, the project would experience both favorable and unfavorable effects at the time of payment or when receiving changes in foreign exchange rates. Exchange rate differences between the home currency and the host currency cause exchange risk to exist. The US dollar is the home currency while the Indian rupee is the host currency for any American multinational operating in India. Therefore, the project was responsible for paying the costs at the time the exchange rate changed as a result of various internal and external factors. We had seen it when the country's central bank changed the monetary policy of the nation. The effect of these modifications varies from project to project, but they are thought to improve and stabilize the economy. The importance of this risk increases for projects receiving finance from foreign financial institutions in a currency other than the project's native currency. As an example, consider a US company that operated in India and earned Indian Rupees while doing so.

When a foreign corporation must earn in a host currency other than its own native currency, things get more difficult. For instance, if a US company operates in India, it will earn in Indian Rupees and send its earnings back to its home country in US Dollars. In projects involving foreign direct investment, management had the power to alter operations and lower the risk associated with exchange rates. However, due to a lack of enterprise control and the inability to structure operations, projects with a portfolio of investments are more susceptible to exchange rate risk. According to Aliber's Exchange Risk Theory, exchange rates have a significant effect in the differences in interest rates between the two nations.

It claims that the nation has the potential to become the world's low-cost manufacturing hub because of its cheap currency. Foreign investors will look into and attempt to take advantage of this cheaper manufacturing possibility. Because they would be getting better deals, they would be eager to purchase in such nations. Conversely, there is no geographical benefit as a source country in industrialized nations with inflated currencies. The inflated currency makes the nation a high-cost manufacturing hub. Therefore, money wants to leave the country in order to buy cheaper foreign assets in nations with undervalued currencies at favorable exchange rates. The buying power of the currency and the destiny of the nation are determined by these three rates: inflation, interest, and exchange rates.

Macro economical Risk Management

The essential phases in the risk management process are;

- a. Identification of risks
- b. Risk evaluation
- c. Risk reduction

d. Risk assessment

The most crucial stage of the risk management process is risk identification. This makes an effort to determine the risk's kind and source. As we had previously seen, contracts give duties to the appropriate party after determining the kind of risk. Correct risk identification paves the way for the development of risk analysis and its management. A study seeks to determine the key risk factor affecting efficacy. It is common knowledge that identifying and reducing project risks is one of the most important elements in ensuring the project's success. If the causes of risk are not identified, it might result in a negative chain of events, such as construction delays, an increase in construction costs, and expenditure that exceeds projections and plans, which could have unexpected effects on the project's outcomes. These factors increase the risk that a project may fail or provide less cash flow than anticipated. Macroeconomic risk may be addressed in the following ways if we have determined it to be a project risk:

- 1. Committing to a project under a public-private partnership approach.
- 2. A fixed-price turnkey contract would protect against any macroeconomic risk and lower the project's cash flows.
- 3. Early project operator participation to keep costs down and guarantee cash flows. This may also result in the signing of pass-through contracts that allow the input expenses to be transferred to the buy.
- 4. Indexing the cost of raw materials to the current market cost of final products.
- 5. Encourage dependence on project companies or special purpose vehicles since they are independent entities, may have high gearing, or more than debt, and encourage a concentrated approach to investments, expenses, and cash flows.
- 6. In order to guarantee consistent cash flows from project operations, pricing for the product must be confirmed and fixed in the market. The project may have an off-take agreement for such a transaction. For instance, a petroleum refining project and a petroleum marketing business may enter into a petroleum purchase agreement.
- 7. More bonds should be issued to pay interest during the loan's term and principal when it comes due.
- 8. Macroeconomic risks have a significant influence on operating expenses, hence pass-through cost structures may be beneficial. These arrangements pass on the project's input costs to customers, thus any rise in those costs has no effect on the project's cash flow.
- 9. To lower the risks, rely more on local currency finance, insurance, and offshore accounts.

Hedging and currency swaps should be employed to lower risk. Interest rate swaps allows two counterparties to have a written agreement for the exchange of recurring cash flows. These parties could be active in two distinct nations. Therefore, nominal value cash flows at a floating rate can be exchanged for nominal value cash flows at a fixed rate of interest. The Board of India (RBI) works to maintain economic stability in India. Foreign financial organizations used to invest in Indian markets in order to profit from the expansion of the Indian economy. Equities and debt

instruments may be issued in order to raise money. But obtaining capital from abroad is comparatively less expensive. However, for foreign investors, these investments must be carefully considered while taking into account macroeconomic factors such as current inflation, interest rates, and exchange rates between their home currencies and the Indian rupee [1], [2].

These macroeconomic hazards are all unavoidable, external risk factors. Still, it must be thoroughly understood and properly managed after identification in order to finance a project. The use of project finance has increased during the last several years. It is a financing strategy in which the project is made into a separate legal organization and is primarily funded by non-resource loans. It has to do with how the project is financed; it was created as a separate legal organization and is mostly supported by non-resource loans. Since these projects are typically scrutinized by the regulator, civil society, and financiers, the project's sponsors allocate extra funds for the management of environmental and social risks. Environmental and social risks might cause project operations to be suspended or stopped, which could lead to legal issues and reputational damage that would jeopardize the project's final performance. It should be noted that risk is a component of all investments in some way. Investors need to be ready to deal with a scenario in which there is a big loss. This loss would later be distributed to the shareholders of a listed corporation. A limited partnership investor, however, may suffer a loss greater than their original investment in a general partnership [3].

DISCUSSION

The regulatory assessment, approval from statutory authorities, and making provisions in the project for its long-term solution are all parts of the overall project life cycle. This includes actions like the standard environmental project evaluation and research. To include a facility in the project, get statutory authority approval, conduct the pollution control project alongside the main project, and routinely check the pollution control standards throughout operation after the project is finished. Therefore, government approval, including that of the Ministry of Environment and Forest and Department of Environment, is now required for any new project. Therefore, it is now necessary to conduct research into the regulatory issues raised by the new project and to identify potential solutions.

Uncertainty underlying new or changing legislation throughout time. Regulatory risk is the potential for a change in laws or regulations to have a significant impact on the economy, sector, industry, or public health. A company's profitability may suffer from changes in policy or regulatory rules or regulations, and the competitive climate may change. The initiatives must consider infrastructure, products, and finances in addition to regulatory risk and disclosure activities. It could raise costs, slow down operations, and occasionally even limit how well a business operates. Therefore, any modification to the law may have an industry-wide ripple effect. When regulatory risk develops [4].

Without uncertainty, there can be no regulatory risk, and there are two major types of uncertainty that need to be distinguished. Business uncertainty is a result of the regular stochastic interactions between buyers and sellers in every sector of the economy. This encompasses the effects of

regional and global disruptions, unanticipated technological advancements, changes in preferential agreements, shifts in the distribution of wealth among people, and changes in the distribution of the population between areas. Even though all businesses, whether regulated or not, are aware of the effects of market uncertainty, this does not make a regulatory risk assessment irrelevant. The effective execution of a project is significantly impacted by legal and environmental issues. As a result, both before and after a project is started, the influence on the environment should be evaluated. The project manager will also be able to create realistic objectives for the project and the organization by considering how a future project will affect the environment.

Instead of seeing these regulatory procedures as obstacles to the accomplishment of the project's objectives, the project manager should accept them as a necessary component of sound planning. Before beginning the project, the project manager needs get the required green lights from environmental protection organizations. If at all possible, he ought to incorporate these rules into the projects' overall strategy. Every project should adhere to the law in every way. Legal counsel is often enlisted by businesses to guarantee that the project manager's team's operations comply with the law. Legal counsel is essential to confirm that all necessary licenses and permissions have been requested for and obtained for the project. Government and regulatory agencies routinely create new rules or amend existing ones. This poses a risk to the regulatory system. Here are some examples of regulatory changes that might have an impact on businesses or industries:

Trade Laws and Tariffs

Companies that routinely export and import goods will be impacted by changes in international trade rules. Affected investors include those who make investments via foreign direct investment. For instance, many nations have tight rules for establishing businesses in their native nations. For instance, China only permits partnerships and joint ventures inside its borders. China's capital market has long been subject to several limitations on investments, but only lately have they changed their regulations [5], [6].

Fiscal Policy

Income tax legislation changes immediately impact each party's income and may create a new regulatory risk.

Legislation Governing the Minimum Wage

Increasing minimum wages may pose a huge regulatory risk since they have a big influence on businesses, especially when it comes to recruiting a lot of underqualified workers.

Financial Ordinances

Financial institutions are in charge of enforcing rules relating to timely financial report disclosure, investing strategies, and sustaining liquidity standards. But financial regulation encompasses more than just following the law; it also refers to ongoing oversight and observance. Financial firms that are not properly regulated run the risk of weakening the stability of the financial system, hurting consumers, and harming future economic prospects.

Regulatory policies pose top risk to India Inc. Corporate activities in India are plagued by several enforcement and regulatory issues, including extensive corruption, bureaucratic red tape, and different cultural norms. The advantages of the expanding industry and its skilled labor, however, outweigh the regulatory vulnerability. India continues to be the most popular location for commercial outsourcing, even if the quick rush to outsource IT and back office functions there has slowed. According to "The Handbook of Global Outsourcing and Offshoring," six of the top outsourcing locales are in India [7].

However, American businesses must become familiar with the cultural complexities and unique threats of India if they hope to build successful operations and relationships there. In India, major projects often call for the passage of government representatives. In fact, many companies seem to agree that bribery is not even necessary to do business in India. The KPMG poll also revealed that % of respondents in India experienced corruption and bribery. The bureaucratic structure in India is another significant problem. % claimed that bribery and corruption caused their company "a considerable risk." In India, everything takes a very long time to clear. Another barrier to contract compliance in India. It is practically impossible to resolve a civil issue since the legal system is so convoluted. Cases have been pending in India's legal system for more than 0 years. As a result, many companies and other third parties do little to stop harassment.

Elements That Determine Project Risk

In both economic and non-economic fields, projects are used to organize activities and attain desired goals. Additionally, the risk attached to these activities varies across industries as well as between projects within the same industry. They will, however, presumably be based on the following.

Project's Nature

The technological aspects of projects vary greatly, even within one area. Additionally, there are areas that are shared across sectors. For a project to utilise a certain asset, such as real estate or intellectual property, certain government permits may be needed. These viewpoints might result in approvals being rejected outright.

The Project's Location

A project based in a less developed nation is usually riskier than one in a nation with a more advanced economy. every political upheaval, economic instability, inadequate policy, volatile market, etc., raise the risk level for every business undertaking. However, projects in developed economies may face a variety of difficulties due to regulatory constraints, environmental regulations, financial reforms, and legal requirements.

Those involved in the project

Typically, private businesses with specialized, often quite deep knowledge in the industry where the project should function help initiatives. Direct collaboration with political or bureaucratic State-owned entities is required of the private sponsors.

The Prognosis of Regulatory Risk

Even though regulatory risk is rising, many businesses still do not use an integrated, risk-based strategy for compliance. Companies that are able to anticipate potential regulations will be able to use this knowledge to improve market processes, discourage non-compliance, and foster better connections between customers and legislators. To keep up with changing regulations and concerns, financial service companies need clear methods for identifying and incorporating information into their plans and actions.

A business requires business process management solutions in order to integrate the new rules into the workflow. As a result, the end-to-end approach is not handled by a single technology; rather, it would include a combination of technologies and rely on the market's size and dynamic complexity [8].

The key is an integrated strategy and data qualityMore and more reporting criteria also make organizations more responsible, notably in the sectors of trading, risk management, and fees. Technology suppliers see potential market in supporting regulatory risk management. To establish a single risk picture, many businesses gather this data and extract it for the business. Risk management strategies to reduce regulatory riskThe traditional risk management model is to operate three defense-based lines in which the business group manages the risk, supervises the management, and then audits the process to evaluate the success. This ensures that information becomes useful knowledge. Companies may better manage their exposure to regulatory risk by enforcing compliance. If companies wish to deal with laws successfully, like many other hazards, this must be established carefully.

CONCLUSION

In conclusion, exchange rate risk is an important aspect of international finance that can significantly impact the profitability and financial stability of businesses and investors. This risk arises due to the volatility of exchange rates between different currencies, which can fluctuate due to various factors such as economic conditions, geopolitical events, and government policies. To mitigate exchange rate risk, businesses and investors can employ various strategies such as hedging, diversification, and using financial instruments such as options and futures contracts. These strategies can help to lock in specific exchange rates, reduce exposure to any single currency or market, and protect against losses due to currency fluctuations. In addition, financial institutions that provide currency exchange services can use risk management techniques such as establishing limits on currency exposure, monitoring currency positions, and using hedging strategies to manage exchange rate risk. Overall, managing exchange rate risk is essential for businesses and investors engaged in international trade and investment. By understanding and effectively managing this risk, they can protect against potential losses and ensure their long-term financial stability and success.

REFERENCES:

[1] C. Fei, W. Fei, Y. Rui, and L. Yan, 'International investment with exchange rate risk', *Asia-Pacific J. Account. Econ.*, 2021, doi: 10.1080/16081625.2019.1569539.

- [2] R. Friberg and M. Sanctuary, 'Exchange rate risk and the skill composition of labor', *Rev. World Econ.*, 2020, doi: 10.1007/s10290-019-00363-0.
- [3] S. Chen, S. Liu, R. Cai, and Y. Zhang, 'The Factors that Influence Exchange-Rate Risk: Evidence in China', *Emerg. Mark. Financ. Trade*, 2020, doi: 10.1080/1540496X.2019.1636229.
- [4] X. Yu, W. G. Zhang, Y. J. Liu, X. Wang, and C. Wang, 'Hedging the exchange rate risk for international portfolios', *Math. Comput. Simul.*, 2020, doi: 10.1016/j.matcom.2020.02.014.
- [5] F. Parlapiano, V. Alexeev, and M. Dungey, 'Exchange rate risk exposure and the value of European firms', *Eur. J. Financ.*, 2017, doi: 10.1080/1351847X.2015.1072570.
- [6] B. Gadanecz, K. Miyajima, and C. Shu, 'Emerging market local currency sovereign bond yields: The role of exchange rate risk', *Int. Rev. Econ. Financ.*, 2018, doi: 10.1016/j.iref.2018.02.004.
- [7] G. Li, J. Zhu, and J. Li, 'Understanding bilateral exchange rate risks', *J. Int. Money Financ.*, 2016, doi: 10.1016/j.jimonfin.2016.07.008.
- [8] J. Chi, 'The impact of third-country exchange rate risk on international air travel flows: The case of Korean outbound tourism demand', *Transp. Policy*, 2020, doi: 10.1016/j.tranpol.2020.01.012.

CHAPTER 11

ROLE OF POLITICAL RISK IN FINANCE

Ms. Neha Saxena, Assistant Professor, Masters In Business Administration, Presidency University, Bangalore, India, Email Id-nehasinha@presidencyuniversity.in

ABSTRACT:

Political risk is a significant factor in finance that refers to the risk of financial loss due to political events or changes in government policies. This risk can arise from a range of political factors such as political instability, social unrest, terrorism, war, and changes in regulations or policies that affect business operations. Political risk can have a significant impact on the financial performance and stability of businesses and investors, especially those operating in foreign countries. This risk can result in direct financial losses, such as expropriation of assets or nationalization of industries, or indirect losses, such as a decline in market value due to changes in government policies or regulations.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The correct environment would need to be created by company executives for a risk-based strategy to settle in and transition. Investments are necessary in developing emerging technology providers' capabilities so they can match authorities' expectations. While evaluating political risk has always been a component of any business. In literature, it first appeared in s. Political risk is likely to have an effect on the local business and/or investment environment via governmental choices or actions in a manner that may result in losses for foreign enterprises. Political risk is a word that is now often used to refer to a part of nation risk.

Political risk suggests that the risk arises as a result of a change in a nation's governmental structure, posing a danger to investments in various asset classes. A country's political environment may change, which might bring about corruption, terrorism, etc. and ultimately result in changes to the laws that apply to that country. Political risk, which may impede businesses and eventually lower investor confidence, is also known as geopolitical risk and results from conflict between two nations. For instance, any modification to the corporation tax rate by the current administration may result in an increase or reduction in business revenue. Legal issues might also raise investment risk, reduce profitability, and cast doubt on how company is conducted.

To manage the political ecology, it is important to take into consideration the following factors.

1. **Ideology:** When the ideology of the governing party changes, a nation experiences transformation. Every country's governing party instills its ideology over the economic policy.

- 2. **Stability:** Violent events, linguistic disparities across cultures, and other unstable elements may transform a nation's atmosphere. For instance, the upheaval in Somalia and Czechoslovakia enhances awareness of these countries while eroding investor confidence in them.
- 3. **International Relations:** Over the last 20 years, ties between nations have improved. This is mostly due to the expansion of GATT, NATO, and the EU, which have all made significant strides in lowering "international" tensions.

Differentiating Political Risks

The macro risk is associated with multinational corporations that operate in several countries and sometimes have to sacrifice on profits because of various functional restrictions. Micro-risks are caused by internal conflicts like corruption, poverty, unfavorable manipulations, etc. Political events may have a significant impact on asset prices or company expenses. Political policy influences everything from taxes to interest rates.

Trade Barriers: Trade obstacles like tariffs will cut into corporate margins or restrict global market competition. Local politics or commercial conflicts often result in trade obstacles. Taxes: Tax changes will have a negative effect on company profits and the value of its securities. Legislation: New legislation may result in the cost of compliance as firms may need to adjust their operations, goods, or business processes. Complex tax laws may be a hardship for small businesses that must devote limited resources to grasp the new rules and comply.

Administration: Political unrest may be brought on by administrative delays. A government may start withholding corporate permissions, such as building permits. Political instability: Events like terrorism, riots, assaults, civil wars, and insurrections may utterly disrupt a nation's long-term corporate operations. Syria, Afghanistan, Cairo, Somalia, etc. are a few examples. Economics: Political choices over interest rates, which have an influence on asset prices and company expenses, are one example of how politics may sometimes affect economic policy.

Political Risk Management

Assessing global risks entails more than just determining the likelihood that political hazards will materialize. Even after a project has been approved and put into action, political risk has to be managed. An MNC may create a strategy that lessens the likelihood that political risks will materialize. They should also decide what actions they will take in the case of political risk incidents. If political risk is a concern, MNC must organize its investment such that changes in political risk do not have an impact on its cash flows. An Indian exporter's industry may see long-lasting consequences from a single occurrence, which might affect the whole business. Here are a few steps you may take to lessen the danger these kinds of things might cause [1].

Through the use of special supplies from its headquarters or specially challenging technology, the MNC can make it challenging for a government to take over without its cooperation. It is acceptable to take political risk into account by keeping the insurance cost separate from the expected cash flows if MNCs would fully safeguard against any future risk incidences and collect their losses. To prevent the risk from being concentrated in just one or two developing economies,

consider diversifying your worldwide holdings. Establish a transparent and current government strategy to reduce risks based on the nature of the business. Know in advance how to respond to a variety of dangers.

Inform your clients, vendors, and representatives of your backup plans for handling unanticipated policy risks, and when required, coordinate your risk response. If you are aware of a negative political development and can prepare your response with your key players beforehand, recovery from it is often faster and smoother. Emerging markets trading may be intimidating, so it's critical to have a thorough strategy and policy to reduce risk right away. Numerous environmental factors affect the company. Political choices or changes may have a significant impact on companies in addition to market-based factors [2], [3].

For instance, government policy choices on taxes, currency exchange rates, trade tariffs or barriers, investment, wage levels, labor laws, environmental regulations, and development goals may impact the viability of businesses. Similar to this, non-economic variables may affect a firm. Global uncertainties should be accepted by hedge fund accounts as well as international corporate investors. Since Donald Trump took office in the United States in, there have been numerous changes to economic practices. Import taxes have been imposed mostly on Chinese goods, starting a trade war that has affected the economies of Chinese businesses and put Chinese investors under even more stress. Asian immigrants' arrival into diverse regions of Europe disturbs the socioeconomic structure of the continent. There may be an increase in local labor unemployment as a result of the supply of inexpensive labor from other nations. Because of this, the situation may be beneficial for business while being challenging for regional residents.

The project's organizational, social, and cultural contexts must be understood by the project manager. Identifying the project stakeholders and their influence on the project's result is necessary to comprehend this environment. When the environment is understood, the project manager may take action to ensure that it benefits the project. This chapter covered some of the internal and external environmental aspects that the project manager must evaluate, including the project's influence on organizational structure and socioeconomic conditions. Various facets of project phases and project life cycles were also covered in this chapter.

Regulatory compliance has been defined in both the public and commercial sectors. Following recent deregulation initiatives, the regulatory rulebook has kept growing. Regulatory risks have considerably grown in a number of key sectors, including the financial, automobile, and healthcare industries. Managers must comprehend that, in addition to adhering to the law, they must also be able to manage and minimize compliance risks by putting procedures in place [4].

Country risk refers to the potential negative impact on an MNC's cash flows of a region's political and economic climate. Political risk is a specific instance of country risk in which a government or legislation affects a company's cash flow. A government's capacity and inclination to make repayments to the holders of its foreign debt are also strongly correlated with country risk and political risk. The sovereign risk is another name for the danger of nonpayment. War, social unrest, and corruption are additional risk factors. Utilizing expert-gathered quantitative and qualitative data, country and political risks are assessed. Political risk research most typically ignores the

premise that currency and political risks may occasionally coexist. MNCs should take specific steps to lessen the effect of political risk occurrences in addition to considering political risk in capital planning.

Accelerated depreciation is the option for tax authorities in many nations to accelerate the depreciation schedule for a company's assets in order to get tax benefits. Acceleration clause: Requirement enabling debtors to demand quick repayment of the SPV's whole debt. This will happen in particular if the project is unsuccessful and there are more instances of default specified in the loan agreement. Administrative risk: Potential project repercussions from non-compliance; delays or judgments made by the public administration. To determine the magnitude, timeframe, risk profile, and mix of a contract in a way that is acceptable to all lenders, the sponsor recruited professionals as advisors. The arranger is the bank or group of banks that plays a prominent role in the loan arrangement process. The amount and contract terms for lending and corporate loan syndication are determined throughout the arrangement process. Bullet payments: One-time debt repayments that often come after little or no loan repayment. Business disruptions: The danger and resulting effects of third parties ceasing to do business. Business Plan: This document, which is a crucial component of the information memorandum, converts the gathered data into figures to assess the effects of numerous factors on the cash flows, revenues, and asset structure of the project firm. Buyer: A rival who purchases SPV production. Generic buyers, whether from the home market or from outside, may decide to acquire the whole selling of SPV production. Additionally, there are generic buyers [5], [6].

DISCUSSION

Cost of Preference Capital: The discount rate that compares the net proceeds from the preference capital issue to the payments associated with it, such as dividend payments and principal payments. Cost of Non-Conformance: These are the costs that are incurred for improving the quality of a product that has fallen below the desired quality level. Business Risk: Variation in the earning of the firm due to changes in its normal operating conditions. These expenses include things like complaints, reworks, and repairs. Corporate loans are given to new, frequently used, up-andcoming businesses, with little connection between the loan at issue and how the funds are used. Country risk is a more general term for the degree to which political and economic unrest affects issuers' securities in a particular nation. Country risk is another term for the risk that foreign governments would not fulfill their financial obligations, such as bond obligations. Covenants are promises made in an indenture or other official debt arrangement that particular actions will be taken or not taken, depending on the situation. Credit agreement: A financial agreement containing contractual terms negotiated with the lenders is summarized in a legal document. Credit enhancement: Any guarantee given to a borrower by a third party to increase its credibility. Positive agreements require the company to make certain decisions; negative agreements forbid the company from making others. Credit risk: The danger that one of the parties taking part in a project financing effort may not fulfill its obligations. Critical analysis: It is an activity whose total float value is zero [7].

Data Tables: These are the statistical tools used to collect and present data in a systematic way. Decision Tree Analysis: It is used in complex decision-making processes. Cumulative Reports:

They are reports that present the history of the project, from its inception to the end of the current reporting period.

Dummy Activity: A zero-duration activity used to depict the logical relationship in the network diagram is referred to as a dummy activity. Exchange rate risk: This risk rate arises if some or all of the financial flows in the project are shown in different currencies from the account of the SPV. Export credit agencies: Organizations supporting exports from their country by providing financial assistance. Fixed-price turnkey contract: Construction agreement for a plant based on a fixed price charge. Funding paperwork are created by the arrangers' attorneys and negotiated with the project company's lawyers. Construction risk may be transferred in this manner to SPV sponsors and lenders [8].

Force Majeure Risk: Events beyond the control of either party increase the likelihood of nonperformance. Free float: This is the amount of time by which the completion of an activity may be delayed beyond the earliest end time without influencing the earliest start of a following activity. These occurrences are either "acts of God" or political hazards. General Audit: This is often a quick examination of the project, completed in a condensed amount of time with few resources.

Horizontal communication is the sharing of information between the project manager and other people in comparable management roles, including functional managers, other managers, the client's representative on the project, and other managers. Investment risk is defined as the potential for failure rather than the expected advantage brought on by reduced securities fair prices. A financial institution known as the lead manager is in charge of overseeing the sale of new bonds, stock in a firm, or loans issued jointly by numerous institutions.

Schedule for loan drawdowns: Order of current debt borrowings. In project financing, plant building milestones are often tied to the loan drawdown timetable [9].

Loss carry forward: The capacity to use this year's earnings to future years' taxable profits.

Node: A node is a point in time that marks the beginning or finish of an activity.

Model of numeric selection: This model of project selection chooses a project by using numeric inputs.

The least amount of time that a task may be finished is known as the optimistic time. An activity can only be finished in the allotted time when the external environment is very favorable. In general, change control refers to handling the variables that cause changes in a manner that ensures the changes are advantageous to the project. Project auditing is the process of carefully examining a project's management, including its methodology, methods, processes, documents, properties, budgets, costs, and degree of completion. Project control is the process of gathering data on the system's performance, comparing it to the intended level of performance, and taking corrective action to close the performance gap.

Project cost: The total cost of all the project-related activities is the project cost.

1. It is a schematic depiction of the project activities and the connections that logically connect them.

- 2. It is a document that outlines the scope of a project, according to the project overview statement.
- 3. Project phases are groups of linked project activities that come together to produce one or more significant project deliverables.
- 4. A formal, authorized document used to oversee and supervise the progress of a project is called a project plan.
- 5. Project risk analysis examines the likelihood that certain unfavorable outcomes will occur as well as their influence on achieving project or procurement goals.
- 6. Project Risk Management is a subset of project management that includes the procedures for locating, evaluating, and addressing project risk. It entails identifying risks, quantifying risks, developing risk responses, and controlling responses to risks.

Project Specification:

- 1. The guidelines under which the goals of the projects are accomplished.
- 2. Project stakeholders are people, organizations, or authorities who are engaged in or impacted by project operations. If their demands are not met, they may even act against the project.
- 3. Report on the status of the project: This document details progress made and any deviations from the budgeted resources and planned activities.

Pure Project:

- 1. A project is said to be pure if the unrecovered investment balance remains negative or zero during the project's duration and remains zero at its conclusion.
- 2. Quality assurance is the practice of routinely assessing the project's overall performance to make sure it complies with quality standards.
- 3. A list of priority projects is created using the sort methodology, which is a method for project appraisal and selection.
- 4. A risk avoider is someone who strives to minimize danger.
- 5. Risk avoidance is a risk management response strategy that aims to remove the root of a risk in order to mitigate it.
- 6. It is the process of identifying which risk occurrences are most likely to have an impact on the project.
- 7. Risk management is a method for systematically identifying, evaluating, and planning for risk concerns.
- 8. Risk mitigation is a risk management strategy that aims to lessen loss in the event of a risk by taking preventative action.
- 9. Risk quantification is evaluating the variety of hazards connected to a potential project result.

Risk Taker:

1. This individual wants to take on the risk.

2. Transferring risk obligation to a third party was the goal of the risk response strategy. However, because this model can only transfer financial risk, its application is frequently constrained.

Risk Signs: These are also referred to as triggers. These occurrences don't represent real risk incidents, but they do show that danger is becoming more likely.

Risk: The chance that a result will vary from what is anticipated. While the potential outcomes are known, it is unknown which of them will actually occur. In order to understand the features of the variables in the scenario, simulation requires simulating the behavior of some situation or process using a comparable circumstance. Sinking fund factor: Amount that must be invested at the end of each year over a period of 'n' years at an interest rate of 'k' in order to amass a certain amount of money over the course of the time.

Slack: Slack is the time interval between the latest and earliest times of an occurrence. The term "social benefit" refers to a project's beneficial effects on society, such as increased job possibilities and per capita income.

Systematic Risk: This risk results from the state of the market. Market risk is another name for this issue.

Term Loan: A loan with a three- to five-year maturation duration that is used to finance the purchase of fixed assets or the renovation of commercial properties.

Variance Reports: These documents demonstrate how the actual production or activity deviates from the original plan.

Weighing System: This procedure qualifies all the data relevant to the vendor's qualitative characteristics.

The total of the weighted values produced by multiplying the cost of each source of funding by its weight in the capital structure is the weighted average cost of capital. The work breakdown structure (WBS) organizes and defines the project's overall scope via the grouping of project activities based on deliverables.

Since gaining independence, our nation has developed steadily thanks to the Five-Year Plans for economic growth. Technology, infrastructure, economic growth, and social development have all advanced. However, due to our rapid population growth, we now require a significant amount of infrastructure and resources, which must be expanded with the help of investors and financial institutions.

All investors want to remove risk from the project and reduce it going forward before they commit any money. It is unrealistic to depend only on government support in emerging nations. Tax revenue from both direct and indirect taxes is one source of funding for these improvements. When investing public funds, it is essential to prioritize project risk management. Through a Public-Private Partnership, which is invited to share risk and return of project financing, the government entrusts its risk to a private entity. In this approach, the funding and development of infrastructure is greatly influenced by the private sector.

CONCLUSION

To mitigate political risk, businesses and investors can employ various strategies such as diversification, insurance, and hedging. Diversification involves spreading investments across different countries and industries to reduce exposure to any single political risk. Insurance can provide protection against losses due to political events, such as war or expropriation of assets. Hedging involves using financial instruments such as options and futures contracts to protect against potential losses due to political events.

Governments and international organizations also play a role in managing political risk by providing political risk insurance, investment guarantees, and other forms of support to businesses and investors operating in politically unstable or high-risk areas. In conclusion, political risk is an important factor in finance that can have a significant impact on the financial performance and stability of businesses and investors.

By employing various strategies such as diversification, insurance, and hedging, and by receiving support from governments and international organizations, businesses and investors can effectively manage political risk and protect against potential losses due to political events.

REFERENCES:

- [1] H. Davarzani, R. Zanjirani Farahani, and H. Rahmandad, 'Understanding econo-political risks: impact of sanctions on an automotive supply chain', *Int. J. Oper. Prod. Manag.*, 2015, doi: 10.1108/IJOPM-01-2013-0021.
- [2] T. Chang, B. G. Hwang, X. Deng, and X. Zhao, 'Identifying Political Risk Management Strategies in International Construction Projects', *Adv. Civ. Eng.*, 2018, doi: 10.1155/2018/1016384.
- [3] M. T. Gibbs, 'Why is coastal retreat so hard to implement? Understanding the political risk of coastal adaptation pathways', *Ocean and Coastal Management*. 2016. doi: 10.1016/j.ocecoaman.2016.06.002.
- [4] T. Chang, X. Deng, B. G. Hwang, and X. Zhao, 'Political Risk Paths in International Construction Projects: Case Study from Chinese Construction Enterprises', *Adv. Civ. Eng.*, 2018, doi: 10.1155/2018/6939828.
- [5] N. vonHedemann, M. K. Butterworth, P. Robbins, K. Landau, and C. W. Morin, 'Visualizations of mosquito risk: A political ecology approach to understanding the territorialization of hazard control', *Landsc. Urban Plan.*, 2015, doi: 10.1016/j.landurbplan.2015.03.001.
- [6] T. Chang, X. Deng, and B. G. Hwang, 'Investigating political risk paths in international high-speed railway projects: The case of Chinese international contractors', *Sustain.*, 2019, doi: 10.3390/su11154157.
- [7] B. Fägersten, 'Political risk and the commercial sector Aligning theory and practice', *Risk Manag.*, 2015, doi: 10.1057/rm.2015.5.

- [8] S. Grünenfelder, 'Understanding and Managing Political Risks of Sovereign Wealth Funds.', *Univ. St. Gall. Bus. Diss.*, 2013.
- [9] D. L. Bodde and D. L. Lewis, 'Understanding political risk in investment planning', *J. Policy Anal. Manag.*, 1984, doi: 10.1002/pam.4050030405.

CHAPTER 12

SOCIO-POLITICAL RISK OF THE COUNTRY

Dr. Vijayarengam Gajapathy, Professor, Masters in Business Administration (General Management), Presidency University, Bangalore, India, Email Id- vgajapathy@presidencyuniversity.in

ABSTRACT:

Socio-political risk is a significant factor in finance that refers to the risk of financial loss due to social and political factors such as civil unrest, protests, and policy changes. This risk can arise from various social and political factors such as labor strikes, political instability, social unrest, terrorism, and changes in regulations or policies that affect business operations. Socio-political risk can have a significant impact on the financial performance and stability of businesses and investors, especially those operating in countries with high levels of socio-political risk. This risk can result in direct financial losses, such as damage to property or disruption of operations due to civil unrest or protests, or indirect losses, such as a decline in market value due to changes in government policies or regulations. To mitigate socio-political risk, businesses and investors can employ various strategies such as diversification, insurance, and hedging. Diversification involves spreading investments across different countries and industries to reduce exposure to any single socio-political risk. Insurance can provide protection against losses due to social and political events such as civil unrest or protexts to protect against potential losses due to socio-political events.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Projects should take into account "force majeure," which refers to the fact that the accountable parties may decline to accept responsibility for failure to execute due to certain unforeseen situations beyond of their control. Due to the complexity of the transactions, the parties involved, the diversity of stakeholder interests, the nature and timing of construction, technological risk, performance-related risk in the future, the distance between production and the market, and the transportation of raw materials to the production unit and supply of finished goods to the sales counter, project finance is subject to these force majeure risks [1], [2]. These factors make it impossible to have two projects that are precisely the same and have the same risk management and mitigation. For each project funding, a fresh risk management and mitigation plan must be used. The primary risk elements connected to project funding are;

- a. Choosing the financing model
- b. Species and potential of the proposed initiative
- c. Country's Sociopolitical Risk

d. Economic hazards specific to the operating nation

Future project design, procurement, construction, commissioning, and performance all include certain risks that are associated to project commercialization. We would learn about macroeconomic issues. Financial risks may result from cost overruns, which can be caused by inflation, currency rates, etc. Once you've finished reading, you'll be able to comprehend:

- a. Knowing how to reduce risk for a project.
- b. Understand how project financing may reduce risk throughout the building phase.
- c. Learn about project financing's role in risk reduction at the operational level.
- d. Using project contracts to control risk

Risk Management and Planning

The funding of the project carries risk for many different reasons. Even when the project managers take all possible risks into account while financing the project, the existence of uncontrolled elements makes project financing problematic. We need sound risk management strategy at this point. This planning is a continuous process for risk assessment and management in light of potential environmental change scenarios.

The main risk elements that are involved must be taken into account during risk planning, and risk management involves minimizing it as soon as it is identified. Planning for the hazards that have been identified is part of the risk reduction process [3].

- a. During the planning phase and even later in the project, identifying and characterizing the risk factors
- b. Identification of common causes based on knowledge and historical data
- c. recommending different mitigating tactics, tools, and strategies for
- d. such noted dangers
- e. Ranking and prioritization of risk mitigation options
- f. choosing resources for the mitigation options
- g. Communicating with decision-makers and implementers about risk planning and management.

This kind of project standardization aids in keeping the project on schedule. As a consequence, the investors can anticipate the project's success. Even if this whole phase occurs before the project is implemented and built, risk must be reduced in light of the changing business environment in order to make it lucrative for the investors and stakeholders.

Even after the project is over, it continues to support the planning of future initiatives that are comparable.

The management or organization may benefit from opportunities in the external environment by having effective risk management skills. It must lower the risk elements, such as cost or loss to the project, in order to be more cost-effective. The project's cost was negatively impacted by the loss of resources, including manpower, machinery, time, money, and other resources [4].

Sorting the Risk for Mutual Mutation

A project must deal with a variety of manageable and unmanageable risks, which require significant time and effort from the decision-makers. However, effective risk management produces future project outcomes that are profitable. An effective risk management plan is organized into the following categories:

Risk Mitigation during Construction

During the building phase, sponsors, procurers, governments, contractors, financiers, and feedstock suppliers run a significant risk. Therefore, when making decisions about risk factors and how to mitigate them, decision-makers exercise due diligence. To be more precise about their strengths and weaknesses, companies employ a variety of tools and methodologies such Strength Weakness Opportunity and Threat analysis. If they discovered that the risk could be reduced through contractual agreements, they made the necessary preparations. Typically, the risks listed below are present during the construction phase:

Delay in Finishing:

There are instances when projects cannot be completed as planned and wanted owing to a variety of unforeseen circumstances. The project manager's approach to reducing this risk is to choose a seasoned and reputable builder or construction firm. The most capable and reliable building firm is given this task by the corporations. The provision for applying financial penalties in the event of any inconsistency or delay in the project's delivery also serves as a risk-mitigation measure for completion delays. Therefore, if a business loses as a result of the contractor's delay, the losses are recovered by levying financial penalties against the offending party [5], [6].

A delay in the support infrastructure's completion:

The roles and duties of the parties engaged in the project are predetermined according to the planning. The state or the federal government provides the support system when the government participates in the PPP as a party. Therefore, the additional support offered aids in the project's smooth operation. According to the partnership agreement, the government is responsible for taking on the risk in the event that such supplemental help is not delivered on schedule.

Cost Inflation

This is one of the risk management for a project's most uncontrolled variables. The lenders of money engage with experts and consultants to assess the project's competence and capacity to deliver results on schedule. According to the project management and planning, funds are allocated. If money are allocated at random, the project will often be more expensive and provide less profit. Lenders get additional compensation to be on call and deploy debt and equity in such circumstances in order to reduce this risk.

Force Majeure

The technique for mitigating such risk is to extend the deadline and provide relief from the associated responsibility. Insurance is also utilized to lessen such risk and provide the enterprise

and its backers financial security. As a way to reduce sponsor credit risk from project financing, lenders evaluate the credit quality of the sponsors and pay for their equity commitments. Lenders work to reduce risk in project financing so that sponsors are always prepared to take on the risk under any circumstance.

DISCUSSION

At The Operational Stage, Risk Mitigation

As we had previously stated, the project requires funding, and risk must be reduced both during building and throughout operation. In this manner, a steady supply of raw materials is guaranteed, correct operations are carried out, and routine maintenance is carried out to prevent a decline in sales.

Supplying Raw Materials

The businesses get into long-term contracts with the creditworthy suppliers to guarantee smooth output at the manufacturing unit. These providers handle all the hassles involved in providing raw materials on time at the location. The manufacturing location is located close to the natural source of raw materials to ensure an equitable supply of raw materials to meet demand. If not, the clusters of auxiliary units step in to provide the primary production unit's requirement for raw materials and other support.

Support for operations and maintenance

The turnkey operator or establishing company offers technical assistance for turnkey projects. In other situations, the operational risk is reduced by performing routine maintenance on operating units. For this, a contract for routine maintenance is agreed upon with a professional and experienced operator. This agreement has a provision that provides reimbursement for losses caused by subpar work or other losses caused by carelessness in the maintenance services. In the case of equipment, the equipment provider will offer maintenance support under such contracts for the predetermined times.

Money Flow

Each project requires a high degree of operational and financial support. The financial flows are anticipated in order to guarantee a steady supply of finances for the project. Cash flows are anticipated based on scenarios taking into account situations like greater and lower sales, increased support for raw materials, and reduced supply as well in order to make the project's risk-proof prototype. The models for risk reduction are independently audited by independent auditors for the projects. The company is able to handle any shortfall in cash flows because to the existence of cash reserve accounts [7].

Exchange Rates

The company uses risk hedging strategies for risk mitigations connected to currency rate fluctuations and changes. As a result, they balance the debt financing with the revenue currency. If the projects are operating in multiple countries and at various locations, currency exchange is

used. If the government participates in this PPP model as one of the parties, then according to the terms of the contract, the government is responsible for bearing such currency risks.

Rates of Interest

Interest rates are taken into account when the contract is made, and hedging is done in accordance with the lender's requirements. The timely completion of the project and systematic cash inflow as anticipated throughout the project's planning and management are necessary for risk mitigation. An efficient method for funding initiatives that need long-term financial commitment is proper project finance. Estimating project cash flows and reducing revenue risk are made possible with the use of financial due diligence and risk modeling. The demand can be readily identified, and future projections are helpful. However, with this, the analysts attempt to invest in projects that are situated in nations with sound political systems and where the risk factors are clear. By securing financial goods from multilateral and export credit organizations, political risk is reduced. They are able to assess the project's dependability and possibilities using their sophisticated software and data warehouses. Lenders of capital often seek for pre-existing, bankable projects, and for this reason they don't hesitate to provide long-term finance. Additionally, high capital structure leverage is permitted because it is simpler to forecast cash flows for such projects.

Tools for Risk Management to Reduce Financial Risk

Following the 2008 financial crisis, the world had grown more complicated, and competition among all businesses operating in it had significantly increased. In order to deal with such difficult and dangerous conditions, every industry must develop its own special approach. All businesses, no matter how big or little, public or private, for-profit or nonprofit, were required to adapt to the demanding climate. As we've seen, corporations may create their strategies based on their internal strengths since the external environment is uncontrolled. Effective risk management and control mechanisms are crucial at this point. The finance manager must enhance the decision-making process for investments, corporate financing, management accounting, and cost management by doing appropriate analysis. Financial statement analysis, together with external finance reporting, budgeting, and forecasting, enhance this process' overall decision-making, internal control, and execution.

The organization wants to have sustainable development, but there are strong competition factors for developing creative products, choosing what to make or buy, choosing where to get money internally and outside, and choosing what to enhance or replace. However, every organization making such a decision must assume risk. Therefore, risk management and its mitigation are crucial for both national and international projects. Due to a lack of proper corporate environmental knowledge and competence, risk intensity rises.

It is challenging to evaluate risk for the same projects in various locations because the risk factors for each project vary. This makes risk assessment and its relevance to projects that are comparable difficult. However, avoiding or ignoring risk recklessly and making irrational decisions can be very expensive. In order to choose the tools and approaches for risk reduction, a good analysis is crucial. Therefore, it must be decided during capital budgeting whether the organization wants to accept risk, partially mitigate it, or get it reduced to zero by refraining from this risk taking.

Depending on the kind of risk, it may be managed in a variety of ways, including internal risk management and reduction, sharing of risk using various technologies, and risk transfer via the involvement of other companies and specialized institutions. In corporate finance, we discovered that the best tools and methods are those that align with the organization's goal and vision. The organization's capacity for taking risks, the stage of the business cycle, the involvement of consultants and other experts, and the cost-effectiveness of the instrument and approach may all have an impact. In this manner, the group hopes to map the cost-benefit analysis of using such a tool and method. To make correct decisions and manage them successfully, they must integrate the risk probability analysis with the risk impact assessment. The following alternatives are available for international risk sharing:

Forwards: According to the Forward Contract Act, which governs forwards in India, a forward contract secures the delivery of goods under a contract that is not for immediate delivery and is not for ready-delivery. Whether the buyer is in a long or short position determines whether they are required to service such contracts. When holding a long position, the trader is required to buy the underlying instrument at a predetermined future date for the price set at the time the contract was made. The crucial step at this time is to price the instrument correctly on Day 0. If a buyer's predictability for the future price of the item is correct, it will be advantageous for him or her. Accuracy in prediction determines whether an investment will profit or lose money. While in a short position, the person is required to sell the underlying asset at a predetermined price at a later date. If the prices established on Day 0 are higher than the future prices determined by market circumstances, then the position will profit. Unlike futures and options, which are traded on derivatives markets, forward contracts are not exchanged as a standardized entity. Forwards are really simple products that may be tailored to the needs and preferences of the parties involved. Due to the high credit risk being bundled to the contractual parties, major institutional parties often make the contracts.

Futures: The future contracts are conventional contracts, as opposed to the personalized forwards. These futures work to fill the gaps left by the forwards as a conventional commodity sold on established stock exchanges. Therefore, the stock exchanges not only serve as the agreement's guarantor but also request that the parties maintain the margin money in order to reduce the risk of future party default. They are similar to futures in that for long positions, there is an obligation to buy the underlying asset in the agreed-upon amount and grade at the agreed-upon future price under the terms of the contract. While the obligation to deliver the underlying asset to the buyer at a specified quantity and grade agreed upon on Day 0 at a futures price is similar to the forward position for the short position.

Swaps: Swaps are a different kind of derivative instrument that may be used for risk hedging. Future cash flows are exchanged between the two counter parties in these types of contracts. To manage risk and meet their business requirements, these parties may engage into such contracts for the equities, commodity, debt, currency, and credit markets. The responsibility of a swap contract is to exchange the cash flows for a certain period of time at predetermined and agreed-upon rates. Therefore, depending on the terms of the contract, the swap may involve a single

exchange of cash flow or multiple ones in the future. So a swap could consist of a number of forward instruments with varying maturity dates [8].

Joint Ventures: companies choose joint ventures as a risk-sharing mechanism; in this case, a distinct entity is created that is distinct from the parent companies. In this approach, the development of a particular new entity, which exists for a specified purpose and sometimes has a predetermined existence span, does not negatively impact the parent companies. Sometimes companies do this by issuing shares in the market to raise money for themselves.

Purchase of Credit Guarantees: Project financing often consists of a number of components, such as loan payments and repayment, exchange rates and interest rate clauses, concerns over the protection of lenders, representations and warranties, and other ad hoc clauses like jurisdiction, etc. A risk-sharing alternative between the parties is the acquisition of credit guarantees.

Credit derivatives are bilateral financial contracts that precisely separate the underlying instrument's credit risk from other risks and transfer that risk between counterparties in the derivative market. Simply put, it functions as insurance that must be paid for on a regular basis to guard against certain risks that arise in the event of specific, uncommon situations. The protection seller and buyer are the two persons participating in this transaction. In place of the loss protection in the event that the pre-agreed credit risk event occurs, the customer pays a premium that includes a charge to the protection seller.

7. Derivatives of currencies: Spot and derivatives markets for currencies are both available in the Indian forex market. The spot market allows currency trading at market rates, with settlement taking place two working days in advance. The most promising instruments utilized in the currency derivatives market are the futures and the foreign exchange swap, such INR-USD. In the derivatives market, the currency is exchanged using currency forwards, swaps, and options. These tools aid in risk reduction against market-based currency risk. Use the following alternatives for risk transfer when parties are located outside of national borders:

In the risk sharing section above, we had discussed the various derivatives, including forwards and futures. Options are contracts as well, however they vary greatly from forwards and futures contracts in that they restrict investors' losses, which aids in risk hedging by transferring risk. These derivative instruments allow for the transfer of risk and provide the contract holder the right, but not the responsibility, to execute the contract in the event of unfavorable market circumstances. Index options, equity options, currency options, interest rate options, future options, and swaptions are some of the options that are offered depending on the needs of the holders, and they are all exchanged in the organized market, or stock exchange.

If a corporation can profit from risk pooling on its own, it will switch to self-insurance; if not, the risk is transferred via the use of a third-party insurance product from the insurance company. For the project risks, insurance serves as a tool for risk transfer. Because it benefits both parties, it creates a win-win situation for all parties. The insurance provider builds a portfolio of risks for the product, giving the parties risk diversification. Their proficiency in the transfer of risks to the parties, such as inspection and safety services, through proper risk evaluation is helpful. To spread

the risk into smaller shares for the parties concerned, the insurance provider receives the premium in exchange for this.

Asset securitization is the process of producing securities of such kind that are backed by assets when the securities are collateralized by the pool of assets. As a result, the risk is transferred from one entity to the other. The second kind of this bundling is streaming receivables, such as mortgage payments, to be offered as an investment option on the capital markets in exchange for future payments that include ROI [9].

Due to the uniqueness of each project's nature, products, region of operation, environmental circumstances, and other factors, each project finance must be handled differently in terms of risk reduction. The constantly changing nature of the business environment necessitates a fresh approach to risk management and mitigation for each financing. The project funding was placed in a difficult position since the competent institutions were unable to manage complicated issues. The complexity of the transactions, the number of parties involved, stakeholder interest, the kind and timing of construction, new technology, market circumstances, and infrastructure assistance at the government level all contribute to complicated situations.

CONCLUSION

Governments and international organizations also play a role in managing socio-political risk by providing support to businesses and investors operating in high-risk areas, such as political risk insurance, investment guarantees, and other forms of support. In conclusion, socio-political risk is an important factor in finance that can have a significant impact on the financial performance and stability of businesses and investors. By employing various strategies such as diversification, insurance, and hedging, and by receiving support from governments and international organizations, businesses and investors can effectively manage socio-political risk and protect against potential losses due to social and political events.

REFERENCES:

- [1] M. Alamgir *et al.*, 'Economic, Socio-Political and Environmental Risks of Road Development in the Tropics', *Current Biology*. 2017. doi: 10.1016/j.cub.2017.08.067.
- [2] B. Yet, C. Lamanna, K. D. Shepherd, and T. S. Rosenstock, 'Evidence-based investment selection: Prioritizing agricultural development investments under climatic and sociopolitical risk using Bayesian networks', *PLoS One*, 2020, doi: 10.1371/journal.pone.0234213.
- [3] M. Beck, 'The risk implications of globalisation: An exploratory analysis of 105 major industrial incidents (1971–2010)', *Int. J. Environ. Res. Public Health*, 2016, doi: 10.3390/ijerph13030309.
- [4] Satgas COVID-19, 'Analisis Data Covid-19 Indonesia', Anal. Data COVID-19 Indones., 2021.
- [5] S. Hussain and S. M. A. Shah, 'Corporate Governance and Downside Systematic Risk with a Moderating Role of Socio-Political in Pakistan', *Bus. Econ. Rev.*, 2017, doi: 10.22547/ber/9.4.11.

- [6] M. J. Fell, S. Pye, and I. Hamilton, 'Capturing the distributional impacts of long-term low-carbon transitions', *Environ. Innov. Soc. Transitions*, 2020, doi: 10.1016/j.eist.2019.01.007.
- [7] G. Sorci, B. Faivre, and S. Morand, 'Explaining among-country variation in COVID-19 case fatality rate', *Sci. Rep.*, 2020, doi: 10.1038/s41598-020-75848-2.
- [8] P. A. Trotter, R. Maconachie, and M. C. McManus, 'Solar energy's potential to mitigate political risks: The case of an optimised Africa-wide network', *Energy Policy*, 2018, doi: 10.1016/j.enpol.2018.02.013.
- [9] N. G. Rogozhina, 'COVID-19 in Indonesia', *South East Asia Actual Probl. Dev.*, 2020, doi: 10.31696/2072-8271-2020-2-2-47-065-074.

CHAPTER 13

A STUDY ON COST OF FUNDS

Manoj Agarwal, Associate Professor Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email <u>id-agarwalmanoj21@gmail.com</u>

ABSTRACT:

Cost of funds refers to the cost incurred by a financial institution, such as a bank or a company, to borrow funds from various sources, including deposits, debt, and equity. The cost of funds is a critical factor in determining the profitability of the financial institution and can have a significant impact on its ability to compete in the market. The cost of funds is influenced by various factors such as market interest rates, creditworthiness of the financial institution, inflation, and economic conditions. Financial institutions typically use various methods to calculate their cost of funds, such as weighted average cost of capital (WACC) or marginal cost of funds. Managing the cost of funds is crucial for financial institutions as it directly impacts their profitability and ability to offer competitive rates to customers. Financial institutions can manage their cost of funds by adjusting their lending rates, managing their balance sheet, diversifying their funding sources, and maintaining a good credit rating.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Our comprehension of the risk management process makes it evident that there are three key actions that must be taken in order to appropriately reduce risk. They are risk identification, risk reduction, and loss control and mitigation. The risk analysis is crucial for the project's commercialization and it begins with the project's future performance and planning, procurement, construction, and commissioning. Cost overruns, which may be caused by macroeconomic variables like inflation, currency exchange rates, etc., are a financial risk that increases throughout the project's planning and execution. We need to be aware of the distinctions between project finance and corporate finance. Technically, both are distinct. In corporate finance, the firm raises money based on the strength of the balance sheet and the promoter's creditworthiness. In order to enhance shareholder value and get capital for the firm at the lowest possible cost, several financing options are considered [1].

On the other hand, project financing is helpful when money is required for large projects like the construction of infrastructure like motorways, tunnels, metro systems, mines, oil pipeline expansion, or airports. A significant sum of money is needed. A crucial strategy for using private resources to establish private control of public services is project financing [2], [3]. A corporation develops a Special Purpose Vehicle when it starts a project. The project's implementation is handled by SPV. The financial institutions who provide money for these projects place a high

priority on the projects' anticipated cash flow. If the cash flow that the company forecasts throughout the project's duration seems to be sufficient and advantageous to the lending institutions, they invest in the project. The total sum needed for the project is not donated all at once. Over the course of the project, the money is released in installments.

The sources of funding may be categorized in a variety of ways. The origin of the markets, the kind of instruments, and whether the money is generated directly from the market or via an intermediary may all be used to categorize them. Shareholder money and loan funds are the two main capital sources or capital types accessible for projects. Equity and preference funds are owned by shareholders. Working capital advances, term loans accepted for a certain length of time, and debenture capital are some of the several ways that loan funds are obtained. Below is a diagram of a power project finance structure: The following elements determine whether debt or equity is used as a primary source of funding for projects:

- 1) **Cost of capital:** Compared to equity owners, lenders anticipate a lower rate of return. Therefore, the project will work on its cash flows while taking the cost of borrowing into account.
- 2) **Project Nature:** Lenders are more inclined to provide loans against projects with more movable property.
- 3) Since project funding is often long-term and hazardous, lenders typically impose terms and conditions to guarantee the projects' success since this would lower their financial risk.
- 4) If the project sponsor needs control, a significant portion of the necessary funds will be obtained via stock rather than loan.
- 5) The choice of raising project financing via debt or equity is also influenced by market circumstances. The project sponsor will choose more equity if the stock market is strong rather than debt otherwise. Finance may come from local financial markets or from international financial markets. The categorisation of global financial markets from the viewpoint of a particular nation is as follows;

The national market is divided into two categories: the home market and the overseas market. Securities of domestically based enterprises are traded, dealt with, and issued on the local market of the nation. Securities of companies that are foreign to the country are traded, dealt with, and issued on the foreign market of that nation. In the domestic markets of other nations, the corporations directly issue securities. The rules and regulations for issuing foreign securities are set by the regulatory body of the nation in which they are traded. For instance, SEBI laws must be followed when non-Indian corporations issue securities in India. Foreign domestic marketplaces are referred to by a variety of names, such as "Samurai Market" in Japan, "Yankee Market" in the United States, and "Bulldog Market" in the United Kingdom.

Capital from an External or International Market: These markets are referred to as Euromarkets or Offshore Markets. National organizations do not control the securities offered on foreign markets. An instrument known as a debt instrument may be issued by the project firm for a need of a predetermined amount in a specified currency. The project sponsor may issue a residual amount instrument, often known as an equity claim. Because the amount distributed to

shareholders is based on profits left over after the company has settled other obligations, this is also known as an equity claim or residual claim. International markets are also open to Indian businesses. They are able to raise money in the following ways:

Eurocurrency Loans: External Commercial Borrowings are the most often utilized form of project finance. Eurocurrency Loan is the borrowing instrument. A syndicated loan is one in which a number of lenders concur to provide credit to a borrower in accordance with a single loan arrangement. The term "eurocurrency" refers to money kept in a bank outside of the nation where it was issued. An Indian company, for instance, buys technology from the United States. The Indian Company pays the American Company in US dollars. This sum is deposited by the US company in a German bank. This deposit in the German Bank is in euros. This dollar will be used by the German bank to make loans in euros. The interest rates on the loans are variable. The rate is correlated with global loan rates such as LIBOR and SIBOR.

Eurocurrency Bonds: When projects need large loans and wish to look into more affordable markets, they turn to borrow from the global debt market or the Eurobond markets. Eurocurrency Bonds are the name for these obligations. The definition of Eurobonds is the same as that of Euroloans. Bonds denominated in euros are marketed outside of the US. Bonds in euro are marketed outside of Japan. A bearer bond is this. The holder of the instrument will get payment. Compared to the domestic market, the lending rates in the euro debt market are lower [1].

Global Depository Receipts are issued by the project sponsor if the project calls for indirect equity investments in euro markets. A corporation that wishes to raise money via GDR engages into a holding agreement with a foreign bank. The bank holds deposits for customers. The public receives claims from the bank against these shares. Depository receipts are the name for these claims. Each receipt entitles the bearer to a certain number of shares. Typically, the issue currency is US dollars. On stock exchanges, GDRs can be traded. Since GDRs are regarded as a type of foreign direct investment, clearances from the Indian Ministry of Finance and the Foreign Investments Promotion Board are required before they can be issued.

Multilateral development agencies are organizations established by a collection of nations that provide financial support and expert advice for the advancement of development. Both developed nations with extra money and developing nations in need of money are members of these organisations. Long-term loans are financed by grants, extremely long-term loans at rates below market, and long-term loans at market rates. International financing organizations support initiatives that are important for a nation's economic growth, advance human welfare, and foster international commerce. For instance, the European Bank's Reconstruction and Development plan encourages green development and urban renewal. As a result, they will assess and fund initiatives that support their plan. World Bank, European Investment Bank, Asian Development Bank, and African Development Bank are a few instances.

The area in which IFC provides finance for initiatives that develop new building designs with a goal of being green is shown by one of the examples mentioned above. IFC offers three different loan types: A, B, and C. Loan A is a personal loan that it uses to fund project costs and project growth costs. The interest rate is either fixed or variable. Other private lenders taking part in the

scheme are allocated Loan B. This is provided to the private lenders since certain projects have higher project risks than typical projects. Loan B encourages private lenders to provide loans to the project. IFC also offers loans in the C category. This kind of loan is a subordinated loan or quasi-equity loan.

National interest lenders and Government Export Financing Organizations:

Buyer's credit: A bank extends credit to an importer. Large export orders qualify for buyer credit since there are several contracting parties and multiple countries' legal requirements to be met. To reduce the risk of foreign exchange, the importer might seek finance in a major currency. The amount borrowed is repaid throughout the time frame outlined in the contract's conditions. This agreement safeguards the lending financial institution and shields the bank from commercial, political, and economic risk.

b) Suppliers credit: This credit is given to international exporters to help them meet their obligations to importers. The importer might pay a part of the price and promises to pay the whole amount after the products are received and accepted. The presenting bank is the bank of the importer, while the remitting bank is the bank of the exporter. For capital goods, the maximum credit period from the supplier is three years; for revenue items, it is one year.

Additionally, they offer tied and untied financing. A financing arrangement from an ECA is referred to as "tied financing" if it is reliant on exports from the home nation. Depending on the commercial and/or political risks involved with the loan, ECAs assess a premium. Country risk is another important component that is taken into account when determining the premium rate to be paid on the project financing. Untied financing does not mandate buying products or services from the host nation. This kind of funding is often associated with equity investments made by businesses from the ECA's country of origin or funding to enhance domestic exports in the future [4], [5].

Host Nations:

The host governments provide both direct and indirect financial support, particularly to initiatives that are deemed crucial and important for the country's economic growth. They provide funding for projects in a variety of ways, including equity investments by government investment firms, investment grants, subsidized loans to support start-up businesses in economically struggling areas, income tax breaks, tax holidays, and real estate tax breaks, as well as subsidies for communications, energy costs, and employee support services like schools. This will either directly or indirectly lessen the strain on the project's operating cashflows.

Commercial banks are still a significant source of financing for projects. Commercial banks provide long-term project financing. The kind of loan, the amount, and market circumstances all affect the interest rate. It is favorable for projects to get financing from commercial banks in the host nation since the money will be in local currency. Because the capital bases of commercial banks in developing nations are weak, it is difficult for them to fund projects. National regulators will be able to establish the Liquidity Cover Ratio requirements they will place on letters of credit thanks to Basel III regulations. This may alter how projects are granted short-term financing in the

future. More assets will be needed to meet the capital adequacy standards set out by BASEL III, as well as suitable risk weights. The Net Stable Funding Ratio must be maintained by banks. This will affect how much money a project has available over the long run.

Islamic Finance: This is a recent method of funding projects. Now, Shariah-compliant projects are attracting investors' attention. The worldwide economic recession followed the financial crisis, and project sponsors began seeking for new sources of finance. Middle Eastern nations began concentrating on Islamic financing for their initiatives.

DISCUSSION

There are public and private options available for raising equity and debt. Capital obtained through requesting licenses and other essential clearances from SEBI falls under the category of public sources. Bank and other financial institution loans are examples of private capital, as are the issuance of stock, preference, and debentures to private sources. Private equity funds, venture capital businesses, financial institutions, mutual funds, insurance companies, and affluent people are examples of private sources. Negotiations between principal lenders and project sponsors determine the project's debt to equity ratio. An industry benchmark is used as a starting point for determining the debt equity ratio. Shareholders jointly own the firm, split the earnings, and take on the associated risks. In the event of a liquidation, the shareholders would have the right to income, control over the company, and a division of the assets once all creditors had been satisfied [6].

a. Equity capital's benefits include:

- i. It is an ongoing source of funding. Dividend distribution is not required. The business will only make payments when there are surplus earnings.
- ii. Since there is no equity capital maturity date, there is no obligation to repay.
- iii. When considering a project financing proposal, lenders consider a company's equity capital to be a promise made by its shareholders. As a result, the stakeholder will be accountable for and driven to finish the project. Businesses that have equity capital will be more creditworthy and able to borrow more money.

b. Negative aspects of equity capital

- i. Typically, stockholders anticipate the greatest rate of return. Therefore, the cost of the company raising equity is high.
- ii. Underwriting commissions, trading fees, and other expenses are part of the price of issuing equity capital. Due to this, issuing costs for equity capital are high.

Preference Capital: Obtaining this capital is a way to raise money. It combines aspects of equity and debt. It possesses equity-like characteristics, such as the ability to pay dividends from earnings; however, dividend payments are optional and will only be made when there are surplus profits. It has several characteristics with debt, such as the set dividend rate similar to the interest rate, the payment of preference dividends prior to equity dividends, and the lack of voting rights comparable to those of lenders in corporate issues.

Preference Capital Benefits

- i. Dividend distribution is not required. The business will only make payments when there are surplus earnings.
- ii. As there is no maturity date for the preference capital, there is no obligation to repay.
- iii. The holder of a preference share is not required to provide security in the form of assets.

Advantage Capital's drawbacks:

- i. Capital is more expensive than loans.
- ii. Preference shareholders will have first claim to the assets in a liquidation, followed by equity owners.

Subordinated loans, sometimes referred to as quasi equity or mezzanine finance. This is an unsecured loan. In terms of repayment, this loan has priority over equity capital. However, in the event of a company's liquidation, it comes in fourth place, behind the liquidator, the government tax authorities, and other senior debt. Sources of subordinated debt include financial institutions, risk management firms, and insurance companies. These loans are particularly dangerous for the lender.

Subordinated loan benefits:

- i. Long-term, unsecured subordinated debt is often provided at a set rate.
- ii. Senior lenders calculate the debt equity ratio using this debt as equity.

Benefits of a Subordinated Loan:

- i. The lender of a subordinated loan considers a project's financial flows. The project operations are under strain since the cash flows need to cover the principle and interest payments on both senior and subordinated debt.
- ii. Since they lend without any asset backup, subordinated loan lenders carefully examine the management team's capabilities. If they are financing to a project with a poor credit rating, they also consider equity kickers.

Senior Debt: Debt financing accounts for the majority of project funding. Senior debt comes from commercial banks. In the event that the project runs into financial difficulties, these loans are paid back first. Both secured and unsecured senior debt are possible. There are several ways to provide security for senior debt. The primary source of both secured and unsecured loans is banks and other financial organizations. Sponsors often provide unsecured loans. A secured loan is one where the value of the item used as security outweighs the loan amount. The project's cash flow is the lenders' main concern, and they only turn to collateral if there are any financial issues with the project. Senior loan holders that have security interests in the project are the lenders.

Working Capital Advances: A primary source of cash for urgent needs is commercial banks. To finance their current assets, projects need money, which banks provide in the form of working capital advances. Working capital advances come in the forms of cash credits, overdrafts, loans, bill discounting, and letters of credit. The bank lays forth the terms and conditions of this kind of credit.

Other Sources: A project may directly or indirectly fund its needs. There are other methods for a project to get funding that were not included above, including deferred credit, lease and hire buy financing, special financial institution programs, commercial paper, factoring, and securitization are some examples. The senior lenders to a project will exercise caution on the following issues, regardless of the form of capital or debt utilized in the project:

- a. They'll make sure the project is a success and generates the necessary cashflows to prevent the addition of additional lenders. Thus, their security interest will be protected. If not, they must combine the security interest with those of other lenders.
- b. The lenders will make sure that, in the event of a difficulty, they will distribute the funds in accordance with the amount they provided.
- c. Senior lenders will wish to prevent the cash flows from being misappropriated without paying back the agreed-upon amount.

A single borrower receives funding from a large number of lenders for a project. Any difficulty will result in issues and disagreements between lenders. They sign into an inter-creditor arrangement in order to prevent these problems. These agreements provide clarity on protocols, understandings, and agreements on loan repayment priority, loan maturation acceleration, decision-making for loss sharing in the event of a necessity, and coordination of foreclosure of any collateral security for the advantage of all lenders [7].

Important Things to Consider When Formulating an Estimation of Project Financing Requirement

- 1. Consider the prior promises made by the project sponsor to equity or debt holders when estimating the amount of external finance needed for the project. The total cash cost for project completion plus interest on project loans that must be paid during the project's execution stage plus any other fees incurred in arranging project finance plus initial working capital requirement plus cash for salaries and other operating costs that are required in the stages prior to project completion make up the total amount needed.
- 2. The ideal debt to equity ratio must be considered by the project sponsors. The predicted profitability of the project, the operational risk, the finance security arrangements, and the creditworthiness of the parties involved all play a role in optimization. The project's output purchaser's long-term purchase agreements will also assist it in financing money more cheaply.
- 3. Understanding the separation concept is necessary to make cash-flow projections. In other words, we must realize that the project has two sides: the investment side and the funding side. Estimates of cash flows for investments and finance should be created separately.
- 4. We should be aware that in the current climate of global commerce, projects need the payment of expenditures and the receipt of profits in many foreign currencies.
- 5. For the project to handle currency risk, project funding estimates must be made taking into account currency exchange rates.
- 6. The project's anticipated lifespan should coincide with the chosen funding period.

- 7. Establish the long- and short-term financial needs, as well as the funding sources that would meet them.
- 8. The project finance estimates should also be aware of the host nation's tax, regulatory, and legal requirements for project funding. For instance, taxes withheld from dividends, management fees, and other payments to overseas corporations would have an impact [8].

You gained an understanding of the distinction between corporate finance and project finance in this course. The class also walks you through the requirement for project financing as well as the benefits and drawbacks of doing so. We must identify the accessible sources, which are discussed in this section under the heading sources of funding, in order to raise the necessary funds. Projects will be financed by various sources, but we need to know what tools or funds the sources will provide for the projects. The forms of capital accessible for projects are outlined in this section. Once we are aware of these, we must create an estimation for project financing that takes into account not only sources and capital but also the other factors that are listed in the last section as being crucial to consider when creating an estimation of the project financing requirement.

CONCLUSION

In conclusion, the cost of funds is an essential factor in finance that impacts the profitability and competitiveness of financial institutions. By managing their cost of funds effectively, financial institutions can maintain their profitability and offer competitive rates to customers. Understanding and managing the cost of funds is crucial for any financial institution to succeed in the market. the cost of funds is a critical factor in finance that refers to the cost incurred by financial institutions to borrow funds from various sources. The cost of funds impacts the profitability and competitiveness of financial institutions and is influenced by various factors such as market interest rates, creditworthiness, inflation, and economic conditions. Financial institutions can manage their cost of funds by adjusting their lending rates, managing their balance sheet, diversifying their funding sources, and maintaining a good credit rating. Managing the cost of funds effectively is crucial for financial institutions to maintain their profitability and offer competitive rates to customers. Thus, the cost of funds is a crucial concept that financial institutions must understand and manage effectively to succeed in the market.

REFERENCES:

- M. F. Sofi and M. H. Yahya, 'Shariah monitoring, agency cost and fund performance in Malaysian mutual funds', J. Islam. Account. Bus. Res., 2020, doi: 10.1108/JIABR-04-2018-0051.
- [2] Y. Sun, Q. Guo, P. Schonfeld, and Z. Li, 'Implications of the cost of public funds in public transit subsidization and regulation', *Transp. Res. Part A Policy Pract.*, 2016, doi: 10.1016/j.tra.2016.06.029.
- [3] E. Pérard, 'Water supply: Public or private?. An approach based on cost of funds, transaction costs, efficiency and political costs', *Policy Soc.*, 2009, doi: 10.1016/j.polsoc.2008.10.004.

- [4] I. W. Sunia, N. P. L. Kusumawati, and M. Suidarma, 'Analisis Cost Of Fund Untuk Menentukan Base Lending Rate Selama Covid-19 Di Pt. Bpr Tridarma Putri KlungkunG', *J. Ilm. Akunt. dan Bisnis*, 2021, doi: 10.38043/jiab.v6i1.3054.
- [5] J. A. Busse, T. Chordia, L. Jiang, and Y. Tang, 'Transaction costs, portfolio characteristics, and mutual fund performance', *Manage. Sci.*, 2021, doi: 10.1287/mnsc.2019.3524.
- [6] J. Nickelsburg and W. Yu, 'On the Consequences of the Discontinuation of the Eleventh District Cost of Funds Index', *J. Real Estate Financ. Econ.*, 2021, doi: 10.1007/s11146-020-09744-x.
- [7] S. Sato and T. Matsumura, 'Shadow cost of public funds and privatization policies', *North Am. J. Econ. Financ.*, 2019, doi: 10.1016/j.najef.2019.101026.
- [8] B. Dahlby and E. Ferede, 'The stimulative effects of intergovernmental grants and the marginal cost of public funds', *Int. Tax Public Financ.*, 2016, doi: 10.1007/s10797-015-9352-5.

CHAPTER 14

IMPORTANCE OF VARIOUS STAGES OF PROJECT FINANCING

Chanchal Chawla, Professor

Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-chanchalchawla0@gmail.com

ABSTRACT:

Each new project is funded separately from the assets of the previous developers and is reliant on non-recourse financing. Numerous organizations are set up to split the cost of the project during the construction and operation phases without having to deal with the parent company's balance sheet, which is the primary project supporter. The borrower is a "Special Purpose Vehicle," and the asset is on its balance. Receiving funding for commercial, long-term infrastructure and public works initiatives is possible via project financing. In other words, project finance is a way to provide money to big, capital-intensive projects with a lengthy gestation period where the borrowers rely on the project assets for security and the cash flow the project generates for a source of money to service their debts. Based on these project financing aspects, the lenders often approve the funding requested by the borrower after evaluating the cost and viability of the projects as well as the trustworthiness of the project promoters.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Expanding production efficiency, reserving a workstation, upgrading technology, handling unforeseen costs, experimenting with a new service or item, creating a cash flow, etc. are all made possible by project finance. A project's finance is made up of money that is primarily focused on the project's cash flow. Creative financing techniques will aid in financing the possibility of prospective project revenues to fund the projects after evaluating the project's income source. To fill the gap between lenders and borrowers, a special purpose entity is developed as an intermediary. The main responsibility of the SPV is to keep an eye on the project's finance and administration, as well as to make sure that its assets are not negatively impacted by a project failure.

A Range of Project Financing Stages

The Pre-Funding Phase

Project plan discovery: This entails figuring out how the project will be developed and establishing if it is possible. A pre-emptive analysis should be conducted by the investor to ensure that the business idea is consistent with the objectives of the financial services organization.

Risk identification and elimination: One of the key actions to be conducted prior to the project finance company getting started is risk reduction. Before making an investment, the investor has the right to confirm that there is sufficient funding available for the proposal to prevent additional risks. A project's viability must be determined before an investor agrees to fund it, even if all other factors are economically and technologically possible.

Funding Process: This phase, which is also the most crucial in project finance, is further divided into:

- (a) **Funds acquisition:** In order to finance the project, the sponsor must get public financing or a bank loan from a financial services provider whose interests align with those of the project.
- (b) **Negotiating funding:** The borrower and the lender talk about the loan amount and come to an agreement on it.
- (c) **Documentation:** In accordance with the project's policy, all parties to the loan have consented to and reported on its terms.
- (d) **Transfer of monies:** The borrower receives the monies as previously agreed to carry out the project operations when the collateral documentation has been completed.

Following Funding:

As soon as the project gets started, the project manager is in charge of continuing to supervise it.

Closing Phase: The project or task is finished at this point.

Payment: After the project is over, the cash flow from activities has to be monitored since this money is used to pay back the loan that was used to finance the project.

Vehicle with a Specific Use

In order to limit the incapacity to execute the assets in the event of project failure, a Special Purpose Vehicle is designated to maintain strict management of the project finances. The sole asset is the project itself since this entity was created exclusively for the project. By preserving the project's financial stability, the creation of an SPV guarantees the participation of the borrowers.

Sponsors

Sponsors are often shareholders of the parent firm who are eager to seek project finance. It takes place when two entities create synergies or stand to gain from the underlying SPV. They provide equity to SPVs. The owners of the parent firm must get authorization via a shareholder agreement before launching an SPV.

Banks/NBFCs

They take precedence over the sponsors' extended debt since they are the providers of the earlier loan. The SPV's assets and cash flows are the sole legally enforceable security for the loan. As a result, due diligence is done before any credit is granted.

Government

It alludes to the administration of the SPV's nation of origin. It often acts as the custodian when providing certain tax advantages and incentives.

Takers of Off

In a collection of hundreds of funding documents for major projects, off take agreements are one such crucial document. Off take agreements are essential for gaining project approval. The off-take agreements are given another degree of supervision. Lenders rely on off take agreements to provide the financial assurances necessary to validate the cash flow estimates that serve as the foundation for loan repayment [1], [2].

Suppliers

Suppliers and contractors are required to sign a contract, just as with any building project. They are the biggest providers of raw materials. They take on significant responsibilities in design, development, operations, and maintenance. There are many different types of funding options available for companies to use to fund their projects. In certain circumstances, long-term finance is needed for a project that is more concerned with its cash flow than with the sponsor's balance sheet. The most suitable financing option for the project schedule must be determined in collaboration with other stakeholders. The various funding options may be divided into two main categories, namely financial equity and debt. Depending on the project's complexity, a careful balance of equity and debt should be chosen. One or more of these options for project finance may be chosen by the project manager.

Equity

There are two different forms of capital: preference share capital and equity capital. Equity capital is the investment made by investors who also get the rewards of ownership. They get a percentage of the dividend income in return for their investment. Even a financial gain from the sale of their shares will be paid to them. Due to the fact that preference securities are not corporate shareholders, preference options are less risky. Retained earnings: The business keeps a part of its net earnings as a reserve. Generally speaking, it is the best option for equity financing. Convertible debt: Convertible loans may be converted into stock under certain conditions, usually at the issuer's discretion. High-ranking debtors really consider this obligation to be secondary and illiquid. Unsecured obligations: When making dividend payments or seeking repayment, these obligations take precedence over equity and convertible debts. As is clear from the phrase, unsecured debt may be both short-term and long-term and is not guaranteed by any specific asset. Secured debt is short- or long-term debt that is backed by certain assets or sources of income.

Lease Finance

Over the long run, leasing financing may be a wise financial decision. The asset's owner grants another party the ability to make recurring payments on the asset. Private equity provided to small and medium-sized firms by qualified entrepreneurs who demonstrate a long-term potential for development is known as venture capital. This investment is hazardous since it is illiquid but has the potential to provide extraordinary profits if used correctly. Rich investors are interested in investing in these businesses because they see long-term development potential. Grants and Subsidies: Project support subsidies are given to help fund a set time frame, set budget, and set goal for a pre-defined and connected group of activities. Subsidies are rewards offered in the form of money or tax breaks [3].

The Private Finance Initiative (PFI) is a method for the private sector to support public sector activities. PFIs allow governments and taxpayers to capitalize on these initiatives at a lower initial cost. Under a corporate finance plan, the private sector rather than the government is in charge of the operating costs. When companies withdraw funds from their current business accounts in excess of the available cash balance, overdraft funding is provided. Access to short-term funding is made possible for firms via overdraft facilities. Unsecured loans, public deposits, leasing, and hire-purchase financing are some other sources of funding for a project. Another kind of funding provided by the government and its agencies is via incentive sources. Both tax breaks and support with startup cash are examples of them. The overall project capital is only partially funded by all of these sources.

DISCUSSION

The restrictions on getting working capital advances from commercial banks should be understood by the project manager. Regarding the total amount of bank financing that is permitted, he or she should adhere to the lending standards established by the Tondon Committee. Additionally, he or she should be aware of how much margin capital a company can offer for each current asset. The Tondon group first suggested a strategy for figuring out the most money a project might get to cover its working capital needs. The technique requires that long-term financing sources fund at least % of current assets. This strategy was subsequently abandoned on April to provide borrowers more latitude in determining their need for working capital. Banks were given instructions to develop their own procedures for determining the amount of working capital needed for projects [4].

The amount of margin needed depends on the kind of current asset. Here are the ranges for various types of current assets where margin requirements fall. The margin amount, however, cannot be determined using a conventional formula. When performing a financial analysis of a project, the project manager takes into account risk, cost of capital, various appraisal criteria, and the time value of money. In this unit, we'll talk about the idea of the time value of money. In later courses, it will be covered how project managers assess a project's financial feasibility using a variety of appraisal tools, risk analysis, and cost of capital ideas.

Financial Cost

Only once the required funding has been secured from several sources can a project be started. Additionally, choosing the appropriate source is crucial because every financial source comes at a price. The cost of capital is the minimum rate of return the firm must earn on its investments in order to satisfy the various categories of investors who have made investments in the form of shares, debentures, term loans, etc. The project manager must evaluate these costs in order to help decide which source to use. The weighted arithmetic average of the post-tax costs of the many sources of funding a company uses is its cost of capital.

When calculating a firm's cost of capital, two key assumptions are made:

- a. The risk that defines the new project under consideration is similar to the risk that defines the firm's current investment.
- b. The company will stick to its current funding practices. That is, the corporation will continue to follow the present debt-to-equity ratio without any departure or adjustment.

Cost of Different Financing Tools

Capital costs

A company raises money from many sources and invests it via productive channels. This suggests, among other things, that in order to raise the firm's worth, the cost of capital or the cost of financing must be lower than the rate of return on investment. The minimal rate of return anticipated by its investors is known as the cost of capital. The cost of capital serves as a threshold rate, a hurdle rate, or the minimal rate of return that is acceptable for an investment. It is the weighted average cost of all available financing options employed by a company. A company may employ debt, preferred capital, retained profits, and equity shares as sources of funding. The minimal rate of return that investors must get to keep the market value of their shares where it is is known as the cost of capital. If a company cannot even reach the cutoff rate, the market value of its shares would decrease. Therefore, a company must generate a rate of return greater than its cost of capital in order to fulfill the goal of wealth maximization [5].

Relevance of Capital Cost

The following considerations help explain the importance of cost of capital:

- 1. In order to assess financial performance
- 2. As a requirement for acceptability in capital budgeting
- 3. As a factor in choosing a capital structure that determines the capital mix.
- 4. as a foundation for making other financial choices.
 - 1. The actual profitability of the project is compared to the predicted total cost of capital and the actual cost of capital of funds generated to finance the project as a foundation for assessing financial performance. Performance may be deemed acceptable if the project's real profitability exceeds both its expected and actual cost of capital.
 - 2. The cost of capital may be taken into account when making capital budgeting choices as an acceptance criteria. The project may be approved or rejected in accordance with the NPV technique of capital budgeting depending on whether the present value of projected returns from investment is more than or equal to the cost of investment. By discounting the anticipated cost inflows at an external rate, the present value of projected returns is computed.

- 3. As a deciding factor in capital structure decisions, financing a firm's assets is a key issue for any organization. As a general rule, financing a firm's assets should have a suitable balance of debt and equity capital. The management must bear in mind the goals of increasing the firm's value and lowering the cost of capital while building an ideal capital structure. Planning the capital structure of any company requires careful consideration of the cost of capital from different sources.
- 4. The cost of borrowing is also used to determine the rights issue and working capital, as a foundation for making other financial choices.

Cost Classification

The company is responsible for a number of charges, either directly or indirectly. Fig. Provides a list of cost group classifications. Specific cost vs composite cost: Specific cost is the price associated with a single source of capital, while composite cost is the total price associated with many sources of capital. The weighted average cost of capital is known as composite cost. If a company uses only one type of capital, specific cost is used. The composite cost should be taken into account when making decisions if the business is utilizing more than one source of capital [6].

Costs that are explicitly stated: Explicit costs are calculated using the internal rate of return, often known as the discount rate, which compares the present value of cash inflows and outflows. The following formula may be used to determine the explicit cost, which is also known as the opportunity cost, for any particular source of funding. The cost of all capital sources, including equity shares, preference shares, and debentures, is referred to as average cost. It represents the expenses of different sources of financing as a weighted average. The average cost expended to get the extra money needed by a corporation is known as the marginal cost. The marginal cost should be taken into account when making investment choices rather than the average cost. Future cost and historical cost: Historical costs are those associated with the past with books. Future expenses are anticipated future costs. The assessment of future expenses, however, is guided by previous costs.

Factors Impacting Financial Cost

The components in the business environment that influence a company's cost of capital to be high or low are known as cost of capital factors.

- 1. The demand for and supply of capital in the economy, as well as the degree of anticipated inflation, are all influenced by general economic circumstances. The riskless rate of return reflects this economic characteristic. This rate is an illustration of the rate of return on risk-free investments, such as short-term interest rates. Lenders will increase the needed interest rate if there is a rise in demand for credit without a corresponding rise in availability of the necessary equipment. Additionally, investors need a higher rate of return to make up for this anticipated loss if inflation is predicted to weaken the rupee's purchasing power.
- 2. **Market Situation:** In order to make an investment appealing to a buyer of a security when the risk of the investment is high, there must be a chance for higher returns. In essence, the investor wants a greater rate of return as risk rises. Risk premium refers to this rise.

Investors that want greater rates of return will also have to pay higher capital costs. An investor will need a reasonably high rate of return if the asset is not easily marketable when they wish to sell it, or even if there is constant demand but the price fluctuates greatly. The investor's necessary rate of return will be lower, and the cost of capital for the firm will also be lower, if a security is easily marketable and its price is generally steady.

- 3. Firm's Operation and Financing Decisions: Decisions taken inside the firm also have an impact on risks or return variability. The risk arising from these choices is often split into two categories: business risk and higher variability in returns to common stock holders as a consequence of employing debt and preferred shares. Business risk is the unpredictability in returns on assets. The needed rate of return for investors and the cost of capital will change in tandem with changes in business risk and financial risk.
- 4. **Amount of Financing:** For a number of reasons, the weighted cost of capital rises as the firm's financing needs grow. For instance, increased floatation costs will have an impact on the percentage cost of funds to the company when more securities are issued. Additionally, an investor's required rate of return may increase as a management asks the market for significant sums of money in comparison to the size of the company. Without proof that management has the capacity to integrate this cash into the firm, capital providers become reluctant to lend relatively big quantities. This worry is mirrored in the colloquial "too much, too soon" because as an issue's size grows, it becomes harder to promote it without lowering the security's price, which also raises the firm's cost of capital.

Financing Strategies

Financial advisors are often hired by financial sponsors to carry out their financial plans. Making a plan for project financing is very essential. Advisors use scientific methods for financing strategies, track records, and innovative problem-solving. Through the sponsors, financial advisors learn about the different financing options, analyze each source, and pinpoint the risk. Financial consultants' main goal is to reduce risk for sponsors and do their best to maximize a project's ability to employ or improve the gearing ratio. The company's cash flows are required by financial advisors in order to implement the financial plan. Every sane investor anticipates a maximum return with a minimum amount of risk. Investors select between fixed and variable rates depending on how risky they are. The cost of the lender's long-term loan would be substantial, but the short-term borrower would only pay a modest rate. Financial advisers will choose the maturity of project securities.

Boom in India's Project Financing

India was placed first on the global project financing industry in in front of Australia, Spain, and the United States. The primary area for project financing in India was the domestic economy, which expanded by \$ billion, accounting for.5% of the total demand for project investment. The global project finance market was supported in by government-linked projects like renewable energy and social infrastructure, as well as by the fact that India makes up % of the market. Last year, India overtook Australia as the biggest and busiest market. Following the failure of major banks in the West, global project financing estimates have not been as high as they had been in the previous few years due to the financial crisis. According to PFI data, the global project finance

loan rates are billion dollars in relation to a staggering 0 billion dollars in and 0 billion dollars in. Infrastructure bond project financial performance as a whole decreased to \$ billion from \$.9 billion. To put it in milestone terms, the worldwide market for project finance has shrunk by % from billion dollars in and 6 billion dollars in. SBI resolved loan transactions of \$ billion, or.2% of the total value of the Asia Pacific region. The power industry continues to lend and create a record volume, which includes large contracts like the financing for the Sasan ultra mega power project. throughout the course of commercial transactions, more than \$.3 billion, or around % of the PF market, was traded internationally throughout the year. The government's recent initiatives to expand social services have also made a substantial impact.

Issues with Project Finance

The finance for the project is intricate and made problematic by a number of factors. Spending vast sums of money on a single asset is quite difficult. In certain businesses, the project cost is quite high, making it difficult and unclear for the financier to commit a substantial number of money. The firm cannot produce a large cash flow during the processing period, which poses a significant difficulty for the financier in terms of money loan [7].

The following are a few problems:

- a. Cash flow management
- b. Ensuring enough liquidity
- c. A requirement for contingent funds
- d. Unexpected development

CONCLUSION

One particular category of institutions that takes part in international syndicated loans is an international financial institution, which has a significant impact on project financing agreements in developing nations. The majority of these businesses vary their employees' roles, responsibilities, tasks, sources of funding, and activities. In the s, grants, incentives, and insurance provided by bilateral and multilateral organizations assisted in the rapid expansion of project financing in developing countries. Even though the level of official assistance varied depending on the project sector and location, the majority of project financing agreements were then taken over by an official organization. Several bilateral and multilateral institutions have switched from funding growth governments to financing private deals in response to the growing conviction that private contracts actually drive growth.

REFERENCES:

- [1] I. Pyka and A. Nocoń, 'Responsible lending policy of green investments in the energy sector in Poland', *Energies*, 2021, doi: 10.3390/en14217298.
- [2] E. Jokar, B. Aminnejad, and A. Lork, 'Assessing and Prioritizing Risks in Public-Private Partnership (PPP) Projects Using the Integration of Fuzzy Multi-Criteria Decision-Making Methods', *Oper. Res. Perspect.*, 2021, doi: 10.1016/j.orp.2021.100190.

- [3] P. T. I. Lam and A. O. K. Law, 'Financing for renewable energy projects: A decision guide by developmental stages with case studies', *Renew. Sustain. Energy Rev.*, 2018, doi: 10.1016/j.rser.2018.03.083.
- [4] L. Trigeorgis, 'Real Options and Interactions with Financial Flexibility', *Financ. Manag.*, 1993, doi: 10.2307/3665939.
- [5] H. Jung, 'Development finance, blended finance and insurance', *Int. Trade, Polit. Dev.*, 2020, doi: 10.1108/itpd-12-2019-0011.
- [6] J. S. Lantz, J. M. Sahut, and F. Teulon, 'What is the real role of corporate venture capital?', *Int. J. Bus.*, 2011.
- [7] P. T. I. Lam and A. O. K. Law, 'Crowdfunding for renewable and sustainable energy projects: An exploratory case study approach', *Renewable and Sustainable Energy Reviews*. 2016. doi: 10.1016/j.rser.2016.01.046.

CHAPTER 15

A BRIEF DISCUSSION ON LIMITED-RECOURSE FINANCING

Vivek Anand Singh, Assistant Professor

Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-vivekanand.ima@gmail.com

ABSTRACT:

Limited-recourse financing is a form of financing where lenders have limited recourse to the assets and cash flow of the borrower in the event of a default. This type of financing is commonly used in large-scale projects such as infrastructure, real estate, and energy, where the cost and risks associated with the project are high. In limited-recourse financing, lenders typically provide funds based on the projected cash flows of the project, and the borrower's liability is limited to the assets and cash flows generated by the project. This means that lenders cannot seize the borrower's other assets in the event of default, which provides a level of protection to the borrower. Limitedrecourse financing typically involves a complex legal structure and requires a thorough analysis of the project's risks and cash flow projections. As a result, limited-recourse financing is typically more expensive than traditional financing, and borrowers may need to provide additional collateral or equity to secure the financing.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

By increasing loans during periods when cheap money is available in the banking sector, multilateral financial institutions might, in theory, offset the private capital flow pattern. The World Bank Group is the biggest international financial organization in terms of both political clout and financial resources. The IBRD, IDA, IFC, and MIGA are its four primary agencies, through which the World Bank makes many contributions and collaborates with both public and private organizations to promote development in Member countries. In addition to the World Bank, which focuses on a specific geographic area, other international multilateral financial organizations are also active internationally. Some have missions and a continental reach.

As stakeholders depict the continental nature of their operations, the geographic alignment of these banks is frequently apparent in their regulatory bodies. It was primarily designed in Europe to finance post-war rebuilding and was first known as the IBRD. However, compared to earlier times, the goal of eradicating poverty worldwide has gained more importance. The World Bank Community is made up of five interconnected institutions, all of whose members are governments of Member States with the authority to make final decisions. Every organization contributes significantly to the common goal of reducing poverty and promoting economic growth in underdeveloped nations, but IFC and MIGA are the two most important in terms of funding projects since they are largely focused on private investment.

The private sector is supported by direct finance via co-financing agreements. To make direct investments in private sector initiatives, the bank will utilize governments as middlemen. Alternately, IBRD and private banks may lend directly to the SPV after obtaining guarantees from the host nation. All nations willing to accept financial uncertainty are protected by the partial risk assurance. Except for nations with very low incomes that may be guaranteed by the guarantees offered under MIGA, World Bank loans are not available. Investors who engage in financial transactions with the host governments are provided with guarantees, SPVs, or government guarantees.

These requirements show why it is only encountered in a small number of project funding agreements. World Bank assistance is essential in big and complicated projects. In fact, such undertakings essentially cover following risk. Risks associated with currency conversion, transferability, and expropriation Law change. The market for syndicated loans for the financing of infrastructure projects has a major difficulty that is addressed by the insufficient credit protection.

A time-tested approach to high risk development funding is project finance. Massive projects are funded utilizing this long-term, limited recourse financing strategy, which may be repaid using project cash flow acquired after the project is finished. The traits and characteristics of project financing characterize the market and investment in general. Nowadays, project financing often calls for large financial investments. Infrastructure investments in developing nations need critical assessments of political risk in addition to the inclusion of risk premiums at interest margins that are often substantial. The government continually emphasizes the necessity for advanced rates of capital to support project endeavors and the expansion of infrastructure. Strong program structure and refinancing expertise is more important than ever. Every participant in the project must act strategically in order to manage the risks, respond swiftly and effectively to any difficulties that arise, and make the project financially fruitful. The increasing number of initiatives being funded globally rapidly creates a database of case studies for further research. There is a dearth of academic and popular project finance literature.

Acceleration: If a project finance loan defaults, a project loan or loan might be accelerated, which would be a solution for the project lenders. A form used to collect the data required to estimate a project activity is called an activity estimate sheet. Actual cost: The expense spent to finish the task that was actually done in the allotted time. Alternative course of action review is another name for real cost of job accomplished. a review to find alternative approaches to the project's planned strategy that may be used to address the issue or seize the opportunity.

Bond Paying Agent: A party that performs the same functions as the Agent Bank in which a project bond is issued to finance the SPV. Book runner: The project manager funded by project bond issuance. Bilateral agency: An institution established by one country to promote trade, such as an import and export agency or a credit agency. The recipient of the loan, usually the SPV project firm, is the borrower. Cogeneration is the process of producing energy and steam via the

combustion of a certain fuel. Risks connected to the loss of assets or the concession authority's failure to replace equipment. Letter verifying the organizers' agreements to fund the organization before syndicating them. Fee for commitment: Until the conclusion of the time of availability, a fee is levied annually for unutilized money that lenders have promised to lend [1].

Dividend Trap: When a project company is unwilling to pay dividends even if it has enough cash on hand due to a difference between net profit and earnings Cash Flow to shareholders. Equity injection: When economic and financial requirements are not satisfied, project sponsors must provide equity. Financial closing: The time at which all financing terms that have been negotiated between the applicant pool and the agreement bank are permanently ended. Financial package: The section of the report that discusses each enterprise's specific financial structure. The finance package illustrates how the resources are distributed in accordance with the project's economic structure and income sources.

Internal rate of return: When a project's positive cash flows are equal to its negative operational cash flows in net present value. Interest rate risk: The impact of rising interest rates on a project's cash flow. Lenders make a pledge to deliver a certain amount of debt capital.

Lenders may only participate in limited-recourse financing transactions if the SPV shareholders or third-party guarantees expose them to credit risk, and only under the predetermined terms and circumstances set down in advance. Sanctions are paid when the contractor or other project counterparties fail to uphold their contractual duties to the project firm. Liquidated damages are penalties paid to the project firm when a contractor or other counterparty fails to uphold their end of the bargain. Net present value is the total present worth of all the project's cash inflows and outflows.

Network Risk: The risk resulting from interdependence between the broken-down activities. Procurement auditing is the practice of officially examining the whole procurement process, from the contract administration stage forward. Procurement Document: This is the form used to request bids from qualified suppliers. Producer's Risk: This is the risk that the producer faces as a result of a good lot being rejected. Profitability Index: The profitability index is defined as the ratio of future cash benefits to initial outlays. Its other name is benefit-to-cost ratio. Progress reporting system: This method informs the project organization of the vendor's performance, or how well he is carrying out the terms of the contract [2].

DISCUSSION

The process of purchasing products and services from a company outside the project organization is known as project procurement management. Project Proposal: A preliminary report that transforms a concept or policy into the specifics of a proposed project, including the results, output, significant risks, expenses, stakeholders, and an estimate of the resources and time needed. Project Quality Management is a subset of project management that includes the procedures necessary to guarantee that the project will fulfill the purposes for which it was undertaken. It includes quality assurance in planning and quality control. **Quality Audit:** A quality audit is a planned, impartial review process to confirm that the project standards adhere to the required levels of quality. Quality control is the process of examining certain project outcomes to see if they adhere to the quality standard. Controls for risk response: This process involves putting a risk management strategy into action to handle the numerous risks connected to the project. Risk Response: The actions taken by the project manager to address the risks that have been identified and evaluated. Creating a project schedule involves analyzing the order of tasks, their durations, and the resources needed.

Schedule Risk: Failing to complete the work in the time frame or manner specified. Sensitivity analysis: This method is used to determine how sensitive to changes in input variables a specific financial model's outcomes are. Simple Project: A project where cash inflows come after cash outflows. In order to meet the demands of the project, solicitation is the process of requesting information in the form of bids, quotes, and proposals from qualified suppliers. Stand-alone risk: This term describes the risk a project confronts when it is taken alone. A tool that depicts the connections between the projects and the main strategic goals of the company is a strategy map [3].

For the many sorts of business operations, good working capital management is crucial since it is a crucial component of project finance. Effective working capital management entails controlling the many aspects of the company venture to get rid of cash that is related to the business cycle. Working capital, as you are aware, is the sum of money required for projects to run properly and without delay. Working capital is often used to describe the discrepancy between current assets and current liabilities. The overview of working capital management in MS 9 Financial Management is to be used by learners as a reference for additional conceptual background memory. The financing aspect of the working capital gap is explained in this article, along with the funding options available for investing in current assets. To pay for the project's working capital needs, a number of sources have emerged. A project manager should be informed of the numerous funding solutions available to satisfy short-term objectives in order to choose the best one.

Working capital management has importance and is seen as a key issue in the overall management of a project's finances. Working capital has a direct effect on a project's liquidity, and to some degree, properly managing current assets also has an impact on profitability. Therefore, effective policy development for managing cash, inventories, receivables, accruals, and payables is necessary for working capital management. Working capital management is a meticulous process that begins with an evaluation of existing requirements and working capital funding and ends with support to enhance working capital in a project [4].

Learners, managing working capital involves managing two different aspects: managing current assets, and managing current liabilities. Spontaneous financing is money that comes up organically in the course of business. These result from typical business operations and happen in the normal course of business. It is given when the raw materials, commodities, or services are acquired and payment is paid at a later period, providing a firm with a supplementary reserve of capital. These funds are not secure, though. Trade credit, credit from workers, credit from suppliers, accumulated costs, etc. are a few examples of spontaneous financing.

Trade credit is given to a business in exchange for purchases made on credit by other businesses and organizations. It is the credit that is obtained from product suppliers throughout regular company operations. In the usual course of business, a company buys raw materials and other things from the selling firm, but they don't pay for the items right away. In India, this deferred payment offers short-term funding.

Open Account Trade Credit is what is used to describe when a business accepts credit without any agreements or procedures. It is an informal agreement since the supplier provides the buyer products that are accepted by the buyer and show the buyer's commitment to pay the debt. Such an agreement is not, however, a formal or binding contract. This Unclosed Deal

Credit is mentioned in the liabilities section of the balance sheet under Sundry Creditors. Bills or notes payable are used to describe written instruments, particularly those that serve as negotiable instruments that recognise debt. It is shown under Bills Payable on the buying party's liabilities side. The invoices clearly show the seller that the buyer is prepared to make the payments at a later period by designating the specific date in the future. This source is the most trustworthy source for project working capital funding since it is simpler to access, has no direct charges, and is more dependable. However, changes in sales may show an increase or decrease in this capital source. The biggest operational current obligation, Accounts Payables or Trade Credit, accounts for around % of the current liabilities of a typical non-financial business. For commercial organizations, open account purchases are a significant source of unsecured short-term finance [5].

Credit Terms: These are the terms and circumstances that apply to credit sales of items to customers. Credit terms vary from sector to industry, but they generally include three areas:

- i) The length of the credit period, also known as the net date.
- ii) The discount offered for payments made in cash.
- iii) The timeframe within which payments must be paid.

These are marked as x/y net z, which means the buyer will receive a discount of X percent if the payment is made within Y days; otherwise, the buyer must pay all outstanding debts within Z days. In other words, 4/net means that clients will get a 3 percent reduction if they settle their credit within days; otherwise, they must make their payment in full within days. The cost of the aforementioned discount, however, shall be. It would be prudent for a corporation to pay its debts on the due dates if it is unable to take advantage of the cash discount. By doing this, you may increase cash availability without spending more money. However, it should also be kept in mind that consistent payment delays could harm the company's reputation [6].

Benefits of Using Trade Credit

The following are the main benefits of using trade credit:

- 1. Trade credit is very simple to get and does not involve lengthy paperwork and discussions.
- 2. As long as the requirements are satisfied, the mutual agreement between the buyer and seller known as trade credit is simple to maintain.

- 3. The size of the trade credit facility grows as the company's sales rise. Therefore, an increase in sales leads to an increase in subsequent purchases, creating the possibility of automatic financing.
- 4. Unlike negotiated financing, trade credit does not have constraints.
- 5. A potentially inexpensive source of working capital financing is trade credit.

Trade Credit Cost

Although trade credit's cost is logically not obvious, that does not imply that it is a cost-free source. Trade credit has an implicit cost as well and is evaluated based on three key factors:

- a) The reduction for early payment is lost.
- b) A delayed payment might harm a company's reputation, which would eventually hurt its creditworthiness and be bad for the business.
- c) If receiving and extending trade credit results in a net negative working capital condition, it could have an influence on working capital costs.
- d) The corporation may be subject to limitations for the purchase of a minimum quantity or minimum lot for a certain time period, such as monthly or quarterly, which would cause a departure from the financial year's planned amount.

Therefore, a company must consider all options before obtaining trade credit and may weigh all benefits and drawbacks before using it to finance working capital for a project.

Accrued Expenses

Accrued Expenses are the second source of unforeseen funding. The sums owing for salaries, taxes, interest, and dividends that have not yet been paid are referred to as accrued costs. These can therefore be viewed as short-term, interest-free loans made to the company by employees, taxing authorities, etc., which immediately expands the firm's operational capacity. The accruals, however, are governed by economic factors, industry standards, and governmental regulations, thus the corporation has little influence over them. The accumulated costs have no direct cost attached to them, and by delaying payment of them, the company may increase its liquidity. The accumulated costs are an interest-free source that come from postponing payments, but you should also take legal restrictions into account before depending on such money. Long-term accrual stretching may also have an impact on an enterprise's goodwill and credit rating. As a result, the incurred costs are recorded as a short-term liability. Taxes are also paid at the conclusion of the specific time period that includes the amount set aside. Benefits accumulate until the due date, but expenses of penalties and interest beyond the due date lessen the benefits. Taxes and may be prolonged until the final day or last week.

Provisions

Plans are put in place to cover upcoming bills or payments. They are the sums of money set aside to cover anticipated costs. Examples include provisions for taxes, dividends, and depreciation, among others. These do not cause a cash outflow, and the money is kept in the company until the true extent of the liability is known and covered. The reach of this source of funding is severely constrained.

Discounting of Bills

The importance of bill discounting as a short-term financial tool is well known. By buying or offering to discount invoices that the client has acquired as a result of business activities, the bank offers financing to the consumer. When a business or organization needs money and a bill drawer needs cash before the bill's due date, the drawer may sell the bills to banks at a set discount. The drawer has endorsed the bill to the bank, who will thereafter possess and be the owner of the document. After subtracting their fees, banks provide credit to the consumer after carefully examining the legitimacy of the bill and the organization's creditworthiness. The face amount of the invoices, minus any agreed-upon interest or discount, are financed by the bank for the number of days they must be paid. Additionally, the drawer is liable on the bill until the party honors it; for these reasons, it is known as a contingent liability [7].

Factoring

Project finance focuses on providing capital for high-risk, high-investment, development-oriented projects that have the potential to drastically alter the fortunes of their owners, stakeholders, and society at large. As a result, it is crucial and pertinent to strategically manage financial inflows and outflows with the flexibility to divide risk among the parties. Therefore, managing credit sales and receivables is crucial for managing working capital for such projects in order to reduce the risk of bad debt losses. In this situation, factoring offers a way to meet the company's urgent financial demands, helping the project managers retain a lower overall cash balance. Factoring is the ongoing financial agreement between the seller, often known as the client, and the financial institution known as the factor. In this agreement, the customer sells the factor debt or accounts receivable at a discount. Consider the fact that an agent charges a fee for each time they collect a client's debt.

Factoring has been a practice for many years. The International Institute for the Unification of Private Law's Study Group, which was established in Rome during, defined factoring as "a contract between a factor and his client that involves at least two of the following services to be delivered by the factor;

Finance

- 1. The upkeep of accounts
- 2. Recovering debts
- 3. Protection against credit risk.

This definition, however, fell short of being complete since it didn't adequately characterize domestic factoring. According to Westlake, selling receivables to a business that specializes in their administration and collection is a way to turn a non-productive inactive asset into a productive one. A "factoring business" is defined under the Factoring Regulation Act as the activity of acquiring the receivables of the assignor by accepting assignment of such receivables or financing, whether by way of making loans or advances or otherwise against the security interest over any receivables, but does not include credit facilities provided by a bank in its regular course of business against the security of receivables; any activity as a commission agent;

The Factor's services include the acquisition of accounts receivable, the provision of quick cash, the administration of the seller's or client's sales ledger, the assessment of potential losses from bad debts, credit management, the creation of credit policies, and the provision of advising services. Without recourse factoring also includes risk coverage and loss-bearing by the factor. Additionally, he or she evaluates the credit worthiness of the clients using data gathered from a variety of sources, including credit rating agencies, bank statements, trade references, and financial statements [8], [9].

Factoring aids in the release of funds that are locked up in receivables, making cash available to increase liquidity for daily operations. The agreement between the factor and a customer outlining the parameters, terms and conditions, expenses and charges is the first step in the factoring process. The Seller, who has received receivables from the transactions made on credit and has instructed the clients to pay the Factor, offloads all receivables to the Factor. The factor purchases the accounts receivable from the customer or seller and makes the agreed-upon payments in accordance with those terms and conditions.

The Factor reminds the client of the sum that has to be paid. In the event that the client fails to make the required payment by the deadline, the follow-ups are also created. When the customer makes the payment, the factor then reimburses the customer for the remaining amount after deducting operating and financial costs.

CONCLUSION

Despite the higher costs and complexities, limited-recourse financing provides several benefits to borrowers, including reduced liability and risk exposure, increased access to funding, and the ability to undertake large-scale projects that may not be feasible with traditional financing. In conclusion, limited-recourse financing is an important financing option for large-scale projects, providing reduced liability and risk exposure to the borrower. While it may be more expensive and complex than traditional financing, limited-recourse financing offers several benefits and can enable borrowers to undertake projects that may not be feasible with traditional financing.

REFERENCES:

- [1] T. J. Chemmanur and K. John, 'Optimal incorporation, structure of debt contracts, and limited-recourse project financing', *J. Financ. Intermediation*, 1996, doi: 10.1006/jfin.1996.0021.
- [2] T. A. John and K. John, 'Optimality of project financing: Theory and empirical implications in finance and accounting', *Rev. Quant. Financ. Account.*, 1991, doi: 10.1007/BF02408406.
- [3] A. Kreydieh, 'Risk management in bot project financing', *Electrical and Computer Engineering*. 1996.
- [4] K. I. Candee and S. Larson, 'Limited Recourse Financing–EPC Contracting: Investigations Programs and Risk management', *Hydro2013, Innsbruck, Austria*, 2013.
- [5] O. Bayar, T. J. Chemmanur, and S. Banerji, 'Optimal Financial and Contractual Structure for Building Infrastructure using Limited-Recourse Project Financing', SSRN Electron. J., 2016, doi: 10.2139/ssrn.2795889.

- [6] O. Bayar, T. J. Chemmanur, and Q. Ma, 'Credit Rating, Reputation Spill-Overs, and Debt Contract Structure: A New Rationale for Limited-Recourse Project Financing', *SSRN Electron. J.*, 2021, doi: 10.2139/ssrn.3977931.
- [7] M. A. Shaikh, 'Modaraba: A Viable Option for Project Financing.', *J. Islam. Bank. Financ.*, 2017.
- [8] X. Zhang, 'Concessionaire's Financial Capability in Developing Build-Operate-Transfer Type Infrastructure Projects', J. Constr. Eng. Manag., 2005, doi: 10.1061/(asce)0733-9364(2005)131:10(1054).
- [9] M. S. Khan, 'A study of environmental constraints faced by Public Private Partnership (PPP) in India and the road to a framework for successful implementation of PPP project', *Bus. Rev.*, 2014, doi: 10.54784/1990-6587.1225.

CHAPTER 16

A STUDY ON TYPES OF FACTORING

Vipin Jain, Professor

Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-vipin555@rediffmail.com

ABSTRACT:

Factoring is a financial service that involves the sale of accounts receivable to a third-party financing company, known as a factor. This service is commonly used by businesses to improve their cash flow by obtaining immediate funds for outstanding invoices. There are several types of factoring that businesses can use to suit their specific needs. The most common types of factoring include recourse factoring, non-recourse factoring, spot factoring, and full factoring. Recourse factoring is a type of factoring where the business retains the risk of non-payment of invoices. In the event of non-payment, the business is responsible for buying back the invoice from the factor. Non-recourse factoring, on the other hand, is a type of factoring where the factor assumes the risk of non-payment of invoices, and the business is not responsible for buying back the invoice. Spot factoring is a type of factoring where the business sells a single invoice to the factor, while full factoring involves the sale of all outstanding invoices to the factor. Additionally, businesses can choose to use selective factoring, where they sell only a portion of their outstanding invoices to the factor.

KEYWORDS:

Financial, Economical, Risk, Management.

INTRODUCTION

Recourse Factoring: In this kind of factoring, the seller assumes all of the risk of default. The Factor acquires the receivables with the understanding that the client is responsible for any defaults that occur. If the receivables are unrecoverable, the factor is given the option to sell them back to the seller. Non-recourse Factoring - In non-recourse factoring, the factor agrees to collect the debts from the customer and the client transfers the risk of bad debts to the factor. Therefore, factor commission is quite high in non-recourse factoring because the Factor bears high risks of bad debts. According to Pandey I.M., non-recourse factoring, commonly referred to as "old-line factoring," is quite common in the USA. Old line factoring is different from those that only finance receivables since they are true factors.

Both advance factoring and advance factoring without recourse are options. On uncollected and past-due receivables, the factor prepays the client with funds at an agreed-upon interest rate. The factoring agreement does not include the customer, and the client pays the amount to the factor based on the invoices they have received. In essence, advance factoring is when a factor advances money against client obligations that are already owed. Maturity Factoring: The customer receives

payments via maturity factoring. Maturity factoring does not entail funding; instead, it offers administrative services to safeguard against bad debts. The factor oversees the client's sales ledger and seeks payment from the customers on the invoices. Additionally, the Factor collects the bad debts on the due date. Payments are given either at maturity or upon the bankruptcy of the clients in the event of non-recourse maturity factoring. Recourse maturity factoring, on the other hand, pays the client when the customer collects the book debts.

Bulk/Agency Factoring: This approach of financing book debts is used. According to this, the customer still manages credit and runs the sales ledger. The factor lends money to pay off the book obligations in large amounts, either with or without recourse. In other words, it is a variant of involve discounting wherein funds are provided by the Factor only after the seller notifies the customer of the assignment of debts and gives them instructions to pay the Factor. Bank **Participation Factoring:** The floating charges are created by the supplier on the reserves related to factoring, also known as factoring reserves in favor of banks, and the funds are borrowed against these reserves. Learners should understand that in this sort of factoring, the factor arranges to lend money to customers via the banker.

International Factoring: The export sales are related to international factoring. This implies that factoring services offered for overseas markets are included. The export factor considers sales administration and funding the exporter. The import factor is concerned with assessing the buyer, being paid promptly, and making sure he is safeguarded against default. Prepayments, sales ledger management, credit protection, and collections are all included in it.

Invoice Discounting: In this kind of factoring, the Factor buys the client's invoices or receivables and gives the customer cash in exchange. Until the full amount of the invoice is paid by the buyer of the goods, the factor assesses interest. The customer is responsible for managing all administrative elements of the credit sales and account receivables. However, because it lacks the same service components as factoring, this is not a form of factoring specifically.

Using factors in India

Following the formation of the Kalyanasundaram Study Group in January, the Reserve Bank of India looked into factoring in India. It was established to evaluate the viability and system for the factoring companies in India. As a result, domestic factoring services are being offered in India. SBI Factors and Commercial Services Ltd. and Canbank Factors Ltd. launched their operations in India as the country's first two factoring businesses.

The Banking Regulation Act was also changed to make it possible for banks to start factoring businesses. The Reserve Bank of India released rules allowing banks to establish independent subsidiaries or jointly participate in factoring businesses. In order to increase transparency in the legal framework relevant to factoring services in India, the Government of India drafted the Factoring Act in the year. The Act has improved the viability of the factoring industry by exempting completed papers from paying stamp duty. The term "factor" as used in this act refers to a non-banking financial company as defined in clause of section I of the Reserve Bank of India Act, which has been granted a certificate of registration under sub-section of section 3, or to any corporate body established by an act of Parliament, an act of a State Legislature, an act of a Bank,

or an act of any company registered under the Companies Act engaged in the factoring business. Additionally, it has been made mandatory that no factor may start or operate a factoring business without first obtaining a certificate of registration from the Reserve Bank to do so in accordance with this Act. The Act is broken down into seven chapters that exhaustively outline the standards for factoring [1].

Discussed Finance

Negotiations must be formed with the financing institutions, such as commercial banks, development banks, the general public, and other financial institutions, in order to get negotiated finance. This kind of funding may be either short-term or long-term. Since working capital financing for development-oriented ventures and other projects will be covered in this unit, negotiated financing will cover bank credit, commercial paper, and loans obtained against receivables or inventory. An important source of negotiated short-term financing is loans from commercial banks. However, negotiated financing is typically more expensive than impulsive financing.

Business Papers

Commercial Papers are short-term, fixed-maturity promissory notes that are issued by businesses to raise money temporarily. This is often given out by reputable, established, major organizations with strong turnover and business for a short period of time, usually between a few days and a few months. Highly rated corporate borrowers issue this money market instrument to meet their needs for working capital and ongoing production activities. From this point on, the history of commercial papers in India may be tracked. The big change in the Indian Money Market brought about by the introduction of Commercial Papers was followed by innovation in the Indian Financial System. As a result, it was launched in India to help highly rated corporate borrowers diversify their short-term borrowing sources and to provide investors another tool. Later, to help them meet their short-term funding needs for their operations, primary dealers and All-India Financial Institutions were also allowed to issue CP. Commercial paper has grown in importance as a tool for businesses to raise short-term capital from the money market in the quickest time possible without putting up raw material inventories as collateral security and by avoiding the hassles of direct negotiations with commercial banks for short-term loans [2].

The All-India Financial Institutions, Primary Dealers, and Corporations are qualified to issue Commercial Papers in India. Commercial banks, money market mutual funds, and other financial institutions who are interested in investing their excess cash for the short term often buy these. For the purpose of issuing Commercial Paper, it is required of all participants who qualify to obtain a credit rating from one of the following organizations: Credit Rating Information Services of India Ltd., Investment Information and Credit Rating Agency of India Ltd., Credit Analysis and Research Ltd., or FITCH Ratings India Pvt. Ltd. or any other credit rating organization that the Reserve Bank of India may, from time to time, specify for the purpose. A-2 is the required minimum credit rating. A minimum of 7 days and a maximum of 1 year from the date of issuance are the maturities for which CP may be issued. The maturity date of the CP should, however, not exceed the time period covered by the issuer's current credit rating. The total amount of CP

received from an issuer must not exceed the cap set by its board of directors or the level suggested by the credit rating agency for the given rating, whichever is lower [3].

The main benefits of commercial papers are as follows:

- a) It is efficient in terms of time and money.
- b) It is adaptable since it is simple to alter the maturity of the instruments in accordance with cash inflows.
- c) It gives investors the option of a repurchase.
- d) Because they are granted for a shorter period of time, it also suggests less reinvestment risk.
- e) Because of the shorter time horizon, they do not experience more significant changes in interest rates.
- f) Interest rates are often lower because banks and other financial institutions demand it.
- g) Funds may be used in any way the Issuer deems appropriate. The downsides of commercial papers include the following;
- i. Only blue-chip, or financially stable, businesses are permitted to issue commercial papers.
- ii. Commercial papers are not risk-free in absolute terms since changes in market interest rates might sometimes result in payment default.

Commercial Papers are within the jurisdiction of the Reserve Bank of India due to their unsecured character. The following are the essential components for the issuing of Commercial papers, as per the recommendations published by RBI in the year;

- a. CP must be distributed as a "standalone" item. Furthermore, providing a stand-by facility to the CP issuers would not be required of the banks and FIs in any way.
- b. Banks and FIs may decide to provide stand-by assistance/credit, a back-stop facility, etc. as a form of credit enhancement for a CP issuance based on their commercial judgment, subject to the prudential requirements that apply to them, and with the express consent of their respective Boards.
- c. Non-bank companies are permitted to provide an unconditional and irrevocable credit enhancement guarantee for CP issues under the following conditions:
- d. the issuer satisfies the requirements for eligibility set out for the issuance of CP;
- e. the guarantor's credit rating is at least one notch higher than the issuer's according to a recognized credit reporting agency.

The offer document for CP adequately reveals the guarantor firm's net value, the names of the businesses to whom it has provided comparable guarantees, the scope of the guarantees supplied by the guarantor company, and the circumstances under which the guarantee would be activated. The total amount of CP that an issuer may issue must at all times fall within the range set by the Board of Directors of that issuer or the level stipulated by the CRA for the particular rating, whichever is lower. Banks and FIs are free to set working capital limitations while appropriately taking into consideration the financing pattern of the firm, including CP.

An FI must issue CPs within the overall cap set out in the Master Circular on Resource Raising Norms for FIs, as prescribed/updated from time to time by the Reserve Bank of India, Department of Banking Operations and Development. Within two weeks of the day the issuer offers the issue for subscription, the whole amount of CP scheduled to be issued must be raised. As long as each CP has the same maturity date in the latter situation, CPs may be issued all at once or in segments on various dates. Every new issuance of a CP and every renewal of an existing CP must be considered as such. Additionally, the key components of the regulations governing the issuance of commercial papers in India are listed as follows;

All RBI-regulated entities may only deal in and hold CP in dematerialized form through such depositories. CP may be issued in the form of a promissory note and held in physical form or in a dematerialized form through any of the depositories approved by and registered with SEBI. The amount of the CP would be distributed in multiples of Rs. 5 lakh. A single investor's investment should not be less than Rs. 5 lakh. Discount to Face Value-CP obligations must be issued at a possible issuer-determined discount to face value. Additionally, no issuer is permitted to issue CP that is co-accepted or underwritten. Options are also not allowed on CP.

Tenure-Commercial Papers may be issued with maturities ranging from seven days at the lowest to one year at the most. The maturity date of the CP may not exceed the time period covered by the issuer's current credit rating [4]. Procedures and paperwork are prescribed for CPs by the Fixed Income Money Market and Derivatives Association of India in accordance with worldwide best practices.

DISCUSSION

Trading and Settlement: All OTC deals in CP must be reported to the reporting platform of Clearcorp Dealing System Ltd. within minutes of the trade. According to the standards outlined from time to time by NSCCL, ICCL, and CCL, OTC trades in CP must be settled through the clearing houses of the National Stock Exchange, i.e., the National Securities Clearing Corporation Limited, the Bombay Stock Exchange, i.e., Indian Clearing Corporation Limited, and the MCX-Stock Exchange, i.e., MCX-SX Clearing Corporation Limited. Additionally, the T+0 or T+1 settlement cycle must be used for OTC trades in CP.

The issuers have the option to purchase back the commercial papers before they mature. The repurchase might begin at the current market price and via the secondary market. The CP cannot, however, be purchased back until a minimum of 7 days have passed from the date of issuance. Issuers are required to share the IPA of any buybacks they do. The Board of Directors should have given their consent before starting any buybacks of CPs.

CPs are redeemed at par at maturity and are issued at a discount to their face value. The effective interest rate is really the discount. This indicates that commercial papers' issuance prices are below their face values. The advantage to the lender in lieu of the money supplied at the discount rate is represented by the difference that is mentioned in the discount. The quantity, maturity term, and prime lending rates of the banks all affect the discount on the issuance of commercial papers [5], [6].

For Working Capital, Bank Credit

The credit facility offered by commercial banks for the short-term financial help needed by the company or enterprises is known as bank credit. It may be the most popular and important institutional source of short-term financing offered to businesses. For the majority of commercial organizations, bank credit has been a significant and essential source of short-term financing or working capital finance. In general, obtaining bank credit is the simple way to meet the borrowing businesses' or organizations' demands for operating cash. However, the ease of obtaining bank loans has also resulted in distortions in the way bank resources are allocated to businesses. Depending on the kind of activity, banks determine a company's working capital needs using the Turnover Method, Maximum Permissible Bank Finance System, Cash Budget System, and Net Owned Funds System.

Letter of Credit: A letter of credit is a document issued by a bank that guarantees payment to the seller in the event of default or failure. The bank will pay the seller in this scenario. Due to the fact that no money is needed to obtain a letter of credit, it offers non-fund based financing. "It is a contract wherein the issuing bank, on the orders of a client or on its own behalf, commits to pay, accept, or negotiate against specified papers, or permits another bank to do so, subject to compliance with defined terms and conditions. Since a reputable bank only pays upon presentation of the required documents as specified in the letter of credit, the documentary credit is regarded as the best payment arrangement. The issuance of a letter of credit to a holder often involves the pledge of securities or cash collateral. A fee, often a portion of the letter of credit's value, may be charged by the bank for issuing letters of credit. According to the Master Circular - Guarantees and Co-acceptances, an Authorised Dealer Category I bank in India may provide a guarantee or standby Letter of Credit in respect of an obligation incurred by an individual residing in India and owed to an individual residing outside of India in connection with the payment of margin money in respect of an authorized commodity hedging transaction of such an individual residing in India subject to terms and conditions as may be stipulated by the Reserve Bank from time to time [7].

Working Capital Loan: When a customer needs extra funds over the sanctioned credit limit, the bank will provide a working capital loan via a demand loan account or detachable non-operable cash credit account. A borrower in a working capital loan must pay more money as a high rate of interest on additional credit that is thus obtained. This loan is often used by seasonal businesses that may need to purchase more merchandise or incur more marketing and advertising costs during the busiest period of the year.

Bank Overdraft: This is another approach to get credit from the bank in which the business borrows money from its current account. The bank permits the business to withdraw funds in excess of the current account balance, but only up to a certain amount. Calculating the maximum amount permitted mostly relies on financial records and security. It is also one of the most adaptable methods of obtaining money since withdrawal and repayment may be done at the borrower's convenience. over offering this service, the bank levies a fee, and interest is applied to any excess funds that are withdrawn over an extended period of time. When compared to a typical loan that is taken out at a fixed interest rate, there are significant interest cost savings because the

interest is only calculated on a portion of the funds utilized. On the basis of collateral securities, bank overdrafts are sometimes possible [8].

The business's financial flows, the timing of collections and payments, seasonal fluctuations in sales, and other factors will all affect how much of an overdraft is available at any one moment. The bank may advise turning an overdraft into a medium-term loan if the company discovers that the overdraft facility looks to be becoming a long-term aspect of the firm.

Money Credit

The bank will authorize a cash credit limit as a short-term loan to the business, and the business or firm may withdraw the funds at any moment as long as they stay within the approved limit. On the amount so withheld, interest is charged at the specific rate for the specified time. The money may be returned after being sent to the appropriate account. It is often offered in exchange for collateral, typically in exchange for the security of existing assets. In case of unfavorable conditions, the bank may also recall these money. According to the Master Circular of RBI dated July 1, for Loans and Advances - Statutory and Other Restrictions, it is required that the loan component should typically be % for borrowers who get working capital credit limits of Rupees ten crore and above from the banking sector. However, banks are free to alter the composition of working capital as they see fit by raising the cash credit component above percent or the "Loan Component" above percent, as applicable. In order to properly price each of the two working capital financing components, banks must consider how these choices will affect their ability to manage their cash and liquidity. Additionally, if a borrower has a working capital credit limit of less than Rs. 10 crore, the bank may entice them to use the "Loan System" by providing a discount on the interest rate for the loan component relative to the cash credit component. The bank and its borrower customers may agree on the precise "loan component" % in certain situations.

Furthermore, the RBI established the following rules in the year in accordance with the Master Circular on Management of Advances Urban Cooperative Banks: for borrowers receiving working capital credit limits of Rs. crore and above from the banking system, the loan component should typically be % and the remaining Cash Credit component. The composition of working capital may be changed by UCBs at their discretion by raising the cash credit component over a certain percentage or the loan component above a certain percentage, as applicable. Additionally, the financing bank may only take into account the release of ad hoc / additional credit for meeting short-term needs after the borrower has fully utilized / exhausted the existing limit [9].

Other than SSI units, borrowers may request up to Rs. 1 in working capital funds. crore and up to Rs. 5 in SSI units. Based on the anticipated turnover, crore can be taken from the banking system. The WC is calculated as a percentage of the anticipated gross yearly revenue, of which the bank may finance at least 4/5 and the borrower must provide the remaining 1/5 as net working capital. A line of credit is a bank's promise to provide a client with a certain amount of standing credit that they may use whenever they need it. The bank that grants a line of credit levies extra fees in addition to the standard rate of interest since the money must always be accessible to a client for their needs. Typically, it is given to creditworthy clients in order to solve their liquidity issues.

Security is needed for Bank Financing

Hypothecation: In a hypothecation, moveable property is used as collateral for a loan. Although the lender has the right to take ownership if the borrower defaults, the borrower still owns the collateral. Therefore, the borrower continues to be the legal owner and possessor of the property. In the event of a default, the lender asserts title, seizes the security, and then sells it to recoup the debts made. It also covers moveable property security.

Pledge: A pledge occurs when moveable property or goods are given to the bank that is the pledgee as security. The bank keeps custody of the items until the pledgor pays the full amount owed on the loan. The property may consist of documents, products, investment documents, gold, jewelry, etc. The bank will realize the security in order to collect the loan amount, principle, and interest, in the event that the loan or credit is not repaid.

Mortgage: A mortgage is the sale of real estate to a lender as collateral for a loan. Immovable property is used as security, such as land, buildings, equipment, etc. A mortgage deed is the agreement in a mortgage that specifies the transfer. The borrower's property serves as security for the loan. Both the lender and the borrower are referred to as mortgagees. In the event of default, the lender seizes and sells the collateral.

Lien: A lien is an official claim or charge made by a lender on property that a borrower contributes as collateral for a loan in order to guarantee repayment of the debt or the fulfillment of an obligation. The individual who receives the benefit of the lien is referred to as the lien or lien holder, while the owner of the property who grants the lien is known as the lienee. A lien gives the owner the right to sell the property to pay the debt, if required.

Forfaiting is a kind of medium-term international trade finance. It involves a bank that is a forfaiter purchasing receivables from the exporter. The bank buys a series of promissory notes that are signed by an importer in favor of an exporter and are payable every six months for three to five years. Frequently, the importer's bank will aval or guarantee these notes. The exporter sells the promissory notes at a discount to the bank that accepted them. The exporter receives the money from the bank, which enables him or her to get financing for the creation of products and services for export. The importer may then be responsible for paying the exporter. The Forfaiter assumes all of the risks related to the receivables in exchange for a margin. As a result, the exporter waives his or her right to future payments from the importer and gives up the right to payment collection by a third party or agency without the exporter's involvement.

The fundamental distinction between forfaiting and discounting of bills is that, while forfaiting is a form of recourse-free financing where the exporter transfers his debts and associated risks to the forfaiting agency, discounting leaves the exporter open to recourse in cases of non-clearance of dues. Factoring includes the selling of a portion of a company's receivables, but it is also related to the acquisition of financial assets; forfaiting is available for 0% of the payment amount. For the purpose of financing export receivables, forfaiting is now permissible for the Export-Import Bank of India and AD Category-I Banks. An AD bank may be used to remit commitment fees, service fees, and other amounts due by the exporter that have been authorized by the relevant AD

Category-I banks and the EXIM Bank. These payments may be provided in advance in a single lump amount or at regular intervals, as determined by the relevant body.

The most popular method used by businesses to lend money for a short period of time is called an inter corporate deposit. It is the deposit given by a business with extra cash to a business with a maximum six-month requirement. Financiers organize the ICD, which are often insecure. Additionally, it is a practical source of emergency cash. As a result, it is a clause in which businesses with plenty of cash lend money to others with little or no cash. However, because there is a lot more risk involved in these deposits, interest rates are higher than those offered by banks.

As long as the following conditions are met:

A subsidiary company may not have any investment subsidiaries for the purpose of complying with the requirements of any law or any rule or regulation currently in effect; a company may not acquire any other company that is incorporated outside of India if that other company has investment subsidiaries that go beyond two layers under the laws of that country. In contrast to Section 6 of the Companies Act, which lists transactions as Loan to Any Person, Loan to Any Body Corporate, Guarantee to Any Person, Guarantee to Any Body Corporate, Security in Connection with a Loan to Person, Section 2 of the Companies Act lists transactions as Loan to Any Other Body Corporate, and Acquire by way of Subscription, Purchase, or Other, the Securities of Any Other Body Corporate.

CONCLUSION

The choice of factoring type depends on various factors such as the size of the business, the volume of outstanding invoices, and the creditworthiness of the customers. In conclusion, factoring is a useful financial service that provides businesses with immediate cash flow for their outstanding invoices. There are several types of factoring available, including recourse factoring, non-recourse factoring, spot factoring, and full factoring, which businesses can use to suit their specific needs. The choice of factoring type depends on various factors, and businesses should carefully evaluate their options before choosing the most suitable type of factoring.

REFERENCES:

- [1] N. CLIFF and C. D. Hamburger, 'The Study Of Sampling Errors In Factor Analysis By Means Of Artificial Experiments', *Psychol. Bull.*, 1967, doi: 10.1037/h0025178.
- [2] O. Stroeva, N. Sukhorukova, A. Tsvyrko, and T. Ivashchenko, 'Development of factoring market in Russia', *Eur. Res. Stud. J.*, 2015, doi: 10.35808/ersj/454.
- [3] K. Schmidt-Samoa, 'A New Rabin-type Trapdoor Permutation Equivalent to Factoring', *Electron. Notes Theor. Comput. Sci.*, 2006, doi: 10.1016/j.entcs.2005.09.039.
- [4] L. Y. Arkhangelskaya and V. N. Salin, 'Current State and Development Prospects of the Russian Factoring Market (Brief Statistical Analysis)', *Stat. Econ.*, 2021, doi: 10.21686/2500-3925-2021-4-22-34.

- [5] I. D. A. Dwi Mayasari, 'Perlindungan Hukum Terhadap Perusahaan Factor Dalam Penagihan Piutang Dagang Pada Transaksi Anjak Piutang (Factoring)', *J. Magister Huk. Udayana (Udayana Master Law Journal)*, 2015, doi: 10.24843/jmhu.2015.v04.i02.p16.
- [6] K. J. Lee *et al.*, 'Comparative transcriptomics and metabolomics in a rhesus macaque drug administration study', *Front. Cell Dev. Biol.*, 2014, doi: 10.3389/fcell.2014.00054.
- [7] V. Petrenko, A. Karnaushenko, and L. Borovik, 'Factoring: Essence, Types And Its Benefits In Financial Activity Of Enterprises', *Ef. Ekon.*, 2021, doi: 10.32702/2307-2105-2021.11.14.
- [8] G. A. Bunich, Y. A. Rovenskiy, and L. P. Dashkov, 'Factoring development: Theory and practice', *Espacios*, 2018.
- [9] A. V. Ivanytskyi, 'Correlation Of Factoring Agreement With Certain Types Of Contracts In Ukraine', *Actual Probl. Nativ. Jurisprud.*, 2019, doi: 10.15421/391910.

CHAPTER 17

ROLE OF INTEREST RATE SWAPS IN FINANCE

Pankhuri Agarwal, Associate Professor Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-dreams.pankhuri@gmail.com

ABSTRACT:

Interest rate swaps are a financial tool used to manage interest rate risk in finance. In an interest rate swap, two parties agree to exchange future interest rate payments on a notional amount of principal. This exchange is based on a predetermined interest rate, which is typically based on a benchmark such as LIBOR or the Federal Funds Rate. Interest rate swaps can be used for a variety of purposes, including hedging against interest rate fluctuations, managing cash flow, and reducing financing costs. For example, a company with variable rate debt may enter into an interest rate swap to convert the variable rate to a fixed rate, reducing the risk of future interest rate increases. Similarly, a company with fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate debt may enter into an interest rate swap to convert the fixed rate to a variable rate, taking advantage of potential interest rate decreases.

KEYWORDS:

Financial, Economical, Risk, Management.

INTRODUCTION

Interest rate swaps are complex financial instruments that require a high level of expertise to manage effectively. The parties involved must carefully evaluate the risks and benefits of entering into a swap agreement, and must also understand the potential impact of changing interest rates on their cash flows. Overall, interest rate swaps are an important tool for managing interest rate risk in finance. They can be used to hedge against interest rate fluctuations, manage cash flow, and reduce financing costs. However, due to their complexity, interest rate swaps require a thorough understanding of the underlying financial concepts and should only be used by experienced professionals.

The parties have agreed to swap a future cash flow stream of interest payments for a certain principle amount. This illustrates the conversion of a fixed interest rate into a variable interest rate or vice versa. The basic goal is to either lessen or enhance exposure to interest rate volatility or to get a cheaper interest rate that would not be feasible without the swap opportunity. Liability swapping refers to the exchange of interest liabilities between two parties that are debt-related to interest rates. Two presently identical cash flows are swapped in a liability swap. Asset swapping is the word used when interest income is exchanged.

An interest rate swap is a financial arrangement in which two parties periodically throughout a certain time period exchange or swap a stream of interest payments for a sum known as the "notional principal." These agreements often provide for the exchange of "fixed to floating" or "floating to floating" interest rates. As a result, during the swap period, cash payments based on

fixed/floating and floating rates are paid by the parties to one another on each payment day. Currency swaps, cross-currency interest rate swaps, interest rate swaps, etc. are the most popular interest rate swaps. Furthermore, Plain Vanilla Swaps are another name for Simple Interest Rate Swaps. Additionally known as Generic Swaps. These swaps include the exchange of fixed-rate obligations for floating-rate obligations at a predefined interest rate on a notional principal on certain dates for a predetermined amount of time. The two cash flows are paid in the same currency in a standard swap. Settlement dates are the dates for the stated payments, while settlement periods are the intervals in between.

The parties to a forward rate agreement agree to lend or borrow a certain sum of money at a set rate at a future date. A future rate agreement is another name for this. Since Forward Rate Agreements have a structure for maturity on a specific date, they are thought to be more flexible. A Forward Rate Agreement (FRA) is a financial contract between two parties to exchange interest payments for a "notional principal" amount on settlement day, for a predetermined time from the start date through maturity date. Typically, FRAs are traded on the future level of 3- or 6-month Libor. As a result, on the settlement date, the parties make cash payments to one another in accordance with the terms of the contract and the settlement rate. The conditions of the agreement date, and maturity date of the notional loan. The settlement rate is the agreed bench-mark/reference rate existing on the settlement day. Additionally, the principal amount is only hypothetical, the interest differential is only exchanged based on the initial FRA rate, and the settlement date exchanges the applicable floating reference rate at the time of settlement.

We have learned about working capital management and short-term finance conceptually in this section. The net working capital is the difference between current assets and current liabilities, as opposed to the gross working capital, which is the sum of all current assets used in the firm, as was previously mentioned in this section. The financing aspect of these current asset patterns is also covered in this course, and we learn about the unique characteristics of the many funding options that may be used to invest in current assets. For quick access to working cash under project finance, many modern working capital financing strategies have been developed. However, other traditional approaches are also used to match the project's requirements, including bill discounting, trade credit, and bank credit.

It is possible to define net working capital as the difference between current assets and current liabilities. Credit Terms: These are the conditions under which a business offers its clients things on credit. Interest rate swaps are agreements between parties to exchange a future interest payment stream's cash flow stream for a certain principle amount. A line of credit is a bank's promise to provide a client with a certain amount of standing credit that they may use whenever they need it. Factoring-Factoring is the ongoing financial agreement between the seller, often known as the client, and the financial institution known as the factor. In this agreement, the customer sells the factoring company debt or accounts receivable at a discount. As an agent collects his client's debt in exchange for a fee, factor.

The technical features of projects were given greater attention in earlier sections. You will study about numerous incentive programs and tax holidays offered to various project types in India in this section. For the advancement and development of infrastructure-related initiatives, these incentives are crucial. Additionally, it aids in the establishment of industries related to sustainable energy, such as solar and wind power. These initiatives in turn speed up the nation's growth [1].

After finishing this chapter, you'll be able to:

- a. Recognize the benefits and drawbacks of tax incentives.
- b. Tax holidays and incentives for India's power sector.
- c. Tax holidays and incentives for India's natural gas distribution system.
- d. A system for awarding rewards.
- e. Various exemptions from service tax.
- f. Tax benefits for financing infrastructure:
- g. The National Solar Mission and a number of incentives for the solar energy industry.

Principles of Tax Incentives

Infrastructure is crucial to the development of the economy. Given the significant capital investments required, private sector involvement in infrastructure development is crucial. Investments are attracted in large part by tax benefits. Tax incentives are only offered to a limited number of taxpayers, making them special tax treatments that vary from the general tax system. It is not referred to as a tax incentive when tax benefits are offered to all taxpayers, independent of their business lines, nationalities, investments, and company locations; instead, it is a crucial component of the overall tax framework.

Tax incentives have traditionally been recommended as a tool to counteract market imperfections brought on by the externality of certain economic activity. Aside from this justification, tax incentives frequently result from policymakers' haphazard assessments of the needs in their region. These decision-makers believe that a particular class of taxpayers is so essential to the expansion of the national or regional economy that they should receive a special tax break [2].

When evaluating the value or lack thereof of tax incentives, it is critical to understand the fundamentals of taxation. The primary goal of taxation is to increase social welfare and collect money to support government operations.

The GDP grows more rapidly as a result of the value produced by all kinds of economic activity, whether it be in the form of investment returns, labor compensation, or consumption fueled by investment and labor wages. As a result, even if it may harm the tax base, tax incentives are given to certain economic activity with the hope that they would eventually boost GDP. We may thus conclude that a tax incentive program is crucial and eventually results in economic development and a larger tax base.

Additionally, the government has a strong influence over taxation policy, which inevitably reduces market efficiency. Redistributing people's income levels is another important duty of the government. This increases the complexity of taxes, which stresses both tax administration and taxpayers. Because of this, economists have devised three guidelines for the best possible tax system. These are what they are:

- i. Efficiency Principles: It aims to reduce tax distortion to market forces' resource allocation.
- ii. **Equity Principles:** They are designed to make sure that taxation is based on a person's capacity to pay.
- iii. Simplicity Principles: It aims to reduce the cost of administration and compliance.

Tax Incentives' Values

Tax advantages may have certain drawbacks. It gives legislators the freedom to choose whether to provide incentives to a particular industry or geographic segment. It is severely criticized as a result of the fact that it generally violates some of these principles. These infractions are listed below.

- a) It has been noted that some governments offer tax breaks to particular groups of entities. The efficiency principle is broken as a result. It results in lowering some entity's manufacturing cost below the market's average manufacturing cost. Tax incentives of this nature benefit some people while placing disadvantages on others. These regulations impede long-term economic development and change.
- b) The equity principle is also broken when tax breaks are provided to a particular sector of the economy or organization. It has been noted that policy makers frequently give tax incentives to certain business organizations under the influence of these organizations. It frequently results in tax evasion as well.
- c) Tax structures ought to be easy to comprehend and use. Administrative complexity results whenever tax incentives are given to a particular industry or location. The simplicity principle is broken here [3].

Numerous studies have revealed that, in addition to lowering the tax base, these violations of optimal tax principles also result in significant costs for tax incentives. Then, why these tax incentives never expire do becomes a question. And why have tax incentives actually grown in popularity in both developed and developing countries?

Tax Incentives' Values

Tax incentives do have some advantages. These benefits compel the government and decisionmakers to keep up these programs. These are summarized as follows.

- 1. Tax incentives are given to projects that have the potential to increase the local population's capacity for income generation, create jobs, improve access to transportation and healthcare, among other things. These advantages do not, however, come without cost. It raises the price of the projects that receive funding from private investors. The government must therefore provide tax incentives for these projects in order for them to recoup their additional costs.
- 2. High capital-intensive industries like telecom, digital payments, technology, etc. should be encouraged with tax incentives so they can be impacted by even the smallest changes in taxation.

- 3. Some regions are extremely backward because of their geographic circumstances. Because of this, life there is extremely difficult. Tax incentives for a specific location could help produce more benefits for the local community as a whole.
- 4. Politicians frequently exhibit bias when deciding who should receive tax breaks that are advantageous to society and who shouldn't. During a sector downturn, they might also feel compelled to provide financial support to a specific important economic player.

Power Sector Incentives and Tax Holiday

The Indian government has recently announced a number of incentives and programs to support infrastructure-related projects in India. The following sections discuss a few of these plans and rewards. Businesses involved in the production of electricity or the production and distribution of electricity have received the maximum amount of tax incentives in the year's budget. These industries received a 0% tax break. These companies specialized in building new transmission or distribution networks of lines. The budget also included a proposal to offer incentives to organizations engaged in significant transmission or distribution line renovation and modernization.

Previously, the tax holiday incentive was lessened because power sector companies were required to pay Minimum Alternate Tax on their book profit. Budget changes were therefore suggested for these companies' book profit calculations. The budget for the year included a tax holiday for businesses involved in building and maintaining a cross-country natural gas distribution network, including the pipelines and storage facilities that are essential components of the network [4], [5].

DISCUSSION

These incentives were designed to increase overall private sector investment, which is essential for economic growth. The Income Tax Act's Section AD has expanded its purview as a result of this budget. Section AD of the Income Tax Act includes a number of infrastructure-related areas, including the building of toll roads, sea ports, airports, bridges, railway systems, highway projects, and water supply and irrigation projects. According to this provision, capital expenses spent for certain activities may be deducted from profits for determining taxable income in the following year. The perk, known as investment-linked deduction, enables businesses to postpone making tax payments until later years. This budget also benefits the industry by building inland container terminals, hospitals with a minimum of 0 beds, inexpensive housing projects, and cross-country natural gas pipelines.

Some of the Infrastructure projects have been given exemption in service tax. These sectors are highways, airports, trains, transport terminal. However, there are some critical infrastructure projects that have not been exempted. These projects involve petroleum activities, building up refinery and electricity projects etc. It is proposed that these industries should be included in the tax exemption net. In addition, the service providers of such sector should also be provided the tax exemption [6].

Services used by SEZ has also obtained the advantage of tax exemption. It has been granted, owing to some procedural inefficiencies at the implementation level. This exemption does not come free

of cost. It really leads to the loss of input tax credit to the service providers. Therefore, it is recommended that wherever the exemptions are granted, the service providers should be allowed to avail the input tax credit.

Incentives for Renewable Energy Sector

Renewable energy industry in India offers significant possibility for expansion in the future decades. This industry has exhibited an outstanding development in India in the recent one decade. The government has approved Foreign Direct Investment up to 0 percent in the clean energy sector through the automatic route in renewable energy production and distribution projects that are subject to the terms of the Electricity Act. As per this legislation, foreign investors are not needed to obtain prior consent of regulatory authorities for infusion of foreign investment. Limited liability partnership were not granted free access to FDI and they need to acquire prior clearance for the same.

In order to assist the domestic enterprises to participate in the renewable energy industry, Reserve Bank of India has approved foreign commercial borrowings. Which means that the companies from these sectors can raise low cost funds from other countries. The scope of clean energy industry were also enlarged. The corporations who are involved sectors like electricity generation/transmission/distribution, oil pipelines, oil/gas/liquefied natural gas storage facilities, and gas pipelines that support gas distribution networks for cities have also fallen under the category of infrastructure sector [7].

Financing of Renewable Energy:

The national government has launched a new regulatory body named "The Indian Renewable Energy Development Agency". The major goal of creating this sort of organization was to promote and fund renewable energy initiatives. It has been formed under the Ministry of New and Renewable Energy as a specialist finance organization.

Domestic Income Tax Law: Tax Holiday and Incentives

Tax break had been provided to firms who are engaged in the development or generation and distribution of electricity for renewable energy facilities if power generation commences before March. This tax exemption is accessible for a duration of -years. Though, these companies are supposed to pay a minimum alternative tax at the rate of approximately percent. However, this MAT payment can be later offset over the next years. Mr. P. Chidambaram, former Finance Minister, in his budget had suggested the Direct Taxes Code, for public discussion/comments. Under this DTC, he had suggested to construct the tools for granting tax incentive to power businesses.

Various Operating Subsidies Generation Based Incentives

Central Government, in its latest budget has made many measures to encourage FDI. One such project is termed Generation Based Incentives schemes. This is relevant for firms who are engaged wind and solar power energy generating industry. Generation Based Incentive scheme are distinct from tax holiday incentives. Under GBI, the subsidies are granted to enterprises for each unit of

electricity is generated. They are also eligible for obtaining the Accelerated Depreciation advantage, which were not accessible prior. Under subisidies initiatives, these power businesses are eligible for an incentive of INR 0. per unit of power fed to the grid for a minimum period of 4 years and a maximum period of years. This is subject to a limit of INR million per MW [8]. This incentive is proposed under IREDA. Wind projects that were put into operation on or after April 1 are eligible to apply for incentives under this program. Therefore, these companies would be eligible to receive Rs from selling electricity to consumers if the State Electricity Regulatory Commissions approved the tariff of Rs 4 per unit of electricity.

Increased Deterioration

Accelerated depreciation allows a firm to claim a bigger depreciation benefit during the first years of operation, lowering the company's initial tax outlay. Companies involved in renewable energy sources like solar and wind are eligible for accelerated depreciation at a rate of % on a writtendown value basis under Indian income tax rules. There is a limitation on the claim, however. A business cannot take advantage of both incentives at once. This implies they may only claim one of the two tax benefits accelerated depreciation or generation-based incentives.

Purchase obligation that Renews

The National Action Plan on Climate Change is set up to enhance the usage of renewable energy in India. This strategy calls for an increase in the penetration of renewable energy in India to percent. Renewable Purchase Obligations are imposed by SERCs in order to meet this goal. Due to this mandate, distribution firms must acquire a certain proportion of the total amount of electricity they need from renewable energy sources. The state-level Renewable Purchase Obligations range from 2 to percent of their overall energy consumption when you look at the present situation. These firms, which fall under the open access and captive customers categories, are likewise subject to this responsibility.

Additional Information on the Indian Renewable Energy Scenario

In India, the development of renewable energy is still in its infancy. The overall grid-connected renewable energy capacity has reached.5 GW, according to the most current estimates. Out of.5 GW, wind energy makes up around % at.8 GW, while solar energy makes up about GW. One area where the federal government is particularly optimistic is solar energy. The government has a lofty goal of increasing wind and solar energy production in India to MW and 0 GW, respectively, by. Jawaharlal Nehru National Solar Mission was established in the year with the goal of dominating the production and use of solar energy globally. It initially set a goal to reach the production GW by. The National Solar Mission aim, however, has since been changed by MNRE from GW by to 0 GW by. One of the innovative initiatives the ministry of electricity introduced was a large-scale rooftop project. It has set the goal of reaching a GW capacity by. You may have read recently in the media that a number of solar power parks would be built in Rajasthan, Madhya Pradesh, and other states [9].

The project using renewable energy calls for a large financial outlay. Engineering procurement and construction project expenses include cost structures. However, the tax burden on these initiatives is also quite high. To make the project profitable and appealing to private investors, this must be decreased. The central government of India has provided a number of financial incentives for the creation of renewable energy generating plants. For instance, some commodities essential for the establishment of these initiatives are free from customs and excise tax.

CONCLUSION

In conclusion, interest rate swaps are an essential financial tool used to manage interest rate risk in finance. By exchanging future interest rate payments on a notional amount of principal, parties can hedge against interest rate fluctuations, manage cash flow, and reduce financing costs. However, interest rate swaps are complex financial instruments that require a high level of expertise to manage effectively. The parties involved must carefully evaluate the risks and benefits of entering into a swap agreement and understand the potential impact of changing interest rates on their cash flows. Overall, interest rate swaps are a useful tool in finance but should only be used by experienced professionals with a thorough understanding of the underlying financial concepts.

REFERENCES:-

- [1] I. Chatziantoniou, D. Gabauer, and A. Stenfors, 'Interest rate swaps and the transmission mechanism of monetary policy: A quantile connectedness approach', *Econ. Lett.*, 2021, doi: 10.1016/j.econlet.2021.109891.
- [2] U. J. Jermann and V. Z. Yue, 'Interest rate swaps and corporate default', *J. Econ. Dyn. Control*, 2018, doi: 10.1016/j.jedc.2018.01.022.
- [3] L. H. P. Lang, R. H. Litzenberger, and A. Luchuan Liu, 'Determinants of interest rate swap spreads', *J. Bank. Financ.*, 1998, doi: 10.1016/S0378-4266(98)00068-5.
- [4] L. Baker, R. Haynes, J. Roberts, R. Sharma, and B. Tuckman, 'Risk Transfer with Interest Rate Swaps', *Financ. Mark. Institutions Instruments*, 2021, doi: 10.1111/fmii.12135.
- [5] R. Calcagni T., 'Implied monetary policy extracted from interest rate swaps in chile', *Rev. Anal. Econ.*, 2020, doi: 10.4067/s0718-88702020000200003.
- [6] C. Xiao, Y. Zhang, and Z. Fu, 'Valuing interest rate swap contracts in uncertain financial market', *Sustain.*, 2016, doi: 10.3390/su8111186.
- [7] S. Balsam and S. Kim, 'Effects of interest rate swaps', J. Econ. Bus., 2001, doi: 10.1016/s0148-6195(01)00048-0.
- [8] J. Liang and H. Zou, 'Valuation of credit contingent interest rate swap with credit rating migration', *Int. J. Comput. Math.*, 2020, doi: 10.1080/00207160.2020.1713315.
- [9] K. T. Saunders, 'The interest rate swap: Theory and evidence', *J. Corp. Financ.*, 1999, doi: 10.1016/s0929-1199(98)00017-0.

CHAPTER 18

THE ROLE OF GOVERNMENT GUARANTEES

Srinivas Shirur, Professor

Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-shirur@gmail.com

ABSTRACT:

Government guarantees are a financial tool used by governments to provide support and reduce risk in various sectors of the economy. A government guarantee can take many forms, including loan guarantees, deposit guarantees, and insurance guarantees. Loan guarantees are designed to reduce the risk of lending by providing a government guarantee to repay a portion of the loan in the event of default. Deposit guarantees protect depositors by ensuring that their deposits are safe in the event of a bank failure. Insurance guarantees protect policyholders by providing government backing in the event of insurance company insolvency. Government guarantees can be beneficial in many ways, such as increasing access to credit for small businesses, supporting the stability of the financial sector, and promoting economic growth. However, they can also create moral hazard by incentivizing risk-taking behavior by lenders or borrowers.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

These exemptions do, however, have some limitations. They must adhere to certain requirements in order to get these benefits. These financial incentives have been offered by some state governments in addition to the federal government. As an example, several governments have lowered the VAT rate from to 5 percent. Different governments, both at the federal and state levels, have provided a variety of incentives, such as tax holidays, subsidies, fiscal incentives, etc. Therefore, it is crucial for any investor to consider all available incentives and make investment plans in the industries that provide the best risk/reward ratio. Additionally, it is crucial for foreign investors who intend to make investments in India. There are some tax havens with which India has tax treaties [1], [2].

Many foreign investors benefit from this tax treaty in terms of tax efficiency with regard to the taxability of gains from the sale of shares. As a result, businesses involved in the renewable energy industry import the necessary equipment and services from outside. India is not self-sufficient in creating components for the sector. In such a case, contract structure is crucial to the producer of renewable energy obtaining significant tax efficiency. India has a number of entity types that may be set up to do business in the renewable energy industry. One of these choices that is particularly popular with international businesses looking to organize a joint venture or a fully owned subsidiary is a limited liability partnership. Additionally, since the renewable energy industry is

known for its high capital requirements, businesses must carefully consider the options available for funding their projects and tax-efficiently remitting profits.

Many developing nations have tried to use tax incentives to encourage a larger flow of domestic savings to infrastructure development in response to weak debt markets. Many nations utilize a variety of incentives, with tax holidays for profits from private infrastructure projects being the most often used in China, India, and Thailand. The purpose of this instrument is not always to aid in domestic debt financing. However, it makes the project more profitable and enables it to compete more successfully with other claimants for limited domestic debt. The project can support higher debt service payments thanks to the extra cash flow tax savings provide. Because long-term debt is limited, it makes it possible to handle finance with shorter maturities. If a person owns stock or items that are connected to equity, they may also get incentives in the form of exemptions. For instance, Section C of the Indian Income Tax Act exempts from tax long-term savings made by individuals in the form of Provident Fund contributions or premiums for life insurance plans. This tax break has now been expanded to include investments in infrastructure project shares or bonds. Similar to this, capital gains from the sale of shares are not subject to taxation if the proceeds are used to purchase equity or debt securities issued by infrastructure projects.

Financial intermediaries may also be the target of tax incentives. India encourages its financial institutions to provide long-term financing for infrastructure. Financial institutions are permitted to deduct from income when calculating taxable income a percentage of the profit due to such loans. Purists disagree with tax incentives because they consider them to be indirect subsidies, which are often unjustified. However, it draws in private capital during the early stages of investment, so it should be promoted. Concerns about the investor receiving a windfall profit from tax benefits may exist. However, that can be achieved by ensuring a competitive process for setting tariffs or license fees. Tax incentives fundamentally enable private investors to provide services to consumers at lower costs than would otherwise be achievable under such a system. When private investors receive these tax breaks, it also creates a level playing field for them because public sector suppliers benefit from a variety of undetected subsidies.

Government Guarantee Purpose

A common problem that comes up when funding infrastructure projects in the private sector is the government guarantees. It has to do with the fact that private investors look for guarantees to cover a range of possibilities. However, using the government's guarantee power excessively is not acceptable. If the guarantee is used, there might be a potential cost to the exchequer that materializes into a genuine expense. Due to actual shortcomings in financial viability, money is sometimes refused for projects that have financing issues. In such circumstances, government assurances cannot be used to cover the flaws; they must be fixed at the source.

However, there are times when expanding government guarantees is both necessary and appropriate. The government guarantee should be employed in situations when the government has complete authority, such as when a project is nationalized, forced to stop, or when specified government requirements are not met. In each of these situations, expanding government guarantees lowers prices and the perception of risk. When the assurances provided by entities under government control are not deemed acceptable by the marketplace, government guarantees may also be sought to support their debts. For instance, private power providers may demand guarantees from the government to cover nonpayment for electricity when selling power to public utilities.

They can also anticipate the government to provide financial support for fuel supplier guarantees to the public sector in the event of fuel supply contract failures. Government guarantees are needed in both of these instances due to the lack of financial credibility of the directly engaged purchasing and providing firms. It will take some time for this transition. In reality, after a legitimate restructuring process has been started, it can take several years for these firms to regain complete financial credibility in the financial markets. Government guarantees may need to be offered as a temporary solution at this time since the assurances of these companies are often not acceptable. Extension of government guarantees in these situations is acceptable as long as the projects are viable and more fundamental remedial measures are being taken.

DISCUSSION

The principles of tax incentives and their benefits and drawbacks for the economy have been covered in this section. We also reviewed and commented critically on current policy that is important for the development of infrastructure sectors. State governments must extend the exemption from state charges like VAT, entry tax, and stamp duty etc. for these projects in order to encourage private sector involvement in infrastructure projects. To attain the goal of comprehensive infrastructure development, it is imperative that authorities at the Central and State levels collaborate. In order to move India onto a high development trajectory, a comprehensive strategy to providing incentives for infrastructure investments is necessary.

Benefits of Accelerated Depreciation: Using this technique of depreciation, businesses are able to write off their assets more quickly in the early years compared to when using the straight-line depreciation method and to write off less in the later years. Consequently, it offers the company a better tax shelter [2]. A company's capital expenditures are the monies used to buy, renovate, or replace tangible assets like buildings or machinery.

External Commercial Borrowings: A foreign source of funding is an external commercial loan. As a result, businesses may raise or borrow money in foreign currencies from other nations. Engineering Procurement and Construction (EPC) is a specific kind of contractual structure that is used in several sectors. Under an EPC contract, the contractor is in charge of all project-related tasks, including design, procurement, construction, commissioning, and handover to the end-user or owner. When a producer consumes or purchases input from another provider, they are given an input tax credit. Minimum Alternate Tax (MAT) is a method of ensuring that businesses pay the least amount of tax possible. This MAT is covered by Section 5JA, which was adopted in the following year. MAT as of right now is 5%.

Special Purpose Vehicles: In order to implement the infrastructure project, a special purpose vehicle or organization is often formed. Even if the parent business files for bankruptcy, the project won't be affected by this arrangement. Tax Evasion: Tax evasion is the deliberate failure of a person or entity to pay their real tax obligations. According to Indian law, the activity is forbidden

and is subject to legal action [3]. Value-added tax, known in some countries as goods and services tax, is a type of general consumption tax that is incrementally collected based on the value added at each stage of production. It is typically implemented as a destination-based tax, meaning that the tax rate is based on the location of the customer.

Written Down Value: Depreciation is charged on the book value of the asset using this method. It is sometimes referred to as the "reducing balance method" since the yearly depreciation charge causes the book value to continually decline. The numerous incentive programs and tax holidays offered to various types of projects in India were the main topics in the preceding parts. You will discover more about development finance institutions and export credit agencies in this section. These Institutions are crucial for the development of an economy and operate as catalysts for the promotion of the infrastructure and exporting sectors.

Credit Agencies for Export

ECA serves as a middleman to provide export finance between national governments and exporters. Depending on the mission the ECA has been granted by its government, funding may be provided in the form of financial assistance, credit insurance and guarantees, or both. It is also regarded to be an investment insurance agency and a private or quasi-governmental organisation. This resembles typical banking operations in certain ways. Some organizations are supported by the government, while others are independent [4].

The Indian company Export Credit and Guarantee Corporation Limited

The Ministry of Commerce & Industry, Department of Commerce, Government of India maintains administrative supervision of the Export Credit Guarantee Corporation (ECGC), which was founded in July to boost the export promotion by covering the risk of exporting on credit. The Board of Directors, which oversees the ECGC, is made up of officials from the government, the Reserve Bank of India, banks, insurance firms, and the exporting community.

In each transaction made via the ECA, it is crucial that commercial banks and exporters also share risks. Coinsurance and reinsurance agreements with their own governments, foreign reinsurance companies, and other ECAs are just a few of the risk-diversion strategies that ECAs around the world use. Successful ECAs operate under the tenet that an ECA must be profitable over the long term in order to survive. Because of this, interest rates and premiums accurately represent company expenses and the cost of sustaining capital. Market-based interest rates as well as premiums for guarantees and insurance are used to pay for relevant claims and administrative costs.

Diversification of Operations

The top ECAs provide a wide variety of goods, including loans, guarantees, insurance, and technical support, in order to be completely effective. These programs' usage and demand, as well as their profitability, will change throughout time. The ECA optimizes its influence on exports and balances out poor returns in certain regions with better returns in others by providing a variety of programs. Additionally, the programs complement one another. Technical help, for instance, may lower risks and enhance transaction payback when loans, guarantees, or insurance are used to support the transaction [5], [6].

Management Excellence

Finance specialists with substantial past expertise in the operation of private financial institutions are essential for effectively running ECAs. They are adaptable, effective, and profit-driven managers who are well-versed in trade finance strategies. The ECA offers pay that is equal to those in private sector banks in order to attract and retain such workers.

Procedure Efficiency

The best ECAs keep their administrative processes and paperwork to a minimum. The processing time for loans, guarantees, and insurance is no longer than five days. Instead of producing memos, its internal analysis is often limited to a checklist process. Depending on the risks they are ready to accept and the processes they adhere to, officers within the firm are granted discretionary power, and exporters and banks are given adequate authority.

Ruthless Marketing

Competitive marketing is crucial to the success of ECAs. Its goal is to promote the use of ECA programs by educating banks and exporters about them. A marketing tool is used to advertise their services, and it is targeted at exporters of all shapes and sizes as well as to all geographical areas of the nation.

Knowledge of Credit Analysis

Loan officers and underwriters at successful ECAs have strong judgment, a wealth of knowledge, and a command of risk analysis tools. As the ECA learns from its errors and improves its abilities, losses caused by insufficient analysis in the early years are eventually decreased. Successful ECAs adopt commonly recognized commercial norms when requiring collateral and guarantees. Competitive realities and the viability of enforcing collateral rights are taken into consideration while determining security standards. The emphasis of underwriting policy is on selecting securities that are compatible with the acceptable risk thresholds for the whole portfolio [7]. The top ECAs use the most up-to-date financing methods and tools, adapting them as necessary to keep up with overseas competition. These ECAs work hard to educate the banks and exporters in their countries about financial innovations and effective risk management.

Financial institutions known as development financial institutions were founded with the intention of offering project assessment and project financing to the Indian industry. The first DFI to be founded was the Industrial Finance Corporation of India. Any nation's industrial sector is the foundation of its economy. Therefore, it is crucial to maintain the industrial sector's strong and sound health. For this reason, the governing and regulatory authorities should make sure that these financial institutions do not encounter any obstacles when trying to raise money at lower rates since the money will be used for both funding innovative technologies and lending on a priority basis. Project evaluation and long-term financing for routine projects and innovative technologies are not made possible by the conventional banking industry. DFIs were founded as a result of this gap in order to meet the unique demands of the Indian industrial sector and ensure its success and the health of the Indian economy. In order to address market shortcomings, particularly with respect to the financing of long-term investments, DFIs are established in developing nations. The

DFIs were crucial to the quick industrialization of continental Europe. Many of the DFIs have received funding from national governments and international organizations. In the Netherlands, the first government-sponsored DFI was established. The first few French development organizations to engage in long-term finance were Credit Foncier and Credit Mobiliser. Japan's quick industrialisation was facilitated by the Japan Development Bank and other term lending institutions from Asia. The success of these institutions served as a solid foundation for the development of DFIs in India after independence [8].

Indian Financial Finance Corporation Ltd

The Industrial Finance Corporation of India, which falls under the purview of the Industrial Finance Corporation Act, was created on July 1 as the first Development Financial Institution in the nation. Establishing IFCI served the purpose of providing institutional credit to medium- and large-scale industries. IFCI's status was transformed to a public limited company on July 1 in order to provide it greater operational independence and flexibility. It is a corporation, and its shareholders elect its board of directors.

- i. **Project Financing:** This is IFCI's main line of business. Funding green field initiatives was the major reason for the DFI's formation. Green field projects are those that are started from scratch. Here, IFCI offers medium- or long-term loans for starting new projects, plans for project development or diversification, and plans for modernizing or balancing existing enterprises. These loans may be given in the form of rupee loans, loans in foreign currencies, the underwriting and subscription of shares and debentures, and the offering of guarantees for loans and payments that have been delayed, among other options.
- ii. **Financial Services:** IFCI offers all the financial services that corporations may require, including working capital term loans, short term loans, equipment procurement loans, installment credit, supplier/buyer credit, leasing and hire purchase issues, and equipment financing [9].
- iii. **Corporate Advice Services:** IFCI also offers corporate advice services. Investment banking, projects, infrastructure, corporate finance, and corporate restructuring are a few of the topics it covers. Additionally, it aids corporations in the creation of joint ventures, bid process management, investment appraisals, business restructuring, and disinvestments. It advertises, serves as a channel partner for channelizing foreign direct investments, and offers potential foreign investors a variety of services. Additionally, it addressed consulting services in a number of infrastructure industries, including insurance, telecom, oil and gas, and electricity.

IFCI offers a wide variety of services to potential foreign investors. iv) Corporate Advisory Services to Foreign Investors. Some of the services include facilitating foreign business entities through information services, coordination for obtaining the necessary approvals/clearances from government departments and agencies, inputs on markets, materials, and labor that are readily available in the nation, necessary office infrastructure for the start-up operations of the organization, inputs on readily available manufacturing facilities, syndication services for obtaining the required capital, mergers, and amal. The IFCI has established several services, including investor services, custodial services, rating services, corporate consulting services, venture capital services, etc., to enhance the capital market and create a favorable investment climate in India. In order to meet each target client segment's unique financial demands, IFCI offers a variety of products. From one business category to another, these product offerings vary. IFCI ensures that these items optimize client satisfaction by personalizing the product mix. The product mix is a critical differentiator for establishing, maintaining, and growing relationships with borrowers because IFCI has the necessary subject expertise and innovation.

CONCLUSION

In conclusion, government guarantees are an essential financial tool that governments use to support various sectors of the economy. Whether in the form of loan guarantees, deposit guarantees, or insurance guarantees, they play a crucial role in promoting economic growth, increasing access to credit for small businesses, and ensuring the stability of the financial sector. However, the use of government guarantees comes with potential risks such as moral hazard, which can incentivize risk-taking behavior by lenders or borrowers. Governments must carefully evaluate the potential risks and benefits of government guarantees, taking into account the impact on taxpayers and the overall economy. Despite the potential risks, government guarantees remain an important tool for governments to support economic growth, especially during times of economic uncertainty. By providing a safety net for borrowers, depositors, and policyholders, they promote stability in the financial sector and help to maintain the confidence of investors and consumers.

REFERENCES:

- [1] D. Susanto, I. Abadi, and Y. M. Wardhana, 'The role of government guarantees in environmental and social management for infrastructure development', in *IOP Conference Series: Earth and Environmental Science*, 2019. doi: 10.1088/1755-1315/399/1/012123.
- [2] P. Liu, H. Li, and H. Guo, 'The impact of corruption on firms' access to bank loans: evidence from China', *Econ. Res. Istraz.*, 2020, doi: 10.1080/1331677X.2020.1768427.
- [3] Y. Dong, Q. Hou, and C. Ni, 'Implicit government guarantees and credit ratings', *J. Corp. Financ.*, 2021, doi: 10.1016/j.jcorpfin.2021.102046.
- [4] K. Jeske and D. Krueger, 'Housing and the Macroeconomy: The Role of Implicit Guarantees for Government-Sponsored Enterprises', *SSRN Electron. J.*, 2011, doi: 10.2139/ssrn.811004.
- [5] D. Manheim and D. Foster, 'Option-based guarantees to accelerate urgent, high-risk vaccines: A new market-shaping approach', *F1000Research*, 2021, doi: 10.12688/f1000research.26482.2.
- [6] M. Ding, Z. He, Y. Jia, and M. Shen, 'State ownership, implicit government guarantees, and crash risk: Evidence from China', *Pacific Basin Financ. J.*, 2021, doi: 10.1016/j.pacfin.2020.101470.
- [7] D. Heald and R. Hodges, 'Accounting for government guarantees: perspectives on fiscal transparency from four modes of accounting', *Account. Bus. Res.*, 2018, doi: 10.1080/00014788.2018.1428525.

- [8] F. Allen, E. Carletti, I. Goldstein, and A. Leonello, 'Moral hazard and government guarantees in the banking industry', *J. Financ. Regul.*, 2015, doi: 10.1093/jfr/fju003.
- [9] V. Elenev, T. Landvoigt, and S. Van Nieuwerburgh, 'A Macroeconomic Model With Financially Constrained Producers and Intermediaries', *Econometrica*, 2021, doi: 10.3982/ecta16438.

CHAPTER 19

FUNCTIONS OF SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

Amit Kansal, Professor Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-amit.kansalmrt@gmail.com

ABSTRACT

Small industries development is a critical component of economic growth and development. Small industries are typically defined as businesses with low capital investment, fewer employees, and smaller market shares. These industries play a significant role in creating jobs, fostering entrepreneurship, and promoting economic growth in many countries. Governments often implement policies and programs aimed at supporting small industries' development, including providing financial assistance, training, and technical support. This support can take many forms, such as tax incentives, subsidized loans, and grants. Small industries development is particularly important in developing countries, where it can help to reduce poverty, increase access to goods and services, and promote economic diversification. However, small industries often face significant challenges, such as limited access to credit, lack of skilled labor, and inadequate infrastructure.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

In the year, the Small Industries Development Bank of India (SIDBI) was established. It was established by the SIDBI Act, an Act of Parliament. SIDBI was granted the authority to operate as the main financial agency for promoting financing and growing small-scale enterprises as well as coordinating the operations of other organizations involved in related activities. It began operating in April after assuming the Industrial Development Bank of India's delinquent portfolio pertaining to the small-scale industry. With reference to this, the central government has placed the public sector banks, LIC, GIC, and other organizations under its ownership and management, as well as the percent equity shares of SIDBI held by IDBI. Currently, SIDBI's shareholders include banks, insurance providers, investment firms, and financial institutions. Still holding a % stake in SIDBI is IDBI.

The SIDBI's goals are:

SIDBI was established by the Indian government with the intention of ensuring a greater flow of aid to small-scale businesses. SIDBI immediately determined the following thrust area in order to accomplish this goal. These measures are in the following areas:

- i. The modernization and technological upgrading of existing units will begin.
- ii. Increasing the marketing of the small-scale sector's goods.
- iii. To increase job possibilities, employment-oriented industries should be supported in semiurban regions.

Activities of SIDBI:

Through the nation's current banking and other financial institutions, such as State Industrial Development Corporations, commercial banks, State Financial Corporations, cooperative banks, and Regional Rural Banks, etc., SIDBI offers assistance to the small-scale industries sector. The following list includes SIDBI's primary duties:

- i. Refinancing of loans and advances: Small-scale enterprises are given access to this facility.
- ii. Discounts and rediscounts on bills: It offers discounts and rediscounts on bills for machinery sales to and production by small-scale industrial units.
- iii. Assistance with seed capital via the National Equity Fund, MahilaUdyamNidhi, etc.
- iv. Direct assistance and refinancing loans provided by major lending institutions for the purpose of funding the export of goods produced by small-scale businesses. Leasing, factoring, etc. for small units.
- v. Financial assistance to State Small Industries Corporations for the purpose of marketing and supplying raw materials to small-scale businesses.

India's Export-Import Bank

The Export-Import Bank of India is a specialized financial organization completely controlled by the Indian government that was founded in the same year. The creation of the EXIM bank was done with the intention of funding, facilitating, and promoting Indian exports abroad. Goals of the EXIM Bank: The major goals of the EXIM Bank are listed below.

- i. To pay close attention to capital goods exports
- ii. To make sure that Indian exporters do not encounter any related issues.
- iii. An export forecast;
- iv. To support and promote joint ventures.
- v. Encourage merchant banking
- vi. To increase lines of credit and buyer credit;
- vii. To get resources for the export industry from both local and international markets.

The following are the responsibilities of the Export-Import Bank:

a. **Finance for exports and imports:** The EXIM bank offers support by financing India's exports and imports of products and services. One of the primary emphasis areas the Indian government has adopted recently is the export of goods with value added. As an example, in the past, we exported skins and Hades from India. We now export leather items made of processed leather. As a result of this change, exporters' revenue has increased significantly. Similar to this, the EXIM bank offers loans for the import of raw materials like gold since it would be exported as jewelry, which is once again an export with value added [1], [2].

- b. **Finance on a delayed basis:** The EXIM Bank provides deferred financing for the import of machinery and capital goods. In this facility, the EXIM bank provides guarantee on behalf of the importer and enables the importer to make payment to the foreign exporter on an installment basis because the cost of capital equipment in foreign countries used to be very high and the Indian importer cannot afford to pay lump sum payment in foreign exchange. The bank may sometimes pay the whole price to the overseas exporter in one lump sum and then obtain monthly payments from the Indian importer.
- c. Lease Finance: EXIM Bank offers lease financing to Indian importers who want to purchase equipment from other countries. In this leasing, the lessee will be in India while the lessor will be in a different country. The Indian lessee is assisted by the EXIM bank in leasing out capital equipment and making lease payments in foreign currency. Additionally, it is advantageous for import leasing, where the lessor and lessee are both Indian, but the imported equipment may originate from other nations.
- d. **Finance for export projects:** The EXIM Bank also provides funding for initiatives intended for Third World nations. There are several actors in India who work on Third World projects, such as the Tanzanian railway project, the Omani road and airport project, the Oil and Natural Gas Commission's acquisition of oil wells in Kuwait and Iraq, etc., which are funded by the EXIM bank. EXIM Bank provides the necessary financing for the purchase of equipment or labor.
- e. Line of credit: In order to enhance Indian exports, the EXIM bank offers lines of credit to overseas importers. In a line of credit, the EXIM Bank finances the central bank of the borrowing nation, which in turn funds the commercial bank, which in turn funds the importer. Since there is a guarantee of funds at every stage, this type of credit is secure. Refinance in foreign currency is another service offered by EXIM Bank. In order to do this, it raises a large amount of loans in foreign currencies on the foreign exchange market and offers refinancing to the financial institutions that provide export financing. Different exporter types may need various foreign currencies, which the EXIM bank purchases at a competitive interest rate and provides to commercial banks for financing to exporters. Because of the EXIM bank alone, commercial banks may provide pre-shipment and post-shipment financing to various exporters.
- f. **Contribution to the equity fund:** The EXIM Bank may make investments in the shares and debentures of export-oriented enterprises as part of its investment strategy or via portfolio investments. In this process, EXIM Bank also buys shares or debentures from Indian export-oriented companies and then gives the exporters money to fund their expansion plans. Since it won't hold the shares for an extended period of time, the bank typically extends this facility as a temporary financing.
- g. **Consultancy Services:** The EXIM bank also offers technical, administrative, and other support to exporters. First, the EXIM bank looks at the projects' technical, managerial, marketing, and financial viability. Once it is determined to be viable in every regard, it will receive funding.

In addition to the support mentioned above, it offers discounted services for export invoices. Additionally, export financing is available for software. Assistance with market development is given to exporters so they may engage in marketing and sales promotion activities abroad [3], [4].

Natural Bank for Agriculture and Rural Development

Mr. Gorewalla was chosen by the Indian government and reserve bank to lead the committee tasked with researching agricultural credit in India in order to enhance rural lending. The RBI adopted the committee's recommendations and put them into practice. These suggestions served as the foundation for RBI to launch two significant funds that would lend money to cooperative banks and state governments.

Being the head of India's monetary systems, it was very challenging for RBI to concentrate on agricultural finance. Additionally, Agricultural Refinance Corporation was unable to provide the full amount of financing and refinancing needed. A separate organization was established to supply agricultural financing when it was decided to delink agricultural finance from the RBI in light of the expanding need. Under the leadership of Mr. Shivaraman, a Committee to Review the Arrangement for Institutional Credit for Agriculture and Rural Development was established in the year.

Following Mr. Shivaraman's recommendation being approved, NABARD was established in July.

Nabard's Source of Capital

NABARD was founded with a Rs. 0 crore authorized capital. To start operating, it took over a number of RBI subsidiaries, including the Agricultural Credit Department, the Rural Planning Credit Cell, and the Agricultural Refinance and Development Corporation. The subscribed and paid-up capital of NABARD as of March was Rs. crores.

The Central Government has donated Crores, while the RBI has contributed the remaining Crores. The RBI has also given NABARD a loan of Rs. 1,0 Crores for its growth. Later, loans for agriculture that were given by the RBI to various State Governments and State Cooperative Banks were also transferred to NABARD. Currently, the NABARD is recognized as the premier organization for agricultural financing. It not only has implications for agriculture financing but also encourages the growth of rural communities.

The mission of NABARD

NABARD was founded to accomplish the following goals:

- i. Refinance its major objectives are to support agricultural refinancing and promote rural development initiatives.
- ii. Financial support for small-scale businesses.
- iii. Make irrigation easier by encouraging agricultural pursuits.
- iv. Encourage research and development in rural and agricultural sectors.
- v. Financial support for numerous agricultural production-related groups. The NABARD's following functions are deduced from the aforementioned goals.

Functions:

- 1. **Facilities for refinancing:** It offers refinancing to the majority of commercial banks, as well as to state cooperative banks, central cooperative banks, regional rural banks, and land development banks.
- 2. **Bank financing:** It makes loans to commercial and cooperative banks possible so that they may provide credit to these small, cottage, and rural businesses.
- 3. NABARD offers specific support under its service area strategy for the advancement of small scale, hamlet, and village industries.
- 4. **Discounting of bills:** NABARD offers commercial and cooperative banks the ability to fund agricultural businesses.
- 5. **Money for promotion and development projects:** The NABARD gives money to state governments so they may carry out promotion and development projects in rural regions. It supports regional rural banks that are established in underdeveloped regions of most States.
- 6. **Long-term loan:** Under the State government's guarantee, NABARD also offers long-term loans to institutions engaged in long-term agricultural loans.
- 7. **Research and Development:** The agricultural and rural industries are also receiving funding from NABARD for research and development. Additionally, it puts into practice the RBI's and the Central Government's policies for agricultural lending.
- 8. **Finance for non-farm activities:** It provides funding for non-farm activity in order to significantly reduce rural unemployment.

In order to develop the co-operative structure in the States, it provides loans to both State co-operative banks and Land Development Banks [5].

DISCUSSION

The State Finance Corporation Act was approved by the Indian government, giving state governments the authority to establish state finance companies. Its purpose was to satisfy the financial requirements of small and medium-sized industrial entities not subject to Industrial Finance Corporation regulation. The State Finance Corporation was initially established by the state of Punjab. Various SFCs are currently in operation across the nation [6].

The following are the roles that SFCs play.

- 1. **Financial support for small units:** The main reason the SFC was founded was to provide long-term loans to small and medium-sized businesses. These loans had an annual repayment term.
- 2. **Loan guarantees:** If industrial units are looking for loans from commercial banks, SFC offers a guarantee on their behalf.
- 3. **Subscription and Underwriting:** SFCs both subscribe for and underwrite the issuance of stock, shares, and bonds when small-scale businesses desire to raise capital by issuing new debentures or debentures. If certain small-scale enterprises

want to buy machinery, equipment, etc. inside the nation, SFCs will issue a guarantee for deferred payments in such instance.

4. **Government agents:** Both the federal and state governments sometimes need agents to approve and disburse loans to these industrial enterprises. In this situation, SFCs serve as an agent.

The function and significance of export credit agencies have been covered in this section. We also learned about the Export Credit Guarantee Corporation's key duties in India and how they are impacting the country's export industry. The significance of development finance institutions in India was also covered in depth in this subject. The National Bank for Agriculture & Rural Development, Small Industrial Development Bank of India, Industrial Finance Corporation of India Ltd., and Export Import Bank of India were some of the national level development finance institutions that were specifically mentioned. We eventually learned what State Finance Corporations do [7].

Bad debt is created when a business obtains a bank loan but is unable to pay back the principle and interest.

Collateral: A borrower is required to retain certain types of security with the lender as collateral. The lender may sell the collateral to recoup its losses if the borrower defaults on the obligation. Corporate

Finance: Corporate finance is a discipline that focuses on an organization's financial operations in order to maximize shareholder value. Corporate finance includes choices on working capital, debt or equity financing, and capital investments. The custodial services provide a variety of security services, such as safekeeping and settlement, reporting, corporate activities, dividends collecting and distribution, proxy voting, tax reclaim services, fund administration, and the provision of market news and information. Deferred Payment: In a contract, the borrower is permitted to begin paying payments at a future date that is defined.

Bill Discounts: Discounting is the process of transforming bills into cash. Discount is the phrase used to describe the fact that certain corporations get less cash when their bills are converted into cash than the face value of the bill. The government export credit agency, the Export Credit Guarantee Department, offers financing options and credit insurance for exporters who are unable to get assistance from the private sector.

Initial Public Offerings: An initial public offering is when a company makes its shares or debentures available to the general public for the first time. Investment banking is the name of a private enterprise that offers a range of financial services as well as other goods and services to people, businesses, and governments. These services might include underwriting or serving as the client's agent during the issue of securities in order to raise funds [8].

Lease: A lease is a legal agreement that specifies the conditions under which one party consents to rent property that belongs to another party.

Lines of Credit: A line of credit is a contract between a financial institution typically a bank and a borrower that specifies the largest loan amount that may be accessed or maintained. A non-

banking financial company, or NBFC, is a firm that offers financial services. These financial services range from loans and advances to the buying of stocks, bonds, stock hire-purchase, insurance companies, and more. Preoperative expenditures: Before the operation can begin, there are certain costs that must be paid when the factory is created. These costs are classified as preoperative expenditures. Financial institutions that subscribe for the shares and debentures of Indian listed companies are known as qualified institutional purchasers [9].

Rights offers: When a firm offers shares to its current shareholders in order to obtain new money, this is referred to as a right issue. Underwriting: Investment bankers use underwriting to get funding from investors on behalf of businesses and governments that are issuing either equity or debt instruments. Venture capital is a kind of funding offered by financial organizations to startup businesses that are considered to have a strong potential for development. Warrants are a kind of option that provide the holder the right, but not the duty, to purchase the underlying securities at a certain price and in a specific quantity at a later date. The preceding divisions concentrated on organizations like Export Credit Guarantee Corporation, EXIM Bank, etc. that provide financial support and credit facilities to Indian businesses that are export-oriented. Additionally, you gain knowledge of the various Development Finance Institutions' roles. You will study about numerous financial tools and several domestic and international sources of funding for projects in this subject.

CONCLUSION

Small industries development is particularly important in developing countries, where it can help to reduce poverty, increase access to goods and services, and promote economic diversification. However, small industries often face significant challenges, such as limited access to credit, lack of skilled labor, and inadequate infrastructure. Overall, small industries development is a crucial component of economic growth and development. Governments and other stakeholders must work together to support small industries by providing financial assistance, training, and technical support. By doing so, they can promote entrepreneurship, create jobs, and help to drive economic growth and development. In conclusion, small industries development is a critical component of economic growth and development. Small businesses are important drivers of job creation, innovation, and entrepreneurship, particularly in developing countries. Governments play a vital role in supporting small industries' development by providing financial assistance, training, and technical support. Policies and programs that support small industries development can take many forms, including tax incentives, subsidized loans, and grants.

These initiatives help to reduce poverty, increase access to goods and services, and promote economic diversification. However, small industries often face significant challenges such as limited access to credit, lack of skilled labor, and inadequate infrastructure. To address these challenges, governments must prioritize small industries' development and work with other stakeholders to provide the necessary support. This includes investing in infrastructure, providing access to credit, and promoting skills development. By doing so, they can help to create jobs, foster entrepreneurship, and promote economic growth and development, leading to a more inclusive and prosperous society.

REFERENCES:

- [1] M. L. Ashoka, T. S. Rakesh, and M. Abrishami, 'A Study on MSME Entrepreneurs' Perception Towards Financial Institutional Support', *J. Entrep. Manag.*, 2019.
- [2] K. Vanaja and M. S. Abhinaya, 'A Study on Role of Sidbi Towards Upliftment of MSME.', *EPRA Int. J. Environ. Econ. Commer. Educ. Manag.*, 2021.
- [3] J. Srivastava, 'The Cordial Link Microfinance sector and Make in India Impact of Make in India on SIDBI', *BVIMSR's J. Manag. Res.*, 2017.
- [4] M. Satyavathi and P. S. Ravindra, 'An Analysis on Financial Performance of Development Banks: A Case Study of SIDBI', Asian J. Manag., 2020, doi: 10.5958/2321-5763.2020.00045.1.
- [5] H. K J and D. R. Reddy, 'A Study on Youth Mindset on Awareness of SIDBI Loan Schemes with Special Reference to Bengaluru Urban and Rural', SSRN Electron. J., 2021, doi: 10.2139/ssrn.3915693.
- [6] K. S. Rao, 'The Role of SIDBI in developing the MSMEs in India', *IOSR J. Econ. Financ.*, 2013, doi: 10.9790/5933-0160814.
- [7] V. S. Vithalbhai, 'An Analytical Study of Selected Development Banks in India', *J. La Bisecoman*, 2021, doi: 10.37899/journallabisecoman.v2i4.427.
- [8] S. A. Lone, 'Analysis of Financial Position of Small Industries Development Bank of India', *Int. J. Sci. Res.*, 2018.
- [9] B. Kakde, T. C.-I. J. of Management, and undefined 2020, 'Empirical Analysis of Functioning of Financial and Non-Financial Supporting Institutions for Msme', *Researchgate.Net*. 2020.

CHAPTER 20

A STUDY ON INFLATION-INDEXED BOND

Srinivas Shirur, Professor

Teerthanker Mahaveer Institute of Management and Technology, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India Email id-shirur@gmail.com

ABSTRACT:

An inflation-indexed bond is a type of government bond that is designed to protect investors from inflation. The value of the bond is linked to an inflation index, which means that its principal and interest payments adjust for inflation over time. This helps to ensure that the bond's purchasing power remains relatively constant, even in times of high inflation. Inflation-indexed bonds are popular with investors who are looking for a low-risk investment that can provide a hedge against inflation.

They are typically issued by governments and are often used to finance infrastructure projects or other long-term investments. Investors who purchase inflation-indexed bonds receive a fixed interest rate, which is paid out semi-annually, in addition to the inflation adjustment. The adjustment is typically based on a consumer price index (CPI) or another inflation measure.

KEYWORDS:

Financial, Economical, Risk, Management.

INTRODUCTION

Project finance is considered as a long-term sources or method of financing large infrastructure and business endeavors. Instead of the investors' personal finances, the expected cash flow of the completed project is used to assess this funds. We are aware that there are several financial resources accessible for use in project funding. In order to optimize shareholder profits, a careful balance of debt and equity is always preferred. Here, the project's overall capital structure significantly depends on the debt used as a source of funding. You may find many kinds of debt instruments that are available for project funding in this area. There could be several debt instrument kinds.

A kind of debt instrument is a bond. To raise money from the market for its operations, it is issued by businesses or governmental organizations. It is a long-term investment with a maturity that might range from 5 to years. The fact that a bond has a fixed or variable interest rate is one of its key characteristics. A bond's holder gets a monthly interest payment, or coupon, and is entitled to the principal when the bond matures. The bond's ability to be negotiated is one of its most significant characteristics. It indicates that the instrument's ownership may be changed on the secondary market. As a result of its ease of sale on the secondary market, this also indicates that the instrument is very liquid.

Different Bond Types:

Bonds with fixed rates have an interest rate or coupon that stays the same throughout the duration of the bond. Floating rate notes: These bonds have changeable coupons that are based on benchmark interest rates like LIBOR or Euribor. For instance, if the three-month USD LIBOR plus 0 coupon rate. %, at which point the coupon rate will continue to change and be based on the three-month LIBOR rate. Zero-coupon bonds: Although they are issued at a discount to their face value, these bonds have no interest attached to them. The face value of the bond is paid to bondholders when it matures. Therefore, the gain bondholder holders get at maturity is represented by the difference between the face value and its discounted value. Bonds that have a credit rating that is below investment grade by credit rating agencies are referred to as trash bonds because they pose a danger to investors. Bonds that can be converted into equity over time are known as convertible bonds. Because they possess both the characteristics of debt and equity, they are also known as hybrid securities [1].

Bond that is inflation-indexed: In this kind of bond, both the interest and principal payments are linked to national inflation. Comparing this interest rate to fixed rate bonds with a similar maturity, it is maintained substantially lower. However, with rising inflation, the interest payment also rises as the principal amount does. Bonds with a subordinate status are regarded as having lower priority than the issuer's other bonds. Under the liquidation process, holders of subordinated bonds are paid after holders of senior bonds have received their payments in full. This hierarchy makes the risk associated with subordinated bonds greater. As a result, senior bonds often have a higher credit rating than subordinated bonds. Government bond: Also known as a Treasury bond, it is a security issued by the federal government. Bonds of this kind are not at danger of default. As a result, they are regarded as the safest investment vehicle and have the lowest interest rates.

Loan

A loan is a sort of financial aid that banks or other financial organizations provide to private persons or businesses. In accordance with this agreement, the borrower is required to pay interest at a fixed or variable rate during the duration of the loan. The loan is often offered in exchange for a security, such as equipment or real estate. Secured loans are those that are offered in exchange for security, whilst unsecured loans are those that are not. The loan agreement's specification of the repayment schedule, interest rate, and other terms incentivizes the lender to enter into the loan. Loan covenants are restrictions that may sometimes be included in loans [2].

Different Loan Types:

Project finance loans are given to projects by financial organizations as guarantees or to provide loans to projects. To assess a project's creditworthiness, they thoroughly examine its economic, technical, marketing, and financial soundness. They guarantee that the project will generate enough cash flow to cover all operating expenses and debt servicing. In order to keep the loan safe and secure, they also make sure that it is supported by collateral. As long as the standard certification tests for physical completion, operational implementation, and financial soundness are not passed, the project sponsors are obligated to support the foreign operation. Beyond the necessary completion commitments, sponsors may not be required to offer their own general credit until project funding is adequate. They ensure that there are no gaps in the project. This implies that even when the project is operational, all purchases and sales of the end product should be secured by long-term contracts. Lenders often charge interest rates of up to 2% on loans made to foreign borrowers, and depending on the nation, the cost of insurance-related expenses may vary from 2-4%. Therefore, even in the worst case, the overall cost will not increase by 6%.

Term loan: A loan given by commercial banks or NBFCs for business reasons is simply referred to as a term loan. It must be paid back within a certain time period. It normally has a set interest rate and a monthly or quarterly payback plan. Again, term loans might be secured or unsecured. Unsecured term loans are those where no collateral is needed, while secured term loans demand some kind of security. Compared to an unsecure term loan, a secured term loan has a lower interest rate charged by the bank. The following categories apply to this loan type depending on the payback period:

- i. **Short-term loans:** These loans have a duration of less than a year, and their repayment is due immediately.
- ii. Medium-term loan: This term loan's payback length ranges from one to three years.
- iii. Long-term loan: With this sort of loan, the payback duration is more than three years.

Bank overdraft facility: The firm may utilize this facility if it needs more money than it has on hand in its current account. In order for the borrower to be aware of the upfront cost of such a facility, banks often establish the interest that must be paid on overdrafts. It is thought of as a source of emergency cash [3], [4].

Letter of Credit: A letter of credit is given to the seller as a guarantee. It assures the provider of the commodity or service that they will get payment as long as the work is done. It is a specific kind of paper that a financial institution issues to guarantee payment to a seller as long as the seller provides the documentation that the bank or other financial institutions need. Because trading parties are unfamiliar with one another, importers and exporters in global trade use this type of facility.

DISCUSSION

Small and Medium Enterprise Collateral Free Loan: As the name implies, this kind of loan is often given to SMEs without the use of any collateral or outside guarantees. Since SMEs lack sufficient assets to use as security, banks or other financial institutions often supported by the government provide this form of loan to support SMEs in the nation. It may be used to equipment purchases, working capital needs, and growth plans for both new and ongoing businesses. It is not intended for small firms engaged in retail commerce, nevertheless [5].

Leasing

Another significant source of funding for equipment purchases is leasing, which is now a significant financial option for both industrialized and developing nations. Under leasing, a company receives the right to use a specific fixed asset in exchange for a set of regular, contractual payments that are tax deductible and are referred to as lease rentals. The majority of industrialized and developing nations finance around one-third of private investment via leases. One of a lease's

most frequent elements is that the lessee is required to make payments to the lessor in exchange for the right to lease a certain asset. Leasing primarily involves two parties:

Lessor: This refers to the entity that owns the property being leased

Lesser: Under a lease agreement, the recipient of the services or assets is known. There are two sorts of leases:

Operating Leases: In an operating lease, the lessor maintains ownership of the leased asset and is responsible for regular maintenance, including repairs and maintenance. It is intended for use for a shorter duration.

Financial Lease: In a financial lease, the lessee is responsible for covering the cost of the leased property's insurance and property taxes. Additionally, the lessee is responsible for maintaining and making repairs to the leased property. Debt finance may be substituted with financial leasing. The benefit of a financial lease is that it preserves the lessee's own financial ratios. The connection between a lender and an investor-borrower of a bank is comparable to that between a lessee and a lessor. Similar to the relationship between a bank and a borrower, the position of the lessor in a financial lease is fully subordinate to that of the lessee. Similar to the relationship between a bank and a borrower, the lessee is contractually obligated to make timely lease payments.

Typically, a third party is also involved in leasing. In a normal leasing procedure, leasing businesses purchase the necessary equipment from the manufacturer and rent it to the company that requires it for a certain length of time in exchange for an annual charge known as lease rental. Here, it's crucial to keep in mind that during the lease period, the lessor always retains ownership of the property and benefits from depreciation when determining corporate tax. However, since the lessee is the one using the asset, they benefit from lease rental because it is considered an expense. Therefore, to the extent that it pays the lease rental against the said assets, its tax liability is reduced.

Without taking on debt, the organization might get capital via equity financing. This means that there is no need to return a specified sum of money at any given moment. Lenders often limit the payment of dividends during the first few years of operation, until the loan has been fully repaid. A project cannot pay dividends before operations begin. Lenders insist that all free cash flow be used first to pay down project debt. Consequently, equity investors will have to accept postponed dividends if the project necessitates a lengthy construction period. Equity investors, however, would not fund a project if the anticipated benefits did not balance the project's risks.

Equity may take the form of ordinary stock, preferred stock, or both. It can also be public or private. The parties who will directly profit from a project's operations are normally its equity investors. These parties include those who will pay for the project's output, who will control whatever natural resource reserves it will use, and who will provide the project with necessary supplies and services. Common shares cannot often be offered to public investors at the start of a project. Common stock may be offered to the general public and other passive investors if the project company has shown some profitability and the start of cash distributions is not too distant in the future.

Lenders or investors use the equity in project financing as the foundation when providing loans for the project. Lenders see the equity investment as offering a safety cushion. Lenders that fund projects often demand equity commitments for three major reasons. Lenders want investors to have enough at stake to spur them to carry the project through to a successful finish. First, the more burden the debt places on the project's cash flow, second, the higher the lenders risk. A significant infrastructure project may be broken down into many segments. The construction phase includes a summary of the design, engineering, construction, erection, procurement, installation, and commissioning of the project facilities. The operational phase of a project consists of project management, operation, and maintenance [6].

Equity may be categorized as follows:

Common Stock/Ordinary Share Capital

When a company's assets are liquidated, ordinary shares are given last priority. However, they have the ability to vote, which gives them influence over business decisions. Ordinary shareholders typically get one vote per share.

Priority Stock

Stocks that are being sold contain characteristics of both common stock and debt. They are also referred to as hybrid instruments as a result. They are comparable to ordinary stock in that preference stock investors get dividends. However, since their payouts are set, they resemble a debt instrument.

Public Equity

The use of private equity as a source of funding for private limited companies is growing. In accordance with this approach, funds comprised of high net worth individuals' money directly invest in private businesses. The fundamental reason for investing in private equity is because private equity investors desire high returns on their investments. They may also purchase large stakes in public firms, which eventually leads in the delisting of public equities. These investments are made for a duration of 5-7 years, after which time they sell their interest to benefit from financial gains. Private equity investors typically anticipate a return on their investment of - % annually. As a result, they select medium-sized companies with significant growth potential that might expand over the course of the next 5-7 years. Depending on the company and amount of money obtained, different investors may have different minimum capital requirements. The minimum investment amount for some funds is \$ 0, while the amount needed for others might be in the millions [7].

A private equity firm needs enough capital to purchase a sizeable share in a private business. They raise money for this by distributing prospectuses to prospective investors, who then decide to invest money in the fund. The private equity business may start raising money for an investment after it has pledges from several high net-worth people. Similar to this, they continue to introduce other funds depending on the demands of investment methods. The majority of funds have a set life, which means they must make their investments within a certain time frame. To attract investors with varied profiles, private equity companies may launch several funds concurrently.

Venture capital companies are distinct from private equity firms. Typically, private equity firms invest in privately held businesses or publicly traded businesses that want to go private. Alternatively, venture capital firms finance start-up and early-stage companies. Private equity firms often invest in older businesses, although venture capital firms typically steer clear of doing so. When pursuing leveraged buyouts, private equity companies may also use debt in their financing arrangements. The managers of private equity firms are paid an annual management fee that normally ranges from 1% to 2% of the invested capital as well as a percentage of the fund's net earnings. The smartest experts are drawn to these fees to handle these funds.

The federal and provincial governments have established a variety of unique financial institutions to provide long-term financing to the commercial businesses. These organizations provide financial support to both new endeavors like startups as well as to established businesses looking for money to expand and modernize their operations. Some of the well-known organizations providing excellent financial assistance include Industrial Finance Corporation of India, Industrial Investment Bank of India, Industrial Credit and Investment Corporation of India, Industrial Development Bank of India, State Industrial Development Corporations, and State Financial Corporations. These organizations are known as development banks or development financial institutions since they contribute to the improvement of the nation's entire industrial environment [8].

In addition to these development banks, there are a few additional financial organizations including Life Insurance Corporation of India, General Insurance Corporation of India, and Unit Trust of India that provide long-term financing to businesses and buy their shares and debentures. The primary duties of these institutions are as follows:

- i. They provide longer-term financing to help industries get off the ground.
- ii. They also aid in the establishment of new businesses by offering substantial sums of money with protracted gestation periods;
- iii. They aid the government in advancing the nation's underdeveloped areas.
- iv. They support business owners by offering technical expertise, specialized services in the fields of promotion, project support, and training and development.

Additionally, they aid in assessing the project's technical and financial viability so that the business owner can make wiser investment decisions.

Financial Companies That Are Not Banks

You must be aware of the many private sector businesses functioning in the home finance, investment, and car financing industries throughout our nation. These businesses fall under the umbrella of non-banking financial enterprises because they serve two purposes: they take corporate or public deposits and lend money to those in need.

However, since they don't engage in typical banking operations, they are not considered as banking organizations. They solicit donations from the general public and offer them incredibly alluring interest rates. The same money is loaned to small businesses, independent contractors, and

wholesale and retail dealers. These loans often have high interest rates since they are unsecured in nature. These interest rates range from % to % annually. The NBFCs provide services like bill/hundi discounting, merchant banking, home finance, lease financing, hire purchase businesses, etc. in addition to loans and advances. These NBFC are expanding quickly while charging borrowers with higher rates of interest. Their simplified loan sanction process, attractive rate of deposit return, flexibility, and promptness in addressing customers' credit needs are the main factors contributing to their popularity. Bajaj Finance, LIC Housing Finance, Indiabulls, Dewan Housing Finance, Religare, Aditya Birla Finance, Mahindra Finance, and others are some of the well-known brands in the NBFC industry in India [9].

In order to satisfy the long-term financial demands of the firm in India, foreign sources are also crucial. They fall into three categories: overseas investments, external borrowings, and NRI deposits. Let's examine each of them in further depth. As the name implies, it is a fund that is often obtained from another nation via debt. These are the kinds of loans that have lengthy maturities and are offered at low interest rates.

These types of loans are offered to corporate entities worldwide by several authorities and organizations. International Monetary Fund, Aid India Consortium, Asian Development Bank, World Bank, and International Financial Corporation are a few of the well-known organizations. These institutions were each created with a certain goal in mind. For instance, the World Bank offers loans to high-priority industrial units, which are disbursed either directly to a business or via a government agency. The World Bank funds initiatives in the fields of sanitation, health care, and education in underdeveloped nations. Similar to this, the IMF also provides funding to innovative and technologically oriented business entities whose goals are to improve humankind's quality of life. These loans are given out for eight to ten years. Government guarantees are not required for these loans. Export credit organizations like the US EXIM Bank, the Japanese EXIM Bank, and the Export Credit and Guarantee Corporation of the UK provide external commercial borrowings in a similar manner. And more governmental and multinational organizations. The Indian government has also legalized commercial borrowing from abroad, which is a significant source of funding for Indian businesses.

CONCLUSION

In conclusion, inflation-indexed bonds are an important financial instrument that provides protection to investors from the effects of inflation. These bonds are linked to an inflation index, which ensures that the principal and interest payments adjust for inflation over time, thereby maintaining the bond's purchasing power. Governments often issue inflation-indexed bonds to finance long-term investments such as infrastructure projects. Investors who purchase these bonds receive a fixed interest rate in addition to the inflation adjustment, making them an attractive investment option for those concerned about inflation. Overall, inflation-indexed bonds provide a hedge against inflation and are a low-risk investment option for investors looking for a safe way to protect their investment from the effects of inflation. By issuing these bonds, governments can raise funds for long-term investments while providing investors with a secure and stable investment opportunity.

REFERENCES:

- [1] X. Zhang and J. Guo, 'The role of inflation-indexed bond in optimal management of defined contribution pension plan during the decumulation phase', *Risks*, 2018, doi: 10.3390/risks6020024.
- [2] M. Kang, 'Inflation-Indexed Bonds and Nominal Bonds: Financial Innovation and Precautionary Motives', *J. Money, Credit Bank.*, 2020, doi: 10.1111/jmcb.12609.
- [3] Z. Eksi and D. Filipović, 'Pricing and hedging of inflation-indexed bonds in an affine framework', *J. Comput. Appl. Math.*, 2014, doi: 10.1016/j.cam.2013.10.023.
- [4] F. Mkaouar, J. L. Prigent, and I. Abid, 'Long-term investment with stochastic interest and inflation rates: The need for inflation-indexed bonds', *Econ. Model.*, 2017, doi: 10.1016/j.econmod.2016.12.017.
- [5] A. Kanas, 'Bond futures, inflation-indexed bonds, and inflation risk premium', *J. Int. Financ. Mark. Institutions Money*, 2014, doi: 10.1016/j.intfin.2013.09.007.
- [6] R. Price, 'The Rationale and Design of Inflation-Indexed Bonds', *SSRN Electron. J.*, 2021, doi: 10.2139/ssrn.882231.
- [7] C. E. Pflueger and L. M. Viceira, 'Inflation-indexed bonds and the expectations hypothesis', *Annu. Rev. Financ. Econ.*, 2011, doi: 10.1146/annurev-financial-102710-144843.
- [8] F. Mkaouar, J. L. Prigent, and I. Abid, 'A Diffusion Model for Long-Term Optimization in the Presence of Stochastic Interest and Inflation Rates', *Comput. Econ.*, 2019, doi: 10.1007/s10614-017-9742-0.
- [9] H. A. Marfatia, 'Estimating the New Keynesian Phillips Curve for the UK: Evidence from the inflation-indexed bonds market', *B.E. J. Macroecon.*, 2018, doi: 10.1515/bejm-2016-0005.

CHAPTER 21

ROLE OF THE NON-RESIDENT INDIANS

Mr. Prateek Jain, Assistant Professor

School of Business and Management, School of Engineering & Technology, Jaipur National University, Jaipur, India Email id- prateek.jain@jnujaipur.ac.in

ABSTRACT:

Non-Resident Indians (NRIs) are individuals of Indian origin who reside outside of India. They have either emigrated from India or were born outside of India to Indian parents. NRIs play a crucial role in the Indian economy as they contribute to the country's foreign exchange reserves through remittances and investments. NRIs can invest in various financial instruments in India, including bank deposits, stocks, and mutual funds. They can also invest in real estate and start businesses in India. Additionally, NRIs have access to various financial services, such as loans, insurance, and credit cards. The Indian government has introduced various schemes and policies to attract NRI investments and remittances, including the NRI investment scheme and the foreign currency non-resident deposit (FCNR) scheme. These initiatives help to boost the country's foreign exchange reserves, promote economic growth, and provide opportunities for NRIs to invest in their home country.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Indians who reside abroad are referred to as non-residents. They go by the name "Person(s) of Indian Origin." These groups invest via long-term fixed deposits and send large amounts of foreign cash to Indian banks. These deposits are made using non-resident foreign currency accounts and non-resident rupee accounts. However, since they receive domestic rates of interest on these deposits, NRI deposits are high cost sources of external financing. Therefore, the nation should avoid becoming overly dependent on NRI deposits. They are also allowed to subscribe for shares and debentures of Indian enterprises, and they have the option of selling them and receiving the money back.

The corporation does not give its stockholders the whole profit when it makes a profit at the end of the year. For future expansions, some of the profits are retained. Retained earnings are the term for these undistributed profits. Due to its simplicity and lack of formalities, it is also a crucial source of revenue for any organization. Some businesses have a strategy of holding onto profits to fund their modernization and development plans. Some of the elements that determine how much to keep include the amount of earnings, the management's dividend payout strategy, the legal requirements for dividend payment, and the rate of corporation taxes. It is seen as an internal source of funding and has no associated costs or risks with external financing, such as flotation.

In this type of financing, a private manufacturer or builder is granted a concession by the government or government-owned organizations to finance, design, build, and operate the facility specified in the concession contract. The builders may recoup their investment, operating, and maintenance costs by offering this concession. The project business often retains control of the project under these financing plans. The primary benefit of this kind of proposal is that any residual value from the project is received by a private entity. Only when the project's physical life is equal to the concession term is this advantageous. Water treatment facilities are often included in BOO projects.

In accordance with these funding plans, a private company constructs the whole project and rents it to the government. In this instance, the project owner instantly transfers control to the lessee. Consequently, ownership still belongs to the shareholders, but the property is leased for operational needs. The government receives ownership of the asset and operating responsibilities at a previously agreed-upon cost once the lease expires. We have covered the key funding sources for projects in this section. One may satisfy their finance needs by using any of the available sources, depending on their needs. Each party involved in the project must use their creativity to overcome all obstacles to its completion, manage risk effectively and efficiently, and ensure the project's finance is successful. It is true that obtaining financing via syndicate loans puts the business in a highly leveraged position, but on the plus side, the cost of debt is almost usually lower than the cost of stock. Both the lender and the borrower are exposed to risk in a syndicated loan. Making a firm highly leveraged comes with a significant risk for the borrower since if cash flows do not match predictions, it will be challenging to repay the loan and the company may go bankrupt. And on the other side, for the lender, if the business is unable to repay the loan, bad debt will rise and the bank may have liquidity issues. Therefore, it is crucial for both parties to evaluate each risk connected to the project and make decisions taking all of these risks into account [1].

American Depository Receipts (ADR): American Depository Receipts are used when an Indian firm wants to raise capital from the American market by issuing equity shares. It is a negotiable certificate given to American investors by a U.S. bank. On a U.S. stock exchange, these ADRs are traded. Corporate Governance: Corporate Governance refers to the laws, customs, and procedures that guide and regulate a business. A covenant is a limitation or a guarantee made in an indenture or debt arrangement that specifies whether or not specific actions will be taken.

The Euro Interbank Offered Rate, or Euribor, is a daily benchmark rate used to determine how much money one bank or financial institution may lend to or borrow from another bank or financial institution. In the wholesale money market for the euro, banks in the euro zone provide unsecured loans to other banks.overseas currency convertible bonds, or FCCBs, are issued by businesses to overseas investors in foreign currencies. It also goes by the name "hybrid instrument."

Foreign Investment Promotion Board (FIPB): The international Investment Promotion Board was established by the Indian government as a national organization to encourage FDI and international investment in India. It examines applications for foreign direct investment that do not follow the standard process. Global Depository Receipts, or GDRs, are used when an Indian firm want to raise funds from any other nations by issuing equity shares. It is a negotiable certificate

given to overseas investors by a bank abroad. On a Luxemburg stock exchange, these GDRs are traded.

Hedging: A hedge is a financial position that aims to counteract any profits or losses that could be experienced by a companion investment. In plain English, a hedge is utilized to lessen any substantial losses or profits incurred by a person or a business.

The daily reference rate known as LIBOR, or London Interbank Offered Rate, is used when one bank or financial organization lends or borrows money from another bank or financial institution. For short-term loans, it is most often used as a benchmark or reference rate. The 1,3,6-month London Interbank Offered Rate is often stated in US dollars. An organization controlled by many nations that offers loans and PRI for projects in poor nations is referred to as a multilateral agency. World Band and the Asian Development Bank are two examples. The term "perpetuity" refers to an ongoing stream of regular, equal payments or earnings.

Rating Agencies: A corporation must get a credit rating from one of the rating agencies, such as CRSIL, CARE, Moody's, or Standard & Poor's, in order to raise money by issuing bonds. These businesses assign debt a quality grade.

Yield: The monetary return, often stated as an annual percentage. The emphasis in the earlier modules was on various financial mechanisms and various domestic and foreign sources of funding for projects. You will discover several legal facets of project financing in this section. You will be able to:

- a. Understand the function of paperwork in project finance after reading this lesson.
- b. Recognize the papers pertaining to Sponsor/Shareholder Agreements.
- c. Recognize the different loan and security paperwork.
- d. Recognize different project-related documents.

Documentation's Part

The basic goal of project finance is to determine how risk associated with the project might be distributed among different parties with an interest in it. To do this specific activity, many documentations are required. Each project must, for this reason, be compliant with the laws and regulations of the various jurisdictions in which it is being undertaken or carried out. These contracts play a significant role in the project and are of utmost importance to all parties involved. Many of the project risks are disclosed by the project participants only as a result of these agreements [2].

Such items like a standard set of project documentation are uncommon. As a result, each project will have a unique collection of papers created just for it. Every time a business decides to invest in a project, the feasibility study is the first step. A corporation wants to be sure a project is both technically and financially viable before investing in it. First, feasibility study contracts are signed by two or more businesses that have agreed to take on a proposed project in order to complete this research. This preliminary agreement is created to cover the issues around early decision-making and job allocation in connection to researching a certain project or proposal. The conditions under which a party might withdraw from the arrangements, the selection of advisors, general expense

sharing, etc. were all included in the scope of such an agreement. Typically, the agreement is only made for a short time.

Another method for businesses to get into agreements is by teaming up to compete for a certain contract or concession. They only engaged into a formal joint venture arrangement or shareholders' agreement after they received the proposal, allowing them to save costs. Joint ventures are established for certain undertakings. In such cases, a special purpose entity with at least two shareholders is created to further the initiative. A shareholders' agreement will often be entered into by these shareholders to govern their relationship. On the other side, a joint venture agreement will often be signed when a joint venture structure is employed. Any time a shareholders agreement is entered into regarding a project, it is not materially different from agreements regarding ownership of other companies. The following are covered under this agreement: Contribution to share capital; Project Company financing sources; Management of SPV; Voting rules for various sectors

The following topics are covered: Dispute Resolution; Dividends Policy; Sale of Shares; and Preemption Rights. An agreement for a joint venture is likewise created between partners, but it will once again include some of the clauses from the shareholders agreement. It won't cover the organization and operation of a special purpose vehicle, either.

DISCUSSION

Lenders for specific projects are crucial in choosing how the contract will be provisioned. There are many concerns relating to the sponsors/shareholders that might be quite important to lenders. Here are some of the main points highlighted [3]. Lenders are interested in the sponsors' and shareholders' backgrounds and credit standing. The project lenders may request guarantees from the parent company to assist their subsidiaries until the project debt is repaid if a subsidiary is designated by shareholders or sponsors to execute any duties or obligations with reference to a specific project.

Lenders also want to see very explicit language defining the commitments of the sponsors and shareholders. Lenders want to know which shareholder/sponsor will be delivering which services and on what conditions if they commit any resources or expertise to the special purpose vehicle or the project. Lenders want to know exactly what additional equity will be contributed by the shareholders or sponsors in the future and under what terms and circumstances. Lenders may, for example, demand that the shareholders contribute their money before requesting for loan commitment, or at least in proportion to loan drawdowns [4], [5].

The project lenders will probably desire an assignment by means of security of the benefit of the shareholders' agreement as part of their overall security package if the project company is a party to the shareholders' agreement and is the recipient of any rights and/or benefits under this agreement. In some projects, the project firm and the lenders will sign a support agreement with the sponsors or shareholders. The following are the primary obligations that the lenders are looking for from the project's sponsors and owners under this agreement:

Sponsors and shareholders would need to provide managerial and technical support to the lender. Lender would expect sponsors and shareholders to provide capital, either via the purchase of equities or the disbursement of loans. If it's a loan, it should be unsecured and ranked below project loans [6]. The lender would ensure that the project company's sponsors and shareholders did not sell their shares. The lender would ensure that the sponsors and shareholders provided guarantees for cost overruns and on-time project completion, as well as security requirements to back their promises to contribute stock in the future.

Documentation for Loans and Security

Contract for A Project Loan

A project loan agreement is often a syndicated loan arrangement that the borrower, project lenders, and facility agent engage into. The terms and circumstances under which the project loans may be withdrawn and the things that may be acquired with such loans are governed by this agreement. The agreement will be enlarged to encompass the project, project papers, and associated subjects in addition to the standard statements, covenants, and causes of default contained in typical syndicated loan agreements. Standard currency loans are comparable to one another in terms of the computation and payment of interest-related obligations. But the distinction resides in the fact that interest will be capitalized for all projects either throughout the development phase or until project revenues start to flow [7], [8].

Repayment periods will vary from project to project and are often dependent on when project cash flows are received. Additionally, it contains some provisioning, such as the commitment of a minimum portion of the project's cash flow to debt service. All project cash flows, according to this form of arrangement, are directed to a single account that is kept up to date by the agent, a security trustee, or account bank and charged to the project lenders. The agreement terms ask for certain mechanics pertaining to the compilation of banking cases, the calculation of project cover ratios, and forecasting data. The project lenders will also have the option to hire consultants, advisors, and technical specialists. The boilerplate clauses often contained in loan documents for Euro-currencies, as properly modified for a project finance, will be found in the remaining portions of the agreement.

CONCLUSION

In conclusion, Non-Resident Indians (NRIs) play a vital role in the Indian economy by contributing to the country's foreign exchange reserves through investments and remittances. NRIs have access to various financial instruments and services in India, such as bank deposits, stocks, mutual funds, loans, insurance, and credit cards. The Indian government has introduced various policies and schemes to attract NRI investments and remittances, such as the NRI investment scheme and the foreign currency non-resident deposit (FCNR) scheme. These initiatives help to boost the country's foreign exchange reserves, promote economic growth, and provide opportunities for NRIs to invest in their home country. Overall, the contributions of NRIs to the Indian economy are significant, and the government recognizes their importance by introducing policies and schemes that facilitate their investment and participation in the economy.

REFERENCES:

- [1] D. V. Menon and V. M. Vadakepat, 'Migration and reverse migration: Gulf-Malayalees' perceptions during the Covid-19 pandemic', *South Asian Diaspora*, 2021, doi: 10.1080/19438192.2020.1820668.
- [2] M. Walton-Roberts, 'Globalization, national autonomy and non-resident Indians', *Contemp. South Asia*, 2004, doi: 10.1080/0958493042000209870.
- [3] B. J. Et. al., 'Empirical Study of Foreign Exchange Remittance of Non-Resident Indians', *Turkish J. Comput. Math. Educ.*, 2021, doi: 10.17762/turcomat.v12i2.1773.
- [4] A. Gill, H. S. Mand, and J. D. Obradovich, 'Non-resident family members and the financial performance of small businesses in India', *Corp. Ownersh. Control*, 2015, doi: 10.22495/cocv12i2c5p2.
- [5] I. Kaur and S. Thind, 'Socio-personal factors affecting parental perception towards contribution of non-resident Indian children', *Adv. Res. J. Soc. Sci.*, 2015, doi: 10.15740/has/arjss/6.2/119-122.
- [6] A. Chadha, 'Plight of Abandoned Indian Women in Non Resident Indian Marriages: A Critical Analysis', *SSRN Electron. J.*, 2017, doi: 10.2139/ssrn.2773989.
- [7] G. Lakshmy and K. Kumuthadevi, 'Role of demographic factors of consumers on their buying behavior of health drink products in rural Kerala', *J. Adv. Res. Dyn. Control Syst.*, 2017.
- [8] N. Lenze, 'Representations of Non-Resident Indians from the Gulf in Online Comedy Videos', *Middle East J. Cult. Commun.*, 2021, doi: 10.1163/18739865-01401004.

CHAPTER 22

A STUDY ON SECURITY DOCUMENTS FACTORS IN FINANCE

Prof. J.K Tandon, Professor School of Business and Management, Jaipur National University, Jaipur, India Email id-jktandon.sbm@jnujaipur.ac.in

ABSTRACT:

Security documents are essential to protect the interests of lenders in finance transactions. These documents help ensure that lenders have adequate security and protection for their investments, which include loans and other forms of financing. Factors such as the type of financing, the nature of the transaction, and the parties involved can impact the security documents required for a finance transaction. Common types of security documents include mortgages, charges, pledges, guarantees, and debentures. Each of these documents provides different levels of security and protection to the lender, depending on the nature of the transaction. In finance transactions, the security documents must be carefully drafted, negotiated, and executed to ensure that they provide adequate protection to the lender. The documentation process involves several steps, including due diligence, drafting, negotiation, execution, and registration. The importance of security documents cannot be overstated, as they play a critical role in ensuring that lenders have adequate security and protection for their investments. The effectiveness of these documents can impact the lender's decision to provide financing, as well as the terms of the financing, such as the interest rate and the repayment schedule.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The kind and type of the assets that are the subject of the security will determine how this specific document is used, which is not standard and often differs from nation to nation or state to state. The taking of security in connection to project financing is often done via a fixed and floating charge covering all of the property and assets of the project firm if a lender is ready to lend for a certain project. Understanding the difference between fixed and floating costs is crucial in this situation. They are a sort of asset security offered to creditors by debtors. The glaring distinction between fixed and floating charges is the capacity of the debtor to sell off its assets. Fixed charge provides only limited power. Giving complete control to dispose of the assets is a floating fee.

In certain jurisdictions, the appointment of a trustee also occurs. The trustee's primary duty is to protect the security from the bankruptcy of the institution holding the security and to make it easier for banks to trade rights and obligations without running the risk of jeopardizing the security. The project lenders may at times designate the security trustee. The security trust deed outlines the

security trustee's conditions of appointment as well as their rights, liabilities, and duties. It also specifies the sequence in which payments are applied to the different lenders' groups. However, an inter-creditor agreement is frequently used to handle this separately.

The majority of India's existing infrastructure projects are conducted as Build-Operate-Transfer projects. The concession agreement for these projects will be the primary project document since it grants the project business the authority to investigate, exploit, develop, or run the concession or other pertinent project rights. On the other side, Project Company would need a license in order to use all relevant legal rights.

The project vehicle will thus be a beneficiary of a license granted by the Department of Energy and Climate Change, for example, in an oil and gas financing in the UK continental shelf, which authorizes it to search for and extract hydrocarbons under the conditions of the license. On the other hand, in a BOT project, the project vehicle will inevitably get a concession from the host government with regard to the project.

Concession agreements, which often include a build-operate-transfer (BOT) duty but may also include a build-own-operate requirement, are common, especially in nations where political or financial restrictions prohibit governments from building necessary but increasingly costly infrastructure in the public sector.

A concession may provide the following benefits to the host government:

- i. Reducing the project's effect on its capital budget.
- ii. Giving the project a boost in efficiency.
- iii. Encouraging the introduction of modern technologies and foreign investment.

The BOT structure comes to an end when the project is eventually returned to the appropriate governmental body. Although sometimes the transfer is not allowed to take place during the project's economic life, this may lead to the state receiving a useful operational project.

- i. The following are key elements that may be found in concession agreements:
- ii. The responsibilities placed on the project firm in relation to the project and the concession
- iii. The granting of a concession for a certain time frame

The concession grantor made a number of promises, such as not to compete, to provide utilities and other services, to make arrangements for specific legal changes as needed, and to pay concession fees.

- i. Transfers and assignments
- ii. Terms of default and forfeiture
- iii. Termination conditions, including arrangements for transfer.

The project lenders will be concerned, as mentioned above, to ensure that the concession grantor cannot unilaterally change or terminate the terms of the concession, that the concession is transferable to any buyer of the project, and that the concession grantor should also assume at least some risks associated with change of law and/or force majeure circumstances [1].

Construction Licenses

One of the important project papers where project financiers are bearing all or some of the risk of construction/completion is the construction contract. There are many commonly used standard formats for building contracts, however they are sometimes changed to better suit particular parties. The most typical structure is the turn key contract. Here, a single contractor takes full responsibility for the timely completion of a project that satisfies performance guarantees. The owner determines the overall performance and reliability criteria for the plant as it relates to the turnkey project. It has also been observed that the turnkey contractor accepts entire responsibility for the design, building, supply, installation, testing, and commissioning of the plant in order to allow it to satisfy those stated standards [2].

In addition to a turnkey contract, there is another kind of agreement. The design and construction of the project facility may sometimes be managed by sponsors themselves if they believe they have the appropriate expertise. They often delegate some of its duties to the project firm as well. They handle things on their own in order to save money or time overall. If the Project Company or sponsors take on the duties of construction management, lenders will need to be satisfied with their technical capability and resources. In order to guarantee appropriate protection against the lack of a single contractor with total accountability and the potential effects of poor management during design and construction, they often seek for extra sponsor backing.

Another possible configuration is a framework for project management. A project management agreement is signed with one project management business under this arrangement, and that company will then make arrangements for individual contractors to engage into contracts with the project company. In this instance, certain aspects of the project would be completed by each of these independent contractors. Turnkey contracts are particularly popular with lenders since they lessen the chance of disputes occurring between the various contractors and of unassigned duties pertaining to the project. The project financiers will have to spend a lot more time examining the construction contracts and the risks associated with the construction arrangements if a turnkey contract is not used.

DISCUSSION

The following succinctly summarizes the main clauses of a typical construction contract and their importance for the structuring of project finance:

Price and conditions of payment:

Another crucial agreement is the price and the conditions of payment. In general, contractors prefer to receive payments in installments. Typically, contractors receive a sizeable advance payment at the time of contract signing or shortly thereafter. Following that, the contract would want to be paid in instalments contingent upon the accomplishment of particular progress "milestones". Since big structures take a very long time to complete, these payments are essential to generating a positive cash flow during the development process. It has sometimes been seen that projects are finished in - years as well. As a result, these payment term requirements are crucial elements of the project contract. These agreements provide the contractor a feeling of comfort about the price's dependability.

Lenders also carefully consider any provision for a price change. Since it affects project costs and, consequently, their ability to be financially viable. Any alterations made by the project business that have anything to do with the construction work will be subject to lender approval. The interests of the lenders will differ somewhat from those of the sponsors. Sponsors will look for the best compromise between pricing and the contractor's responsibility for contract violations [3], [4].

Completion:

Agreement on completion is also very crucial. Construction projects can have delays that are beyond of the contractor's control. For instance, community unrest may cause delays in metro rail building operations. The completion contract agreement becomes crucial for all parties engaged in the project in such situations. Project lenders desire as much certainty as possible and tolerate delay only in particular, restricted conditions. Whether the project is delayed for a little length of time or for an indefinite amount of time, the lenders will demand the contractor to pay liquidated damages for any delay, such as interest costs that arise on an ongoing basis.

Most contractors also want to ensure that their responsibility for liquidated damages is limited and does not exceed that amount. However, this was done with both sides' interests in mind. The completion date will often be specified in the construction contract as the day an impartial consultant verifies the facility is finished and all commissioning and performance tests have been successfully passed. Force majeure: On occasion, the contractor is unable to finish the job on time because of a delay that is out of his control. In these situations, force majeure offers some type of legal relief in the form of protection and exempts one party from fulfilling their responsibilities under a contract [5], [6].

Unforeseen Ground Risk: This is the possibility that the site's geotechnical state may not be as anticipated, necessitating adjustments to the design or construction procedures, as well as the possibility that development will need to be slowed down or halted altogether. A price increase or a postponement of the completion date may result from its utilization. The contractor will often be expected to assume this risk by the lenders.

Guarantees: The contractor is expected to provide high-quality work in accordance with the terms of the contract. We call this a warranty. The project lenders may need similar assurances from the contractors if the project company has provided construction-related guarantees to the concession grantor. Insurance: Because project lenders consider insurance to be part of their security, it is a crucial document. In general, it is the responsibility of contractors to protect the interests of the Project Company and lenders throughout the building process.

Consents: Typically, the construction contract or contracts will specify who is in charge of securing the licenses and permissions needed by the government to complete the project. The regulatory authorities or host government's consents or approvals that all local health and safety, environmental, fire, and construction standards and requirements have been met at "completion" may be among the crucial consents [7].

Culpability Restrictions: When a contract is broken, contractors often try to reduce their culpability. For certain violations, liability may be capped at a certain level or, in rare situations, fully disclaimed. Project lenders will choose very high limits over any kind of restriction as all.

When the project is finished and put into operation, it enters this stage. Most projects will need an experienced and skilled operator to operate them, thus it's crucial to make sure that operator's performance is up to par. Both the project firm and the lenders want to ensure that the project operator is technically proficient and well-versed in order for them to be satisfied with the project's management and upkeep. They often choose a business to lead that has comparable work experience and a solid reputation in the marketplace. Sometimes the project firm wants to manage the project themselves because they believe they can do it more effectively and for less money. However, in most cases, the operator is a third party with expertise in project and facility operation and management who will conclude an operating and maintenance agreement with the project company on an arm's-length basis. Following are some of the key components of an operating and maintenance agreement:

- a. Operator assumes full responsibility for all project-related risks associated with operation and upkeep, protecting Project Company and the lenders.
- b. The agreement should make sure that the project is run as effectively as possible to optimize its ability to generate income.
- c. It is manageable and can be maintained within budgets established in conjunction with the project business and lenders.

An operating and maintenance agreement may be broken down into three fundamental components. Fixed-price arrangement: In this arrangement, the operator is given a set sum to operate the project. The operator will be responsible for any cost overruns on the operational budget. On the other hand, the operator will make more money if it can reduce expenses. Fixed price contracts are often more costly since the operator under this arrangement is taking on the operational risk.

A cost-plus structure is one in which the project company pays the operator a set amount in addition to any expenses incurred by the operator in running the project. The set charge will serve as the operator's profit, and the operator will seek to transfer to the project company all running expenses. Therefore, the project company is taking on the risk of rising operating costs under this structure. Given this, the project firm would need the option to end the agreement quickly if the operator failed to run the project effectively or under budget. To encourage the operator to work effectively and economically, a certain amount of operational risk is often taken by the operator [8].

Structure of incentives and penalties: In this structure, the operator's compensation is based on meeting tight performance standards in order to earn bonuses. In addition, the operator will pay a penalty in the form of decreased remuneration if it fails to meet the agreed-upon performance objectives. All major facets of the project's operation and upkeep, for which it is acknowledged that the operator is responsible, will be covered by the performance targets, which will be pre-

agreed upon and specifically outlined in the contract. Usually, the maximum amount of incentives or fines is set down in the contract.

Lenders almost always favor incentive/penalty structures because they protect the project business from many operational risks and increase the likelihood that the project will be successfully completed on schedule and within budget. For certain projects, fuel like coal, oil, gas, or wood is crucial, hence the availability of these materials is dependent upon the projects' ability to run the facility. Making ensuring that the project has access to a dependable and secure supply of fuel for the length of the project should be a top concern for all parties. Fixing the availability of a dependable and secure fuel supply alone is insufficient to keep the operation running for an extended amount of time.

The ability of the project firm to enter into a long-term contract with a chosen supplier at a certain pricing structure will therefore be the next important question. If the project firm is unable to do this, it will be required to buy its fuel needs on the spot market, exposing it to risks related to fuel supply and pricing.

The project business will next need to make the appropriate preparations for the delivery of the fuel to the project after securing an agreed-upon fuel supply. This might involve a third party, or the gasoline provider could take on this duty by themselves.

We see two distinct fuel supply agreements being utilized often in project finance in real life. Takeor-pay contracts: In this arrangement, the project firm agrees to accept delivery of a certain quantity of fuel over a predetermined time period for a predetermined fee. Even though there is typically a clause in the contract that allows the project company to take all or a certain amount of the forgone fuel in a later period, if the project company does not accept delivery of the agreed level of fuel, it must still pay for it. The gasoline provider must provide the predetermined quantity of fuel at the predetermined cost.

CONCLUSION

In conclusion, security documents play a crucial role in finance transactions as they help protect the interests of lenders by providing them with adequate security and protection for their investments. The type and nature of the financing transaction, as well as the parties involved, can influence the type of security documents required. Lenders must carefully consider the drafting, negotiation, execution, and registration of security documents to ensure that they are effective in providing the desired level of protection. Adequate due diligence must be conducted to identify potential risks and challenges that may impact the effectiveness of the security documents.

The importance of security documents cannot be overstated, as they provide lenders with a sense of security and confidence in providing financing. The effectiveness of these documents can impact the lender's decision to provide financing, as well as the terms of the financing. In summary, security documents are an essential part of finance transactions, and their importance must be carefully considered by lenders to ensure that they have adequate protection and security for their investments.

REFERENCES:

- [1] S. Mansour, 'Ink protection of security documents', *Nowa Kodyfikacja Prawa Karnego*, 2019, doi: 10.19195/2084-5065.49.7.
- [2] A. Abdollahi, A. Herizchi, H. Roghani-Mamaqani, and H. Alidaei-Sharif, 'Interaction of photoswitchable nanoparticles with cellulosic materials for anticounterfeiting and authentication security documents', *Carbohydr. Polym.*, 2020, doi: 10.1016/j.carbpol.2019.115603.
- [3] R. A. Khan and S. A. Lone, 'A comprehensive study of document security system, open issues and challenges', *Multimed. Tools Appl.*, 2021, doi: 10.1007/s11042-020-10061-x.
- [4] D. Pavlović *et al.*, 'Naturally safe: Cellular noise for document security', *J. Biophotonics*, 2019, doi: 10.1002/jbio.201900218.
- [5] S. B. Razeto and N. Jenne, 'Security and defence policy documents: a new dataset', *Def. Secur. Anal.*, 2021, doi: 10.1080/14751798.2021.1959730.
- [6] M. de Haas, 'Security Policy and Developments in Central Asia: Security Documents Compared with Security Challenges', J. Slav. Mil. Stud., 2016, doi: 10.1080/13518046.2016.1168123.
- [7] A. Symonov, O. Klevtsov, S. Trubchaninov, and O. Lazurenko, 'Computer security of npp instrumentation and control systems: Computer security justification documents', *Nucl. Radiat. Saf.*, 2019, doi: 10.32918/nrs.2019.4(84).09.
- [8] S. S. Z. Abidin and M. H. Husin, 'Improving accessibility and security on document management system: A Malaysian case study', *Appl. Comput. Informatics*, 2018, doi: 10.1016/j.aci.2018.04.002.

CHAPTER 23

A BRIEF DISCUSSION ON TAKE-OR-PAY AGREEMENTS

Prof. J.K Tandon, Professor School of Business and Management, Jaipur National University, Jaipur, India Email id-jktandon.sbm@jnujaipur.ac.in

ABSTRACT:

Take-or-pay agreements are contracts that obligate a party, usually a buyer, to either take delivery of goods or pay a pre-determined fee if they fail to take delivery. These agreements are commonly used in the energy industry, where they provide certainty to sellers and encourage the development of infrastructure. Take-or-pay agreements are often used in long-term contracts where the buyer agrees to purchase a specified amount of goods or services over a set period. The seller agrees to produce or deliver the goods or services at a set price, and the buyer is obligated to either take delivery or pay a penalty fee. Take-or-pay agreements provide benefits to both parties. For the seller, they provide a guaranteed revenue stream and certainty in production levels. For the buyer, they provide security of supply and price, as well as the ability to plan their operations.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Contracts with a single provider: In this scenario, the project business agrees to buy all of the project's fuel requirements from one source. The project business will only pay for the gasoline it actually uses; nevertheless, the precise quantity of fuel required and the price to be paid for it are not always defined. On the other hand, the fuel provider may or may not be required to meet the whole project's fuel needs. Take-or-pay agreements are more likely to be preferred by lenders since they provide a reliable source of supplies for the project at a predetermined cost. These will be crucial in cases where a project's success depends on a guaranteed market for its products. While a long-term sales contract may allow for sales on arm's-length terms and price determination using market prices at the pertinent time, it does not obligate the buyer to buy. The project firm would ideally need a guaranteed cash flow to repay the project financing, and this is what the lenders would be looking for. However, take-or-pay agreements can also have drawbacks, such as creating financial risks for buyers and potentially leading to excess supply or stranded assets for sellers. As a result, take-or-pay agreements must be carefully structured and negotiated to ensure that they provide benefits to both parties and are financially viable.

To ensure the quantity and/or consistency of cash flow, many forms of sales agreements have been devised. When fees are assessed on a pass-through basis, they are determined by taking into account the expenses paid by the project business and passed on to the customer. This is a typical design for electricity projects. The costs that are typically transferred to the buyer include the full or any portion of the costs of purchasing fuel or other materials needed for the project, principal

and interest payments to project lenders, operating and maintenance expenses, administrative expenses, insurance costs, and a sum that represents the sponsor's return on investment. Each time, the expenses that are passed through are those that are associated with the time frame for which the buyer or offtaker is making a payment.

As mentioned above, a take-or-pay agreement requires the buyer to pay for supply of the project company's product even if they are not needed by the buyer. There will often be a "hell or high water" clause that tries to show that the buyer must pay notwithstanding the seller's nonperformance or the presence of conditions that would otherwise render the contract unenforceable. The kind of sales/offtake agreement that is used will mostly depend on the goods at hand. In contrast to the oil sector, where most oil is traded spot or in the short futures market, long-term offtake contracts are rather uncommon in the gas industry [1].

The enforceability of take-or-pay contracts is one of the difficulties that must be taken into consideration while thinking about their implementation. There are two possible trouble spots. First, there is a chance that they may be criticized since they are considered penalties in certain countries. Second, their lack of adequate deliberation may be used against them. The more accurate assessment in terms of English law is likely that the majority of take-or-pay agreements won't be seen as imposing fines. Regarding contemplation, English law does not focus on how adequate the consideration is. However, other jurisdictions might have a different perspective on these matters, so it will be important for the project company and the lenders to confirm the precise legal position.

Depending on the project, throughput agreements, tolling agreements, technology/operating licenses, consultant contracts, utility agreements, refining agreements, and transportation contracts may also be important project papers. But in every situation, it will be essential to make sure that, to the greatest extent possible, all of these agreements are compatible, so that, for instance, if the project business accepts duties to one partner, it may transfer those obligations to another. Keep in mind that any outstanding debts owed by the project firm will eventually be paid by either the sponsors or lenders of the project, depending on the situation. In reality, both of these parties are interested in making sure that any such responsibilities are really incurred by the party best capable of managing and/or avoiding them [2], [3].

The function of documentation in project finance was covered in this unit. Prior to starting any project, it is crucial to identify all the potential risks. The many parties with an interest in that project must distribute these risk factors among themselves. The intricate web of contractual relationships between the many project partners, as set down in the agreements signed between them, is how this risk distribution is put into practice. As a result, the agreements made between the different project participants take on a great deal of importance. It is through the use of these contracts that the project partners are able to share many of the risks associated with the project. The first such set of papers we spoke about has to do with shareholder/sponsor agreements. After that, we spoke about a variety of loan and security agreements, including project loan and security documents. Project-related materials made up the third and final set of documents. Here, we spoke about the contracts for construction, operation, and maintenance, fuel supply, sales and off-take, etc.

Fixed and floating charges: Fixed and floating charges provide creditors security over the assets of the debtor. The glaring distinction between fixed and floating charges is the capacity of the debtor to sell off its assets. Fixed charges restrict creditors' ability to collect. Creditors are free to sell the assets while they are subject to a floating charge in the normal course of business. A corporation becomes insolvent when it is unable to fulfill its financial commitments to its lender. After going bankrupt, the company's assets are sold off to pay back the creditors. An individual who is active in starting a project is known as a sponsor. The individual may own all or a portion of the project as a stakeholder or owner.

Pre-Emption Rights: In the event that a corporation issues new shares in order to raise capital, current shareholders will have the first option. This refusal privilege relates to pre-emption rights. Which implies that prior to being offered to current shareholders, new shares of a company cannot be made available to other potential investors.

Drawdown Loan: With this option, the business may accept further loans with no formality.

Project Cover Ratios: This ratio evaluates how much debt is being covered by the project's discounted cash flow position at a given point in time.

This unit's goal is to provide a project agreement framework. Syndicated loan: A syndicated loan is when a group of lenders band together to support a project. In project financing, the phrase "project agreement" is used. The process of obtaining long-term debt financing for significant projects by "financial engineering" based on borrowing against the cash flow created by the project alone is known as project finance. Under this definition, funding a project cannot be considered project finance; instead, a project is funded by the cash flow created by the project itself, necessitating the preparation of a legal contract known as a project agreement [4], [5].

DISCUSSION

An agreement may be defined as a negotiated, generally enforceable contract or understanding formed between two or more legally capable persons, such as. the parties who meet the requirements and are permitted to sign a contract. The agreement formed between the two qualified parties for any project is therefore referred to as a project agreement. Throughout the course of the project, a project agreement essentially manages the relationship, rights, and obligations between the parties to the agreement. These agreements serve as the project company's operational contracts that require the two responsible parties to comply with the legislation regarding the project's work.

The first thing an entrepreneur considers when deciding to launch a business is financing. Both long-term and short-term initiatives may be financed via project financing. It is possible to identify both internal and external financial sources. There are many methods to describe project finance, and there is no one definition that is accepted worldwide. It is a very old idea that has been well-known during the last 20 years. Due to the fact that every project has a different set of specific requirements, project financing arrangements vary throughout distinct business sectors and from deal to deal. But the project-finance strategy is based on a set of universal principles.

Project financing, according to the Export-Import Bank of the United States, is "the financing of projects that are dependent on project cash flows for repayment, as defined by the contractual

relationships within each project. By their very nature, these types of projects rely on a large number of integrated contractual arrangements for successful completion and operation. Lenders typically do not have recourse to the project's owner, and frequently, through the project's legal structure, project lenders are shielded from a project owner's financial difficulties. Project-finance transactions typically are composed of a group of agreements and contracts between lenders, project sponsors, and other parties, of which are interest payments and repayments of principal.

In other words, project finance is the provision of funding for industrial, long-term infrastructure, and public service projects using a non-recourse financial structure. Project debt and equity are used to fund the project, which will ultimately be repaid with the cash flow generated by the project. It is possible to finance a project using a loan arrangement where the project's assets, rights, and interests are held as a secondary or collateral security, with the project's cash flow serving as the primary basis for repayment. In general, the private sector adopts project financing more readily than the public sector since businesses can easily finance significant projects off balance sheet.

As was previously mentioned, there is no single definition for project finance; rather, it can be characterized in a number of different ways. As a financing strategy, project finance can be defined as: "The raising of finance on a Limited Recourse basis, for the purposes of developing a large capital-intensive infrastructure project, where the borrower is a special purpose vehicle and repayment of the financing by the borrower will be dependent on the internally generated cash flows of the project." An agreement between a property owner and a builder, for instance, in which the builder specifies details and agrees to construct a house on the property by a specific date and in a specific manner, and in exchange for which the property owner declares and agrees to pay the builder a specific sum of money for the work completed [6].

Thus, a project agreement in the context of project financing refers to the collection of agreements supporting the projects. It is a contract that stipulates the terms under which the Project Company agrees to receive its income. It is essentially a form of project contract that gives the Project Company a foundation upon which to build and run the project. The following lesson will go into more depth on the Sub- Contracts, which are the kind of contracts that frame the remaining Project Contracts. The terms used in project agreements might be somewhat perplexing. Process-plant or PPP projects may be categorized based on who owns them at different points in their lifespan. The following terminology is listed:

Build-Operate-Transfer Projects: Under this form of project financing, concession is involved. According to this agreement, a private company receives a concession from the public or private sector to fund, build, design, and manage a facility that has been specified in the concession contract. The project company in this sort of project never maintains the assets that are utilized to provide project services. Regardless, the Project Company, in accordance with a Project Agreement with a Contracting Authority, constructs the project and thus has the right to generate income from its operation.

Along with the concession, it also includes some of the company's additional building and operating requirements. The idea of providing the project is known as build-lease-operate-transfer

or build-lease-transfer. The Project Company may also be awarded a lease of the project site and it may be made to have accompanying buildings and equipment over the life cycle of the project. This project structure is mainly used for PPPs, or public-private partnerships, because the public nature of the project makes it inappropriate for the parties and programs to be owned by a privatesector company. An example of this would be the construction of a bridge, road, or tunnel. Public-Private-Partnership [7].

Build-Transfer-Operate Projects: These are similar to BOT projects, as previously stated, with the exception that the Contracting Authority in this case does not assume control of the project until the construction is complete. In these types of projects, the private sector creates and constructs the facility, but the ownership of it is only transferred to the public owner after the building is finished. Here, the concessionaire is granted permission to run and profit from their investment.

Build-Own-Operate-Transfer Projects: In this type of project, the Project Company constructs the project, owns it, and operates it for a predetermined amount of time. After collecting the project's revenues during the predetermined amount of time, the possession of the project is then returned to the project's maker or contracting authority. Let's use a power company as an example to better understand. The Project Company may build a power station and, in accordance with the terms of the agreement, can own it for years, during which time the power produced is sold to an Offtaker. In this case, the Project Company will earn revenue up until years, after which the ownership is returned to the Offtaker.

Build-Own-Operate Projects are those that are listed and whose ownership stays with the Project Company for the duration of the project. The Project Company hereunder consequently benefits from any remaining value in the project, using the same example of the Power Company from the BOO, such as a power plant in a privatized energy sector or a mobile phone network [8].

An offtake contract often reduces the volume and pricing risk and sometimes also offers sales certainty. These contract categories are often employed for process-plant projects, or projects that create products. Such agreements enable the Project Company to sell its goods on a pre-arranged basis and provide the Offtaker a reliable supply of the necessary commodity. Returning to the project agreement's guiding principles, the risks taken by the project company when selling its goods must be kept to a minimum if a high proportion of project-finance debt is to be raised. An offtake contract is one of the simplest ways to do this, which is why it is frequently used.

CONCLUSION

In conclusion, take-or-pay agreements are contracts that obligate a party to either take delivery of goods or pay a pre-determined fee. They are commonly used in the energy industry and provide benefits to both buyers and sellers, including certainty of supply, revenue, and price. However, they must be carefully structured and negotiated to avoid potential risks and ensure financial viability.

REFERENCES:

[1] Z. Arifin, H. Hassan, and D. Alkano, 'Optimal Sizing and Performance Assessment of a

Hybrid Diesel and Photovoltaic with Battery Storage Limited by a Take-or-Pay Contract of Power Purchase Agreement in Nusa Penida Island, Indonesia', *Int. J. Renew. Energy Res.*, 2021.

- [2] 'Optimal Sizing and Performance Assessment of a Hybrid Diesel and Photovoltaic with Battery Storage based on Take-or-Pay of Power Purchase Agreement', *Int. J. Renew. Energy Res.*, 2021, doi: 10.20508/ijrer.v11i3.12247.g8280.
- [3] E. Yukseltan, A. Yucekaya, A. H. Bilge, and E. Agca Aktunc, 'Forecasting models for daily natural gas consumption considering periodic variations and demand segregation', *Socioecon. Plann. Sci.*, 2021, doi: 10.1016/j.seps.2020.100937.
- [4] S. Fadl, A. Yazc, and B. Urazel, 'A security-constrained economic power dispatch technique using modified subgradient algorithm based on feasible values and pseudo scaling factor for a power system area including limited energy supply thermal units', *Electr. Power Components Syst.*, 2011, doi: 10.1080/15325008.2011.615798.
- [5] B. Satiani and C. A. Davis, 'The financial and employment effects of coronavirus disease 2019 on physicians in the United States', *J. Vasc. Surg.*, 2020, doi: 10.1016/j.jvs.2020.08.031.
- [6] F. Karanki and S. H. Lim, 'The effects of use agreements on airport efficiency', J. Air Transp. Manag., 2020, doi: 10.1016/j.jairtraman.2020.101767.
- [7] M. W. Murage and C. L. Anderson, 'Contribution of pumped hydro storage to integration of wind power in Kenya: An optimal control approach', *Renew. Energy*, 2014, doi: 10.1016/j.renene.2013.10.026.
- [8] R. O. Keohane and M. Oppenheimer, 'Paris: Beyond the climate dead end through pledge and review?', *Politics and Governance*. 2016. doi: 10.17645/pag.v4i3.634.

CHAPTER 24

A STUDY ON TYPES OF OFFTAKE CONTRACT

Prof. J.K Tandon, Professor School of Business and Management, Jaipur National University, Jaipur, India Email id-jktandon.sbm@jnujaipur.ac.in

ABSTRACT:

Offtake contracts are agreements between buyers and sellers for the purchase and sale of goods or services. These contracts are commonly used in industries such as energy, mining, and agriculture, where the seller needs a guaranteed market for their products, and the buyer needs a reliable source of supply. There are several types of offtake contracts, each with their own advantages and disadvantages. The most common types include take-or-pay contracts, interruptible contracts, and spot contracts. Take-or-pay contracts require the buyer to either take delivery of the contracted amount of goods or pay a pre-determined fee. These contracts provide certainty to the seller and security of supply to the buyer but can create financial risks for the buyer. Interruptible contracts allow the buyer to cancel or postpone delivery of goods in certain circumstances. These contracts provide flexibility to the buyer but can create uncertainty for the seller. Spot contracts involve the immediate purchase and delivery of goods at the prevailing market price. These contracts provide flexibility to both parties but can create price volatility and uncertainty.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

The project-finance industry does not always utilize these acronyms consistently, and there are several more permutations for other project structures. For instance, "BOT" is sometimes used to represent "Build-Own-Transfer," which is the same as "BOOT." From the perspective of project financing, it doesn't really matter whether or if the project's custody is temporarily passed to an offtaker or contracting authority, lasts indefinitely, or is never kept by the project company. This is due to the fact that the right to receive cash flows from a project's financing instead of ownership of its assets constitutes the project's true worth. However, any long-term residual value in the project is obviously important for an offtaker/contracting authority as well as to investors in determining their likely return, even though these various ownership structures are of limited importance to lenders. From the perspective of security, this is equally pertinent to the lenders and other linked parties. Offtake contracts come in a variety of formats, but the following six are the most common:

- i. Accept or Pay the Contract
- 2. Accept and Pay Contract
- 3. Long-Term Sales Agreement
- 4. Hedging Agreement

- 5. Contract for Dissimilarities
- 6. Throughput Agreement

Depending on the circumstances, the features of these contracts vary.

Take-or-Pay Contract: Based on an agreed-upon price, the offtaker is obligated to purchase the project company's goods under any circumstances. In these types of contracts, it is crucial to review the force majeure and availability clauses right once since, typically, the project company is only compensated if it can provide the desired results. If the goods is not available for whatever unforeseeable cause, the offtake will not pay the amount. The fact that these contracts seldom operate on a hell or high water basis should be stressed since they help the projects earn predictable income.

Take-and-pay contracts: In these sorts of agreements, the offtaker only pays if it buys the goods at a price that has been previously arranged. This kind of agreement is often used for input supply, such as fuel or raw material contracts.

Long-term sales agreements: In these agreements, the offtake undertakes to buy only the agreedupon quantities of the product, but the price is dependent on an index price or the market price at the time of purchase. Since the price risk is unchanged despite being indexed to the CPI and the demand risk is therefore reduced, the likelihood of deflation will result in a decline in revenue. Examples of LT sales contracts may be found in the mining industry oil and gas endeavors. Some contracts might have a product floor price for deflation risk.

Hedging Contract: Mining projects and merchant power selling markets are the main locations for hedging contracts. Barrick Gold, for instance, offered the option for sales contracts. The price of production was limited to the agreed-upon price if the price of gold rose over Rs. 0. Sometimes there may be a collar, in which case the price can only fluctuate within a limited range than the high and low of the market.

Contract for Differences: In a CfD structure, production is sold to the market rather than to an offtaker, which is the same as in a hedging contract. Similar to a take-or-pay contract with an established rate. In the market for electricity, long CfDs are used. In certain nations, CfD rather than PPA must be used when selling power since it must stay inside the country's electricity pool.

Throughput Contract: Pipeline developments often include these contracts. It is an agreement formed between two parties wherein one of the parties secures a service or good for a certain amount of time. Throughput contracts, which provide access to supplies rather than actual cash, may be utilized by small businesses as an indirect method of funding initiatives [1].

Availability-Based Contract

The PFI-Model project type that is most often employed is one with availability-based contracts. Public-sector infrastructure such as schools, hospitals, prisons, social housing, or government offices, where payments are frequently made by the Contracting Authority for the use of the building; a transportation facility such as a tunnel, road, or bridge, or parts of the system, such as trains or signaling for a railway line, where payments are made for the use of the facility or system. Since the market at the time the PFI projects were first started was very familiar with PPAs, it made sense to try to use an existing model rather than start from scratch. It has been noted that the significant elements of Availability-based PFI-Model Project Agreements are directly derived from PPAs. In summary, the three fundamental needs for a conventional PPA are as follows: In essence, these are decisions that need to be made by the Project Company and its investors. In contrast, the power plant only has to be accessible when necessary to deliver the agreed-upon output in MW in the Offtaker's eyes [2], [3].

Concession Agreement refers to the project agreement between a project company and a contracting authority, under which the project company may levy user charges, such as tolls, fares, or other payments from project users, in exchange for developing, designing, funding, and managing a project to provide or upgrade public infrastructure.

A concession agreement transfers ownership of the project to the government, giving the Project Company a license or lease to utilize it for the duration of the deal before returning it to the Contracting Authority. Concession agreements may be used for the construction and operation of, among other things: a. a bridge, a toll road or tunnel for which the public pays tolls; b. a transportation system for which the public pays fares; c. ports and airports, which are often funded by shipping or airline corporations. A well-known PPP structure is the cluster of Project Contracts around a Concession Agreement. The main difference between it and the PA Model is that with a concession, the Project Company bears the utilization risk.

User fees

Similar to the Service Fee for a PH-Model project, User Charges are often based on the anticipated revenues needed to pay the project's fixed and variable expenses. The primary distinction is, of course, because in this scenario, the total income is variable based on consumption rather than being fixed. The Project Company often has some latitude to determine User Charges within a certain range, subject to regulations prohibiting discrimination against any specific user class, and with indexation for inflation and currency fluctuations as necessary. However, this would not preclude other toll differences from being specified in the Concession Agreement, such as the higher tolls charged for trucks on toll roads compared to cars. Tolls may also change depending on the time of day; for example, a road toll may be greater during rush hour [4]. The Concession Agreement must include language requiring the police to stop and detain motorists who have not paid the tolls or granting the Project Company the authority to prosecute offenders in court.

Competition

Following the user fees comes a crucial condition about competition. Some concession agreements depend on competition to keep user charges affordable rather than fixing them in advance. It goes without saying that there must be genuine competition for this to succeed. This may be the case, for instance, if there is a reasonable-quality parallel free road or another sea port that can be utilized in place of a port that is covered by a Concession Agreement. Contrarily, if the tolls are fixed, as in the case of user fees, competition from other forms of transportation is often a problem in concession agreements. For instance, the Contracting Authority could have to pay the Project Company for lost income if it builds a new road that diverts traffic from a concession route. The

issue with this is that it could make it more difficult for the Contracting Authority to plan longterm improvements to the road system or other transportation infrastructure, and in the worst case scenario, the Contracting Authority would even have to purchase back the concession [5].

Revenue Sharing

The Contracting Authority may demand a portion of the extra money made if traffic is much higher than the initial forecasts. If the Contracting Authority is giving the project any financial assistance, this concept is particularly crucial. Since it is relatively simple to manipulate the investors' rate of return to the Contracting Authority's detriment, such "upside sharing" should be based on gross revenues rather than other metrics.

User Problems

Since users are paying to use the facility under a concession agreement, they are entitled to more in terms of customer service. The Concession Agreement includes service criteria, and failing to meet them will result in fines. A system to settle conflicts is also necessary. In certain circumstances, a project agreement may also be referred to as a concessionary deal. Figure 1 below illustrates the usual fundamental layout of a toll-road concession.

There are many different project types that do not operate under a Project Agreement, for example, those that sell a good or service to private-sector customers in a market that is based on commodities or is open to competition, such as oil, gas, mining, or telecommunications projects, or "merchant" power plants, even though they typically have some kind of license that enables them to do this instead of a Project Agreement.

Instead of just contracting out the project's management and upkeep, the project company may choose to manage it itself, maybe with the help of one of its shareholders under a technical assistance arrangement. Additionally, there is the privatized infrastructure found in ports and airports, which operates under a permit rather than a Project Agreement. A mobile phone network project often consists of many Construction Contracts rather than a single one, and there is no Offtake Contract. There isn't always a requirement for an Offtake Contract if the project's end product is a commodity with a sizable market.

DISCUSSION

An input-supply contract is not necessary for projects that generate electricity using hydropower, wind power, or solar power, or those that utilize gasoline or a comparable raw material. Of fact, none of these arrangements or agreements are particular to project financing. A defining characteristic of project finance is the relative significance of these issues and how they are tied together. Any firm may have investors, execute contracts, get government permits, and so on.Project finance primarily involves dividing a project's risks among its many stakeholders in a fair manner. Certainly, this idea served as the inspiration for the funding method.Project finance methods were utilized by Roman and Greek traders to divide the risks involved in marine trade. On the understanding that such credit would only be repaid through the sale of cargo brought back by the voyage, a loan would be advanced to a shipping merchant.

The project agreement, which is the main contract for any PFI project, sets up the relationship, privileges, and duties that apply to both the public authority and the project business over the course of the project. Another name for it is a concession deal [6]. Early PFI projects often included distinct contracts for the project's various stages, such as a development agreement for the planning and building phase and an operating or facilities management agreement for the running period. However, having a single project agreement that addresses every aspect of the project is more typical these days.

Offtake Contract, Concession Agreement, and Availability-based Contract are the three types of project agreements. These models have been thoroughly explored, with each model's component portion being explained. A project agreement is a specific kind of contract that must be formed in order for the parties to any project finance to be legally binding. Project finance is a strategy for obtaining long-term debt financing for large projects that relies on "financial engineering" and loans secured by the project's exclusive cash flow [7], [8].

Project Agreements are described as agreements made between two or more parties to carry out a certain task in a specific manner. It is a fundamental contract created for each project between the two qualified parties.Offtake Contract: This is a contract, similar to a project for a processing facility, wherein the Project Company produces a product and sells it to an Offtaker.Contracts with availability clauses: These contracts are based on the PFI (Private Finance Initiative) model, in which a Contracting Authority pays a Project Company in exchange for the latter making the project usable.Concession Agreement: A concession agreement is a project agreement between a project company and a contracting authority that allows the project company to levy user charges, such as tolls, fares, or other payments from project users, in exchange for designing, constructing, financing, and operating a project to provide or upgrade public infrastructure.The main clauses that are often included in significant subcontracts are covered in this section. All project contracts that the project business may sign fall under this category of agreements. As was said there are a few subcontacts and other relevant Agreements that were addressed in depth in the previous chapter regarding the project Agreements [9].

All of the direct Agreements between the project leaders and project contracts are included in subcontracts. As was already mentioned, not every project financing contains all of these contractual building blocks, but most do. It is crucial to understand the scope, function, and structure of these contractual building blocks because they frequently serve as a significant part of the framework for project financing. Any project contracts that are changed often need the lenders' consent.

CONCLUSION

In conclusion, offtake contracts are important agreements between buyers and sellers in industries such as energy, mining, and agriculture. The type of offtake contract chosen will depend on the specific needs and priorities of the parties involved, and each type has its own advantages and disadvantages. It is important for parties to carefully consider their options and negotiate a contract that is financially viable and meets their needs.

REFERENCES:

- [1] S. Byoun, J. Kim, and S. S. Yoo, 'Risk management with leverage: Evidence from project finance', *J. Financ. Quant. Anal.*, 2013, doi: 10.1017/S0022109013000082.
- [2] S. Byoun and Z. Xu, 'Contracts, governance, and country risk in project finance: Theory and evidence', *J. Corp. Financ.*, 2014, doi: 10.1016/j.jcorpfin.2014.03.003.
- [3] D. Cha, 'A new approach to value creation stranded gas resource commercialisation via low-cost small scale floating LNG projects', *APPEA J.*, 2018, doi: 10.1071/aj17201.
- [4] T. Daglish, G. G. F. de Bragança, S. Owen, and T. Romano, 'Pricing effects of the electricity market reform in Brazil', *Energy Econ.*, 2021, doi: 10.1016/j.eneco.2021.105197.
- [5] T. Mkhabela, 'Dual moral hazard and adverse selection in south african agribusiness: It takes two to tango', *Int. Food Agribus. Manag. Rev.*, 2018, doi: 10.22434/IFAMR2016.0177x.
- [6] E. R. Yescombe, 'Types of Project Agreement', in *Principles of Project Finance*, 2014. doi: 10.1016/b978-0-12-391058-5.00006-0.
- [7] E. Sugiyama and M. Marmiroli, 'Blockchain-Based Bilateral Energy Transaction Platform', in *Proceedings of 2019 IEEE PES Innovative Smart Grid Technologies Europe, ISGT-Europe 2019*, 2019. doi: 10.1109/ISGTEurope.2019.8905543.
- [8] E. R. Yescombe, 'Common Aspects of Project Agreements', in *Principles of Project Finance*, 2014. doi: 10.1016/b978-0-12-391058-5.00007-2.
- [9] H. Owolabi, L. Oyedele, H. Alaka, S. Ajayi, M. Bilal, and O. Akinade, 'Risk mitigation in PFI/PPP project finance: A framework model for financiers' bankability criteria', *Built Environ. Proj. Asset Manag.*, 2020, doi: 10.1108/BEPAM-09-2018-0120.

CHAPTER 25

A BRIEF DISCUSSION ON CONSTRUCTION CONTRACT

Mr. Mohit Totuka, Assistant Professor

School of Business and Management, Jaipur National University, Jaipur, India Email id- mohittotuka@jnujaipur.ac.in

ABSTRACT:

Construction contracts are legally binding agreements between parties involved in a construction project. These contracts outline the terms and conditions of the project, including the scope of work, timeline, budget, payment structure, and other key details. There are several types of construction contracts, each with its own advantages and disadvantages. The most common types include fixed-price contracts, cost-plus contracts, time and materials contracts, and design-build contracts. Fixed-price contracts provide a set price for the entire project, providing certainty to both parties. However, if there are unforeseen changes or delays, the cost may be borne by the contractor. Cost-plus contracts involve the contractor being reimbursed for their actual costs plus a percentage for profit. This provides flexibility for changes or unforeseen circumstances, but may result in higher costs for the owner. Time and materials contracts provide a more flexible payment structure, with the owner paying for materials and labor based on actual costs. However, this type of contract can result in uncertainty around the final cost of the project.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

In the traditional contracting for a major project, the project developer, or a Contracting Authority, uses an architect and/or consulting engineer to develop the project's design, with detailed drawings, a bill of quantities, etc., on the basis of which a bid for the construction is invited; any specific equipment required is procured separately. However, even if the Sponsors or Contracting Authority have the knowledge to divide the work up into separate contracts and organize the various responsibilities between various parties. Lenders in project finance generally do not accept this because they prefer 'one-stop' responsibility for completing the project satisfaction because it prevents the project company from becoming embroiled in disputes and allows them to determine who is really to blame for a job poorly done.

Therefore, the construction contract for a project that is financed by a project typically takes the form of a contract for the project's design and engineering. This kind of contract must be established in order to purchase or produce any machinery or equipment. In order to build the project, the company creates a "turnkey" responsibility to deliver a finished product that is fully functional and ready for operation. In addition, contracting for major projects entails selecting a

contracting or engineering company to serve as the project's construction manager. This company will be responsible for managing all aspects of the project's construction in exchange for a management fee. However, the fee charged by the engineering firm may change depending on how much the construction costs end up costing in the end [1], [2].

A variable construction cost is not acceptable to lenders because it could result in a cost overrun for which there may not be sufficient funding or which raises costs to the point where the project cannot be operated profitably, even though this may be thought of as an economically efficient way to handle major projects given the high costs involved. As a result, the construction contract also stipulates that the contractor will complete the job for a certain fee.

In order for the project to be finished by the specified date, the requirements of the project agreement must finally meet the project completion. A turnkey Date-certain, Fixed-price, construction contract like this shifts a significant portion of duty and risk to the construction contractor. As a result, we can also claim that the contract also stipulates a fixed project completion date. Additionally, the Construction must "wrap" the performance of its own subcontractors, adding to the risk involved. These additional risks are undoubtedly going to force the building contractor to factor in more contingencies than they would have if the job were performed on a cost-plus basis, which will result in a higher contract price. The predicted cost of a construction contract by %, although the final cost of the latter form of contract may easily climb by %. It is thus presumed to be having the same effect.

Most process-plant and infrastructure projects use typical construction contracts with fixed prices and completion dates. Sponsors that choose a different strategy often need to provide lenders with a guarantee of project completion. Decreasing the transaction's non-recourse status in the process. Certain project types such as those involving mining and oil and gas extraction do not often utilize or cannot use such contracts.

When a project is being built utilizing technology that has been licensed from a third party, as is often the case with refinery or petrochemical project. It should be noted that standard forms of construction contracts, like those created by the International Federation of Consulting Engineers, are typically not appropriate for project financing. This is due in part to the fact that they are too "contractor friendly" and in part to the fact that their structure differs from that required for project financing.

Since the construction contract specifies the project's design, performance standards, and technical requirements, it can be argued that it provides a "fast-track" route for the project's construction because the contract can be signed and construction can start before all of the fine-tuning design work is finished. The project business is also given the option to contest any elaborate designs created by the building contractors.

In order to ensure that appropriately qualified subcontractors or suppliers with pertinent technology are being used, the construction contractor is responsible for hiring its own subcontractors and equipment suppliers, even though the Project Company may have a right of

prior approval over major subcontractors or equipment suppliers. Construction insurance clause is typically excluded from the specified clauses of the construction contract price [3], [4].

Starting of The Works

The Construction Contractor normally waits until the Financial Close has been achieved, when there is certainty that the funding is available, before starting work. However, there may be a delay between the time the Construction Contract is signed and the Financial Close, and there may be other factors involved.

Therefore, a Notice to Proceed is frequently included in the Construction Contract. Here, the contractor uses a period of time after the NTP is issued rather than a specific date to determine the required Project Completion date. The NTP is essentially referred to as a formal notice to begin the work and can be issued by the Project Company at Financial Close.

- a. facilitating the provision of utilities required for building
- b. supplying the gasoline or other supplies needed to test the plant
- c. work that is being done "outside the fence," such as fuel and grid connections for a power plant or the construction of a road or rail link by the offtaker/Contracting Authority or a third party in accordance with the project agreement.

These are effectively compensation events and are frequently referred to as owner's risks. As between the Project Company and the Construction Contractor.

Relief Occasions

A relief event, as used in the context of a construction contract, is defined as an occurrence that was beyond the reasonable control of and could not have been reasonably anticipated by a prudent and experienced construction contractor. As a result, the construction contractor is released from responsibility for any delays in the project's completion. As far as feasible, the terms of the construction contract should resemble those of the project agreement.

Project Finishing

The construction contract outlines the criteria under which the project business will deem the project finished. A project may be completed in numerous stages:

- 1. When a project is ready for start-up and testing, such as performance tests, such tests would include validation that the project can fulfill the necessary performance and operational standards. This is known as mechanical completion under an EPC contract.
- 2. The project is turned over to the Project Company upon reaching Substantial Completion, which occurs when it satisfies the fundamental requirements of the Construction Contract.
- 3. Final Completion, which depends on 'punch list' or'snagging' item resolution. which while they are a part of the agreed-upon elements in the construction contract do not preclude the project from moving forward. Typically, the process of certifying the completion of work involves the Lenders' Engineer.

Damages Liquidated in Full and Termination

Liquidated Damages are agreed-upon set sums of money that are enough to fund the Project. Financial losses incurred by the company as a consequence of late project completion, inability to complete the project on time, or poor project performance. If particular dollar amounts were not agreed upon in this manner, there would be protracted disagreements about the extent of each loss, which would not be acceptable to lenders and may financially ruin the Project Company due to the ambiguity involved. Liquidated Damages are not meant to be a punishment; rather, they are seen as a just reimbursement for the harm done [5].

Other than the amounts of liquidated damages, the Project Company is not permitted to bring claims against the Construction Contractor for additional or lost earnings, unless the Construction Contract is terminated. Liquidated Damages may also be required to offset lost revenue or penalties due under the project Agreement. Lenders, who often demand larger amounts of LDs than may be found in a construction contract not being project financed, place a premium on LDs. Most construction contracts include liquidated damages for delays in project completion, unless they are the result of owner's risk or extenuating circumstances. Performance delays call for liquidated damages when the project includes a process plant or the functionality of a system.

DISCUSSION

Overall Liquidated Damages Cap may be defined as an overall cap that is created for Liquidated Damages of all sorts. For an EPC Contract, this ceiling is often set at -% of the contract value, which is greater than the average for construction contracts that are not project-financed. There is also a clause relating to environmental guarantees. Whereas the construction contractor may also offer assurances regarding the project's impact on the environment. Liquidated Damages are often irrelevant when fulfilling emission limitations is a legal requirement since the criteria must be reached for the Construction Contract to pass performance testing. The Project Company and Construction Contractor should share the benefits of early income if the Construction Contractor receives a bonus for finishing the project sooner than expected.

Departure from the Project Company

The Project Company has the option to end the contract if the Construction Contractor is unable to complete the project by the specified long stop date because Liquidated Damages alone might not be sufficient to protect the Project Company from the Construction Contractor's subpar performance, especially given that these are limited in amount. The project would not be finished in this case if the LD cap(s) were exhausted or environmental requirements were not met. In such circumstances, the project firm has the authority to revoke the relevant contract and assign a different contractor to complete the work.

Alternately, the project company may demand that the construction contractor pay back all amounts paid by the project company under the construction contract and restore the site to its preconstruction state.

Position of the Offtaker/Contracting Authority may also be provided, since an offtaker/contracting authority may desire to charge LDs to the project company.

Security

The project firm is given a variety of forms of security by the construction contractor to ensure that the responsibilities under the construction contract will be fulfilled. The following sections examine these different forms of security:

- (i) **Retainage:** The project business retains a portion of each contract payment until the project is completed to their satisfaction. Alternatively, the construction contractor may be paid this "retainage" and instead give a retention bond for the same amount. This assures that the construction contractor will deal expeditiously with any remaining minor items of the work at the conclusion of the contract.
- (ii) **Performance Bond:** As additional security for the duty to pay LDs, the building contractor is often required to furnish a bond in the amount of -% of the contract value.
- (iii) Advance-Payment Guarantee: If any payments have been received before the work has been completed, the construction contractor offers the guarantee for an advance payment. Under this guarantee, the funds in question will be refunded pro rata if the contract is cancelled before the work is complete.
- (iv) **Warranties:** The construction contract often includes warranties once the project is completed.

These obligations should be backed by insurance company bonds or bank letters of credit, allowing the project business to withdraw money right away instead of having to go through a dispute process or go to court to be paid. If the event covered by the security occurs and payment cannot be quickly acquired, the project company may have a liquidity crisis.

Decision of the Construction Contractor to Suspend and Terminate

The construction contractor is entitled to cancel the agreement and get compensation for any losses, as well as exercise any other basic contractual rights. Before he finally decides to terminate the contract, the construction contractor is typically required to suspend work for a while as a temporary measure. For instance, in the event that Project Company fails to make a payment, the construction contractor may stop working days after the payment was due, but not until after another three months had passed. According to the terms of the direct agreement with the lenders, this suspension period is often extended further. The suspension time is added to the end date for project completion and the Project Company may also be required to pay expenses spent in keeping the project suspended if work continues after the Project Company has corrected the default.

For a maintenance contractor looking after a building, road, or other comparable civil works, fixed costs often apply; these rates are typically linked by the CPI or another industry price index. Operation and maintenance contracts are concerned with all those forms of contracts which regulate PPP (Public Private Partnership) agreements and types, transferring the long-term risk of erratic maintenance and lifecycle costs away from the project company.

O&M contracts may give owners a variety of options relating to the duration of the agreement. For instance, in a process plant project, the O&M contractor may receive a bonus if the project performs better than the initially agreed level and, on the other hand, may be penalized if it performs below the level agreed upon. A bonus is computed to divide the additional income brought in by improved operations between the Project Company and the O&M Contractor. Bonuses often do not apply to contracts for maintenance or building-related services. In O&M/Maintenance Contracts, the Project Company is subject to penalties that are not really limited to the cost of one or two years' worth of fees. Penalty exemptions, including relief from termination, will often correspond to those in the Project Agreement.

Services for Buildings Contract

In the PPP industry, a Building Services Contract is used for projects including accommodations and includes services like cleaning, mail delivery, laundry, catering, trash disposal, parking, reception and security, telephone, and more. This Sub Contract and the Maintenance Contract may be merged, allowing all of these services to be stated in the relevant contract. The Sub-Contract may be periodically the subject of benchmarking or market testing. Performance will be compared to the Project Agreement's KPIs, and again, LDs are often only allowed to charge for around two years. The broker is crucial in providing the insurance company with information about the Project. This is significant since insurance is seen as an uberrimcefidei contract in certain states. There is no need to pay under the aforementioned insurance if the insurer is not informed of any significant information. To prevent it, the broker must collaborate with the project's sponsors and management. A set price for their services is preferable than negotiating a percentage of the insurance premiums, which is often given to brokers but is plainly not an incentive to keep rates low. The insurance is set up in two stages: first, it covers the whole project's building period; and second, it is renewed annually once the project is up and running. The operational phase insurance should either be impossible to get or have predetermined rates [6].

Table of Contents

The next section will describe the seven most frequent insurance kinds that may be used for building contracts:

All hazards insurance: This kind of insurance protects against any kind of physical harm that might be done to the works. The entire reinstatement value as well as a markup for any additional expenditures incurred at employment are often covered by all-risk insurance. Most contractors have "global" or "all risks" insurance plans that cover all of their projects and are often more affordable for all of the contractors to maintain. The risk associated with the job subsequently shifts to the employer, who is then responsible for determining whether or not the activity is sufficiently insured. Although flaws are often excluded from the current all-risks insurance policy, if one so chooses, they may acquire a clause that will cover any damages that a defect causes or may cause to the other components of the job. The many works' components must be stated precisely and clearly in order for this insurance to have any relevance. This kind of insurance is only made accessible if the planned work is carried out in conformity with accepted building methods.

Professional indemnity: Professional indemnity insurance protects contractors from liability resulting from professional negligence in relation to their design responsibilities. This insurance will take action in the following scenarios, for instance, if the designs do not meet the specifications of the underlying construction contract. Professional indemnity insurance often operates on a "a claim made basis" rather than delaying the occurrence of the professional duty violation. In other words, professional indemnity insurance must be present until any applicable restriction term, such as the years-long period in the United Arab Emirates, expires. Depending on the intricacy of the design job in issue, the level of professional indemnity insurance coverage may vary from case to case. Another significant insurance coverage is professional indemnity insurance, which is often carried by design consultants like architects and engineers. They must have this kind of insurance in place in order to have professional indemnity.

Public Liability Insurance: This kind of insurance protects a contractor against liabilities that may result from a third party's death or bodily harm. Employees of the contractor and others are not protected by this insurance, even if they all have worker's compensation coverage or ought to. In addition to death and injury, it also covers damage to property owned by third parties that happened previous to the taking over of the works but is not covered by the all hazards insurance policy.

Workers' Compensation Insurance: This kind of coverage protects contractors from potential legal obligations in the event that one of their workers dies or suffers a bodily injury while carrying out their job-related duties. The Sharia law may apply if an employee of a contractor kills a third party for whatever reason, as it does in many Middle Eastern nations, allowing the victim's heirs to demand "blood money" from the person who killed the victim. In the UAE, the standard of pay is presently AED 0 per make. As a result, the contractors sometimes get this extra insurance to protect themselves from this form of responsibility.

Decennial Liability Insurance: According to a regulation made under Articles 0 to 3 of the UAE Civil Code, a contractor and the supervising architect are jointly liable to the employer for years, or from the date the works are taken over, for the flaws that could endanger the safety of the building. Since this kind of obligation cannot be expressly disclaimed in a contract, contractors often get insurance to cover such risks. Most other Middle Eastern governments typically follow such decennial liability schemes.

Delay in start-up Insurance: This insurance coverage essentially covers any delays that may have occurred in finishing the contract by the specified date. In accordance with this clause, the contractor will typically be required to pay the employer liquidated damages if the work is not completed by the completion date or, depending on the type of work that needs to be done, the outcome does not meet the specified output criteria, unless the contractor is entitled to contractual relief [7].

Essential Terms of Insurance Contracts

In addition to the fundamental criteria for obtaining and maintaining insurance policies, there are other crucial ancillary difficulties as well, such as:

Joint Names: Some insurance policies, particularly those that deal with public liability insurance, are taken out in the joint names of the employer, the contractor, and the funder as well. This ensures that the employer is completely covered against any liability that may have arisen as a result of a contractor's breach of contract. Co-insured parties should also receive copies of the policy so they are aware of their insurance status and are aware of the specifics of their coverage. According to this clause, the party whose name appears on an insurance policy may file claims, and it also stipulates that insurers must forego any subrogation claims against the co-insured parties. In other words, even if the insurer receives payment as a result of the employer's acts, it undertakes not to pursue a claim against the employer. The policy specifically states that no act or omission of a co-insured party would invalidate the policy or otherwise impair the coverage of the other co-insured parties where two or more parties are covered under the same policy.

Cross-Liability: This provision applies generally to all contracts that are entered under in joint names. According to the cross liability provision, each party will be covered separately, as if by a separate policy, and as a result, the policy will also cover any liabilities that may be incurred by one co-insured party against another co-insured party.

Interest listed on a Policy: There is a distinction between insurance taken out in joint names and insurance where a party's interest is just listed on a policy. Although the party has the right to split insurance proceeds when only their name is listed on the policy, in this case they are not directly entitled to make a claim. Additionally, the insurance company will often not relinquish its right of subrogation against the person whose interest is listed on the policy in this situation.

Per occurrence or cumulatively: It's critical to confirm if the insurance coverage is genuinely offered on a per occurrence or cumulative basis. When insurance is supplied on an aggregate basis, a prior claim might have a significant negative influence on the quantity of insurance that is now available, hence it is desirable for the employer to have coverage on a per occurrence basis. If the insurance is not project-specific, it also means and becomes relevant that a claim from one project may imply that there is no coverage available for any other projects [8].

Deductibles: It is the employer's job to carefully evaluate the amount of the deductible under an insurance policy to make sure that the deductible is appropriate and isn't truly too high. As a result of high deductibles, there is a chance of becoming underinsured.

Exclusions: Exclusions are often a part of insurance plans and may limit the amount of coverage that is offered. Therefore, it is crucial that both employers and contractors analyze the scope of coverage in order to determine if a policy is appropriate in light of the risks that are obviously certain to arise under the contract.

Lender's interests: A lender may demand that the assignment of the borrower's rights under insurance policies include the borrower as the loss payee of the insurance funds as part of the security package. In addition, if the project is destroyed or severely damaged, the lenders can choose to utilize the insurance funds to pay down the debt rather than restarting it. He must be careful to respect his right under the insurance policy if the lender demands that this capability be included.

Identity of insurers: Employers often set the minimal standards for the insurers' creditworthiness in order to lessen the danger of insurers defaulting on their payment commitments.

Limitations on liability: There are no restrictions on the amount of insurance that contractors are needed to carry to cover risks that may result from negligence or breach of contract.

The project site is often provided by the public sector offtaker, sometimes known as the contracting authority, particularly when a reverting asset is involved. Until the project agreement's term expires, the project company normally has the right to utilize the allocated site for project completion. The offtaker/contracting authority must first establish that there is no motivation for the firm, or Project Company, to remove the lease from the project. Only then may they sell the lease without finishing the project.

CONCLUSION

Design-build contracts involve a single entity responsible for both the design and construction of the project. This can result in a more streamlined process, but may limit the owner's control over the design and construction. Other types of construction contracts include turnkey contracts, construction management contracts, and joint venture contracts. In conclusion, construction contracts are important legal agreements that outline the terms and conditions of a construction project.

The type of contract chosen will depend on the specific needs and priorities of the parties involved, and each type has its own advantages and disadvantages. It is important for parties to carefully consider their options and negotiate a contract that is financially viable and meets their needs.

REFERENCES:-

- [1] E. Trinkūnienė and V. Trinkūnas, 'Knowledge management in composition of construction contracts', *Entrep. Bus. Econ. Rev.*, 2014, doi: 10.15678/EBER.2014.020407.
- [2] D. Finnie and N. A. N. Ameer Ali, 'The New Zealand construction contracts amendment act 2015 – For better or worse?', *Constr. Econ. Build.*, 2015, doi: 10.5130/AJCEB.v15i4.4544.
- [3] S. Ahmadisheykhsarmast and R. Sonmez, 'A smart contract system for security of payment of construction contracts', *Autom. Constr.*, 2020, doi: 10.1016/j.autcon.2020.103401.
- [4] A. Bencheneb, 'The international construction contract', *Revue Internationale de Droit Economique*. 2018. doi: 10.3917/ride.321.0005.
- [5] R. Asadi, S. Wilkinson, and J. O. B. Rotimi, 'The common causes of rework in construction contracts: a diagnostic approach', *J. Eng. Des. Technol.*, 2021, doi: 10.1108/JEDT-04-2021-0215.

- [6] K. C. Iyer, N. B. Chaphalkar, and G. A. Joshi, 'Understanding time delay disputes in construction contracts', *Int. J. Proj. Manag.*, 2008, doi: 10.1016/j.ijproman.2007.05.002.
- [7] D. Larasati, N. Ekawati, S. Triyadi, A. F. Muchlis, and A. Wardhani, 'Impact of the Pandemic COVID-19 on the Implementation of Construction Contracts', in *IOP Conference Series: Earth and Environmental Science*, 2021. doi: 10.1088/1755-1315/738/1/012075.
- [8] K. Sigalov *et al.*, 'Automated payment and contract management in the construction industry by integrating building information modeling and blockchain-based smart contracts', *Appl. Sci.*, 2021, doi: 10.3390/app11167653.

CHAPTER 26

A STUDY ON PERMITS AND OTHERS RIGHTS

Mr. Dhruv Saxena, Assistant Professor School of Business and Management, Jaipur National University, Jaipur, India Email id- dhruvsaxena@jnujaipur.ac.in

ABSTRACT:

Permits and other rights that are necessary for the project's construction and operation are not thought of as separate contracts, but obtaining or securing them is frequently a crucial requirement that comes before the contract's effectiveness and the financial close. Permits are often split into two categories: those needed for the project's development and operation, such as rights of way or easements and agreements to share facilities with another party, and Permits may be needed in various nations for investments in and financing of the Project Company.

KEYWORDS:

Budget, Economical, Feasibility, Management, Risk.

INTRODUCTION

Permit requirements vary significantly across nations and between projects. Regional or municipal administrations as well as central government ministries may award them. The project may automatically get some of the necessary permits if there is a Project Agreement with a public-sector offtaker or with a contracting authority, or it may offer assurance that the government would assist in acquiring them. Major projects are probably going to need a lot of licenses, and getting those permits late may really slow things down. The Sponsors and the Project Company must make sure that their organization has individuals who work closely with the legal experts on permits.

- 1. **Construction Permits:** Several different types of specialized construction permits could be needed. The construction contractor should typically be responsible for securing such permits; they should be knowledgeable in this field and be willing to assume the risk of delays resulting from late permit acquisition.
- 2. **Investment Permits:** Permits may be needed for foreign investments in the Project Company as well as for the Project Company to send dividends or other payments to investors abroad.
- 3. Exemptions from paying taxes are also possible.
- 4. **Exchange Controls:** In nations with exchange controls, businesses are restricted from engaging in foreign currency exchange and payment activities. Exchange restrictions might stop the project company from:
- i. Having international bank accounts;
- ii. Maintaining bank accounts outside of the nation;
- iii. Extending the duration of foreign currency debts or borrowing foreign money;
- iv. Paying providers who are located abroad.

Guarantees of the Parent-Company

If a subcontractor is a division of a much bigger corporation, as is often the case. Lenders may demand parent company guarantees for the former's commitments under its Sub-Contract. For instance, the transfer of risk such as excess maintenance costs from the project Company guarantee ('PCG') of its LD or other commitments, if the O&M/maintenance is being handled by an SPV created for the purposes of this contract with no other source of funds. All those direct Agreements that connect the project leaders to the project Contracts are often referred to as sub-Contracts. In addition to the project Agreements, which were covered in the previous chapter, there are a few subcontracts and other related Agreements, such as the construction contract, operation and maintenance contract, building services contract, site lease, insurance, permits, and other rights. While not technically contracts per se, these agreements serve as a foundation for all project contracts. Such subcontracts include assurances from the parent corporation.

In a project funded project, the construction contract often takes the form of an engineering/design contract. This kind of contract must be established in order to purchase or produce any machinery or equipment. As a result, in order to build the project, the firm develops a "turnkey" duty to provide a finished product that is completely outfitted and prepared for use, often known as a D&B or EPC Contract. The construction contract specifies the project's design, technical requirements, and performance standards and may provide a "fast-track" path to construction since it may be signed and work can start before all the detailed design work is finished.

O&M agreements, i.e. Operation and maintenance agreements are essentially the contracts that control PPPs (Public Private Partnerships). As an example, in a process plant project, the O&M contractor may receive a bonus if the project performs better than the initially agreed level and, on the other hand, may be penalized if it performs below agreed levels. O&M contracts may offer the owners various types of options relating to the term of the contract. In the PPP industry, a Building Services Contract is used for projects including accommodations and includes services like cleaning, mail delivery, laundry, catering, trash disposal, parking, reception and security, telephone, and more. This Subcontract may be joined with the Maintenance Contract to include the specifications for all of these services.

The broker is crucial in providing the insurance company with information about the Project. This is significant because, in certain countries, insurance is a "uberrimcefidei" contract, meaning that the insurer is not obligated to make payments under the terms of the policy if any crucial information is not given to it. To prevent it, the broker must collaborate with the sponsors and the project company [1]. The project site is often provided by the public sector offtaker, sometimes known as the contracting authority, particularly when a reverting asset is involved. Until the project agreement's term expires, the project company normally has the right to utilize the allocated site for project completion.

Permits and other rights that are necessary for the project's construction and operation are not thought of as separate contracts, but obtaining or securing them is frequently a crucial requirement that comes before the contract's effectiveness and the financial close.

Lenders could demand that the parent company of the former's parent firm guarantee its commitments under its Sub-Contract. In addition to their unique requirements, which are covered in detail in the current unit, all of these subcontracts and the associated subcontracts that were described above must be taken care of. Sub-Contracts: These are all of the agreements that are made directly between the project's leaders and the project contracts. Construction Contract: In project financing, it often takes the form of a contract for the project's design and engineering. This kind of contract must be established in order to purchase or produce any machinery or equipment [2].

Relief Events: In the context of a construction contract, a relief event is defined as an occurrence that could not have been foreseen by and is beyond the control of a prudent and experienced construction contractor, and that exempts the construction contractor from liability for any delays in completing the work. The notice to proceed is a formal notice to start the work under construction contract and can be issued by the project company at financial close. Building Services Contract: A Building Services Contract is used in the PPP sector, particularly for Accommodation Projects, and it includes services like cleaning, mail delivery, laundry, catering, garbage removal, parking, reception and security, telephone, and more.

DISCUSSION

The loan paperwork specifies the extra provisions that must be included in the agreement, as was covered in the previous unit's discussion of project agreements as a crucial subject to comprehend for project financing. The loan documentation, which deals with extra controls and other restrictions that lenders may have and might impose on such project businesses, is seen as being an integral aspect of project financing. In order to offer the learners a thorough comprehension of the loan arrangements, the current course deals with term loan documents. The final product of project financing is often a loan agreement to which the project firms and lenders are parties, together with supplementary security paperwork. 'Boilerplate' is a phrase that is often used when referring to the preparation of loan documents. Boilerplate refers to legal papers that are mostly the same from one loan arrangement to the next. These papers often draw inspiration from loan paperwork that follows the Loan Market Association Standard. The LMA was established in with the goal of standardizing bank loan paperwork as much as possible to make it easier for loans to be syndicated or transferred in other ways on the market.

Although the LMA has not produced any standard project finance loan documents, many of the standard corporate loan clauses can be found in a project finance loan. For this reason, the LMA documentation is seen as a good place to start when creating project finance loan documents because it outlines generally accepted market drafting, which eliminates the need to negotiate "boilerplate" clauses in a loan agreement from scratch [3], [4].

The significance of loan paperwork in project financing is covered in the next part of the unit. The loan documentation plays a crucial role in project financing by strengthening it and requiring the parties to that specific project agreement to abide by the law, as was previously discussed in the unit about the significance of project agreements in the eyes of the law under project financing.

The underlying principles of project finance are primarily concerned with how risks are distributed among the numerous stakeholders with stakes in the project. This risk distribution is achieved mostly via the intricate web of contractual links that develops between the many project partners. The agreements made between them are likewise codified in these intricate matrixes. There isn't a single broad body of legislation that might be regarded as the guiding and regulating force. Strong documentation is required for this since the relationships and risks among the parties to a project finance contract are complicated. But regrettably, there isn't a central authority that can set rules for how projects must be organized or how risks should be distributed among project participants. Instead, it is expected that every project must adhere to the laws and regulations of the specific location and the numerous jurisdictions in which it is being performed or carried out. As a result, it may be inferred that the contracts between the different project partners have a significant impact on the parties. And only these papers will become tools, which in the eyes of the law constitutes proof, through which many of the project risks are distributed among the project partners [5].

It should be clear that there has never been a collection of project documentation that could be considered standard. Each project will have its own collection of papers, some of which may be created especially for it. Below is a quick explanation of some of the major papers included in many project finance models so that you may comprehend it well? These papers may easily be sorted into the following categories:

- a. Sponsor/shareholder agreements
- b. Security and Project Documents
- c. Loan or financial paperwork
- d. Other papers of concern

Loan agreements are essentially the main document that must be properly designed in order to support project financing, since lending is a crucial component of project financing. The loan arrangements are described in detail in the next section. In the group of agreements used to provide financial documentation for project financing, loan agreements serve as the centerpiece. Due to the fact that project companies are sometimes referred to as "special purpose vehicles," the arrangers will ask their project's sponsors to guarantee the project company's payment obligations in the mandate letter. This should not apply to the arranging cost, however, if, as stated in the loan documents, funding for the fee will come from the first withdrawal [6].

Termination:

The final financial documents must be signed since it is stated in the loan documentation that the arrangers won't normally be paid for the job they conduct in connection to the project until it is signed. As a result, the arrangers will vehemently oppose any arbitrary power of the project firm or the sponsors to cancel the mandate. Thus, any right of the sponsors or the project firm to terminate the mandate letter is often excluded in the first writing of a mandate letter. On the other hand, a mandate letter's agreed list of termination events would typically include the following items:

- (i) Missing the deadline for finishing the financial documentation.
- (ii) An unreasonable demand for market flex.

- (iii) a serious mistake made by the sponsors or the project firm.
- (iv) The project's termination; and
- (v) a serious violation by the arrangers that will probably cause the financial papers to be executed after a long-stop date;

Loan agreements so include termination provisions so that parties who violate the contract may be punished in certain circumstances as previously agreed upon by the parties, in addition to fee information and other loan arrangers papers and structures. Numerous clauses with specific purposes may be included in the loan agreement. It might change depending on the circumstances. In the London bank markets, a typical term loan arrangement might have the clauses listed below:

- (a) **Basic Requirements:** In order to avoid being included to the lender's list of defaulters and being panelized, the parties must comply with a number of basic requirements that are precedent. Any bank was required to give money since antecedent requirements under project financing had to be met or waived. These would include delivering certified copies of any relevant board and shareholder resolutions, the borrower's constitutional documents, and other important documents, as well as delivering legal opinions attesting, among other things, that the loan agreement was within the borrowers' power and had been properly authorized. However, no bank is required to lend until these prerequisite conditions have been met or waived. The lenders often vote among themselves to decide whether they should be fulfilled or waived [7].
- (b) **Conditions precedent to each drawdown:** In addition to the general conditions mentioned above, it is assumed that at least two standard conditions must be met on the date that any drawdown request or drawdown was made. These conditions are that no default occurs and that no event occurs that, "with the giving of notice, passage of time, determination of materiality, or fulfillment of any other conditions," would constitute an event of default that had occurred. Although the second condition mentioned above is typically included in almost all term loan agreements, it is likely determined that it occurs because the breach of a representation is a default event.
- (c) **Availability period:** The phrase "availability period" refers to the longest amount of time that lenders may provide a specific party a loan advance. Loan agreements will always specify the time frame for which lenders must advance funds. This time frame is recognized as the availability period. The borrower is required to pay the relevant commitment fee to the lenders throughout the time of availability as previously discussed or agreed upon between them. This charge is owed up to the end of the availability term and becomes due as of the loan agreement's signing. Even if the lenders are not required to provide advance loans, they are still due since the preceding requirements have not been met.
- (d) Drawdown mechanisms: The London market often uses drawdown mechanics. According to this procedure, the borrower is prohibited from requesting a loan in a currency other than sterling more than two working days before the anticipated date of drawdown. On the other hand, if the borrower prefers to use sterling, he may seek a loan up to. a.m. on the actual date of the anticipated drawdown. Every bank in the London

market has easy access to it). If the loan arrangement is a syndicated one, meaning it was funded by many banks, then the notice periods for drawdown listed above may be longer.

(e) A provision relating to interest: Interest on loans in sterling may sometimes be paid at a premium to the base rate. The amount of the margin established and how risky the loan is in the bank's perspective will rely on it. In addition, it is necessary for the loan agreement to make it clear which bank's base rate is being used when interest is levied on the basis of the base rate. For a tiny fraction of other currencies, there could be a London base rate.

However, interest on loans made in sterling via the LMA market may also be levied at a margin above LIBOR, as will interest on loans made in euros through the London interbank market. The rate at which banks may borrow money from other banks in the London interbank market is often characterized as LIBOR in the context of the financial market. When interest is calculated using the LIBOR, it means that each bank has taken out a loan in order to give the borrower the money. Even though a loan agreement may be constructed according to the LMA's guidelines, many banks still do not match funds on a loan-by-loan basis but instead actively manage their funding exposure and aim to strike a balance between borrowing and lending obligations generally.

Banks often buy money on the London interbank market only at short maturities. The longest maturity they will or can acquire under this for the purpose of financing their obligations under a term loan arrangement is typically one year. In this case, the markets are essentially quoted with rates for a variety of shorter maturities, the most popular being one, two, three, and six months [8], [9].

Due to the availability of short-term interbank financing, a bank will often need to borrow money from the interbank market many times throughout the length of a term loan. The borrower often has the option to choose the maturity time of each borrowing his banks are permitted to make; in essence, he does this by defining each "interest period" that will be applied to his loans. The interest is typically paid at the conclusion of each interest period, allowing the banks to pay the interest that is then due on their own interbank borrowings. With the revenues of another interbank borrowing, the parties pay back the principle of each interbank borrowing. "Rolling-over" a loan refers to the practice of repaying one interbank loan using the proceeds of another interbank credit.

CONCLUSION

In conclusion, permits and other rights play a crucial role in various industries, particularly in the construction and environmental sectors. These permits and rights are issued by governmental bodies and are necessary to ensure compliance with regulations and legal requirements. Failure to obtain the appropriate permits and rights can result in legal, financial, and reputational consequences. Examples of permits and other rights include building permits, environmental permits, zoning permits, licenses, and easements. These permits and rights may be required at different stages of a project, from planning and design to construction and operation. It is essential for companies and individuals to be aware of the permits and rights required for their specific project or activity and to ensure that they obtain them in a timely and compliant manner. This may involve navigating complex regulatory frameworks, engaging with government bodies and

stakeholders, and negotiating with affected parties. Overall, obtaining the necessary permits and rights is an important aspect of project management and business operations. It helps to ensure compliance with legal and regulatory requirements, manage risk, and protect the interests of all parties involved.

REFERENCES:

- [1] B. Schreiner and B. van Koppen, 'Hybrid water rights systems for pro-poor water governance in Africa', *Water (Switzerland)*, 2020, doi: 10.3390/w12010155.
- [2] H. J. Bosch, J. Gupta, and H. Verrest, 'A water property right inventory of 60 countries', *Rev. Eur. Comp. Int. Environ. Law*, 2021, doi: 10.1111/reel.12397.
- [3] T. R. Lewis and D. E. M. Sappington, 'Using markets to allocate pollution permits and other scarce resource rights under limited information', *J. Public Econ.*, 1995, doi: 10.1016/0047-2727(95)80005-T.
- [4] J. Muniz, M. da G. G. de Melo, M. A. R. Liberato, I. Wahnfried, and G. Vieira, 'Towards sustainability: Allowance rights for using water resources in Amazonas State of Brazil', *Entrep. Sustain. Issues*, 2018, doi: 10.9770/jesi.2018.5.4(5).
- [5] H. Xu, H. Yang, H. Wang, and X. Li, 'The association of residence permits on utilization of health care services by migrant workers in China', *Int. J. Environ. Res. Public Health*, 2021, doi: 10.3390/ijerph18189623.
- [6] A. L. Ayers and H. L. Chan, 'Rights-based management, competition, and distributional equity in Hawai'i's largest commercial fishery', *Int. J. Commons*, 2020, doi: 10.5334/IJC.996.
- [7] R. H. Braaten, K. A. Brekke, and O. Rogeberg, 'Buying the right to do wrong An experimental test of moral objections to trading emission permits', *Resour. Energy Econ.*, 2015, doi: 10.1016/j.reseneeco.2015.07.002.
- [8] C. Webster, F. Wu, F. Zhang, and C. Sarkar, 'Informality, property rights, and poverty in China's "favelas", *World Dev.*, 2016, doi: 10.1016/j.worlddev.2015.10.007.
- [9] S. Arefin and T. Rashid, 'The urban poor in Dhaka: Perspectives on the right to the city', *J. Urban Reg. Anal.*, 2021, doi: 10.37043/JURA.2021.13.1.9.